

# INDUSTRIAL VACUUMING/ DEDUSTING SOLUTIONS 2021



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# OUR SOLUTIONS ARE EVEN TOUGHER THAN YOUR APPLICATIONS

Teams are heroes. All tasks can only be carried out with the right partners. And the best possible results can only be achieved when different talents are combined. We consider ourselves to be a team with you. Your experience and feedback are valuable to us, because we are pursuing the same goal: developing innovations and products which enable you to achieve your objectives more quickly and efficiently.

## **FOR TOUGH INDUSTRIAL APPLICATIONS**



Metallurgy & Metal-Forming

**Processing of Coke & Refined Minerals** 

**Metalworking Industry** 



**Mechanical Engineering** 



**Chemical Industry** 



**Textile Industry** 



**Automotive Industry** 



**Pharmaceutical Industry** 



**Food Industry** 



**Manufacturing of Furniture** 



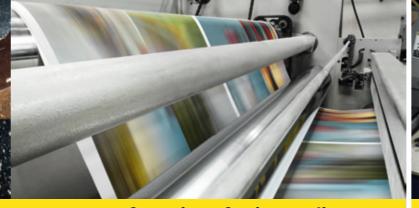
**Electronic & Optical Industries** 



Manufacturing of Rubber & Plastics



**Processing of Lumber** 



**Manufacturing of Print Media** 



**Processing of Glass & Stone** 

# THE VACUUMING **SPECIALISTS FOR INDUSTRY**

With its various sectors, industry places particular demands on cleaning solutions: process integration, large quantities, hazardous substances, narrow time slots and lots more. Both universal and special machines and systems are required here. We offer all vacuuming solutions for industry.



Industrial vacuums Liquid and Swarf

integrated in processes.

Our robust industrial vacuums are capable

of reliably withstanding the substantial load

generated by abrasive swarf, solid material and lubricants. These vacuum cleaners are designed

for continuous stationary or mobile use, directly





#### Industrial vacuums Solid and Dust

These industrial vacuums feature special filter technology for dust and solids and are designed for continuous and stationary use, directly integrated in processes.

#### **Explosion-proof industrial vacuums**

Robust industrial vacuums for notentially explosive atmospheres. These machines are suitable for use in Zone 22 (Z22).







#### Industrial dedusters

These industrial vacuums are the experts when it comes to effectively collecting unsettled particles, directly integrated in processes and designed for continuous stationary use.

#### **Explosion-proof industrial dust removers**

These industrial dust removers are the experts when it comes to effectively collecting unsettled particles, directly integrated in processes in Zone 22.

#### Customer-specific vacuum solutions

No matter how exceptional your work is - we can plan mobile and stationary vacuum solutions to meet your individual requirements.

# THE SYSTEM FOR INDUSTRY

In industry you need a system comprising machines, accessories and services which can be easily integrated in your operations and bring added value. A system in which all products are specially developed to meet tough industrial requirements. We have the system that makes the difference. The Kärcher industry system.

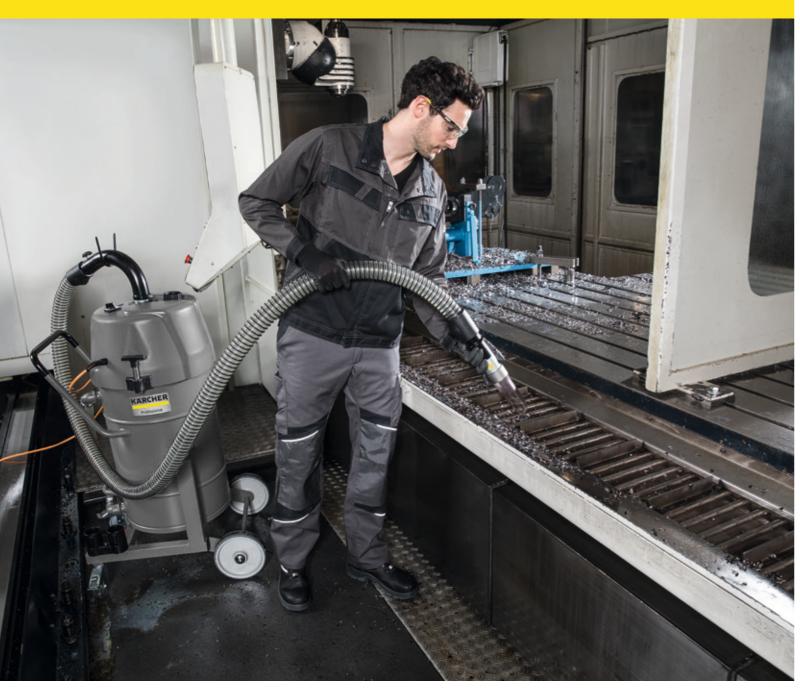
Our industrial vacuuming and dedusting solutions are equipped with the latest most powerful and extremely efficient turbines. At the same time, they feature high-quality filter engineering, which effectively holds back even hazardous dust. The durable components, which reliably withstand tough industrial use for many years are equally important. And they are built so that servicing is easy to carry out. Our industrial vacuums have effective sound insulation for the protection of health at the workplace and compatible accessories for every application.

With the Kärcher industry system you benefit from over 50 years of experience. We are in close touch with our customers world-wide in order to analyse existing and new tasks and optimally adapt our products to these applications.

# **INDUSTRY-SPECIFIC PRODUCT DESIGN POWERFUL AND EFFICIENT DURABLE PRODUCT QUALITY USER-FRIENDLY SERVICE FOR INDUSTRY REQUIREMENTS COMPREHENSIVE RANGE OF ACCESSORIES SAFETY IN THE WORKPLACE**

# FROM THE MOBILE MACHINE TO THE TURNKEY VACUUM OR DUST EXTRACTION SYSTEM

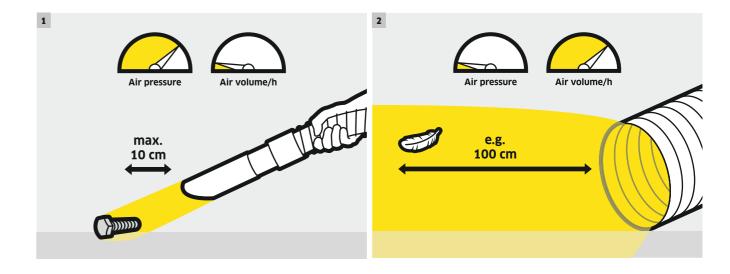
With our Kärcher industrial vacuums and dedusters, we offer you solutions for every industrial vacuuming task: whether flexible and mobile or stationary, for vacuuming anything from coarse swarf to the smallest unsettled particles, for small or large quantities, for liquids or solids, for unproblematic or hazardous material.



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#### 1 Industrial vacuums

Industrial vacuums are designed for the stationary or mobile vacuuming of dry and wet swarf, coarse dust and similar deposited particles. Industrial vacuums work at a high vacuum level with a relatively low air flow.

#### 2 Industrial dedusters

Dedusters are stationary machines that extract unsettled particles such as dust and fine swarf from the air. Industrial dedusters work at a low vacuum level with a relatively high air flow.

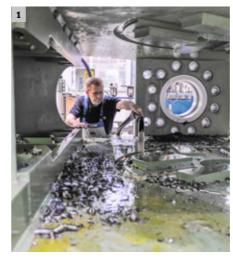
#### **POWER FOR DEMANDING TASKS**

In industry, substances are produced in quantities that push even the most powerful vacuum cleaners to their limits. You can only vacuum these substances, such as sharp-edged swarf, aggressive coolants and combustible dust, reliably and in a recycling-friendly manner, in large volumes and in minimal time, with special industrial vacuums.

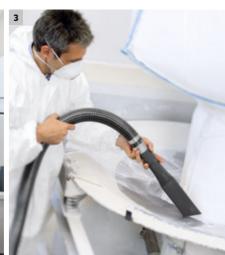


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#### 1 Industrial vacuums for liquids and swarf

Our robust industrial vacuums are also capable of permanently and reliably withstanding large quantities of abrasive swarf and lubricants. As a result, our industrial vacuums are your first choice for vacuuming swarf and emulsions, e.g. from milling machines and modern machining centres.

#### 2 Industrial vacuums for solids and dust

Discover our broad product portfolio of industrial vacuums with special filter engineering for vacuuming fine and coarse solids and dusts. These industrial vacuums are equipped with high-quality filter engineering for hazardous substances and have a particularly long service life thanks to filter cleaning.

#### 3 Industrial vacuums Ex

With our certified explosion-proof industrial vacuums for ATEX Zone 22 with dust classes M and H, you always have the optimal solution for vacuuming explosive dusts.

#### How to read the machine names:

Model	Container	Rated input power	Motor	Equipment
	capacity /	during operation		
Example: IVR-L	100	40		Sc
	Volume in litres	in kW/10 (no comma)		
IVR-L = Industrial vacuum robust class liquids/swarf IVS = Industrial vacuum super class IVR = Industrial vacuum robust class IVM = Industrial vacuum middle class IVC = Industrial vacuum compact class IVR-B = Build-in unit	30 = 30   40 = 40   65 = 65   100 = 100   	55 = 5.5 kW 55-Pp = in case of a pneumatic drive equivalent to kW/10	-1 = 1-phase, 1 motor -2 = 1-phase, 2 motors -3 = 1-phase, 3 motors without designation = 3-phases, 1 motor	without designation = standard equipment Tact/Tact² = fully automatic filter cleaning Afc = automatic filter cleaning Ap = manual or

INDUSTRIAL VACUUMS LIQUID / SWARF

# INDUSTRIAL VACUUMS FOR LARGE QUANTITIES OF ABRASIVE SWARF AND LUBRICANTS

Vacuum cleaners that effortlessly endure several hours daily or continuous operation 24/7 are needed in industry. The spectrum of substances ranges from small to very large quantities of abrasive swarf and coarse particles via discharged media through to liquids such as oil, cooling emulsion and water.



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Robust class Page 20







#### 1 Built for industry

Through our ongoing exchange with users in industry we know exactly what is needed when it comes to industrial vacuums. And we consistently implement this in our products: sturdy tubular steel designs, high wall thicknesses for abrasive media, compact design with 360° hose connection for large working range and time savings, oil-resistant and wear-resistant cables and reels. On top of this, a service-friendly design and special discharge and emptying systems. Low-noise, insulated housing, fill-level control and overfill protection, as well as clever accessory storage on the machine, are also important.

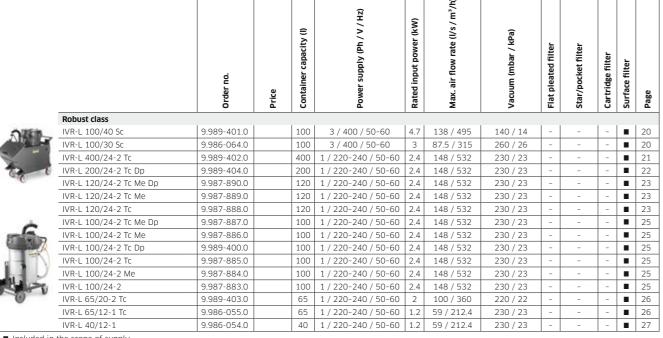
#### 2 For tough everyday cleaning tasks

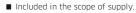
Powerful vacuum cleaners are used almost everywhere in industry. One typical application is workpiece cleaning after machining with coolant application. For general industrial and maintenance cleaning, vacuum cleaners are used on average 2 to 3 hours per day in order to clean floors and clear up leaks from pipes or production residues. Vacuum cleaners are essential for daily machine cleaning, as well as for maintenance activities on machining centres. We achieve the necessary high suction power combined with a compact design thanks to single-phase bypass turbines. For machines with 2 turbines they can be switched separately in order to avoid voltage peaks.

#### 3 Stable in continuous industrial operation

Stationary continuous use 24/7 for vacuuming swarf and cooling lubricants in the machining process directly at the point of origin places extremely high demands on industrial vacuums. For this, we provide multi-site solutions that can be integrated in the process. You can extend these with one or several manual suction points or machine connections as required. These solutions combine high suction power with formidable energy efficiency for low operating costs in continuous operation. Our three-phase side channel blowers in energy efficiency class IE2 are extremely durable with a guaranteed continuous use of 20,000 hours.

INDUSTRIAL VACUUMS LIQUID / SWARF INDUSTRIAL VACUUMS LIQUID / SWARF









#### 1 Collecting containers in every shape

With capacities from 40 to 400 litres, our collecting containers cover every requirement appropriate to the application. Depending on the machine, there are steel containers for cooling lubricants and swarf or stainless steel pump you can discharge liquids with a height difference of up to 6 metres. containers for collecting aggressive liquids.

#### 2 Effortless emptying of solids

A filter basket is used for separating solids and liquids in the industrial vacuum. This can be easily removed and emptied separately. For vacuum cleaners with tilting chassis, this allows safe manual emptying with little effort. A settling chassis trolley with roller collecting container permits emptying without removal of the drive unit. Crane lugs or crane yokes on large vacuum cleaners guarantee safe grabbing and emptying by crane. Welded forklift inserts allow safe and convenient emptying with a forklift.

#### 3 Convenient emptying of liquids

A transparent emptying hose serves for the simple emptying of liquids and at the same time as an unobstructed filling level indicator. With a drum

#### 4 Mobile, can be lifted by crane and moved by forklift

Large wheels on vacuum cleaners and containers are the basis for the high mobility of our vacuum cleaners, even on uneven terrain. For safe loading by crane or forklift, some of our vacuum cleaners are fitted with crane lugs and/ or welded forklift inserts.

#### **ROBUST CLASS**



#### The work horse for vacuuming abrasive suction media.

Whether you need to vacuum coolants, emulsions, oil or water, with or without swarf - the powerful liquid and swarf vacuums with settling container are ideal for heavy-duty industrial uses.









- 1 Easy and safe emptying system without removal of drive head
- Settling container and rolling container for ergonomic emptying.
- 2 Convenient, manual and safe draining of liquids
- Drain hose on the container for safe draining of oils and coolants.
- Filling level indicator on the drain hose and machine to prevent overfilling.

#### **ROBUST CLASS**



#### For extremely large quantities of liquids and swarf.

Thanks to the 400 I collection container, the IVR-L 400/24-2 Tc can also effortlessly keep working for very long intervals. The liquid and swarf vacuum is designed for vacuuming very large quantities of highly abrasive suction waste. It is emptied using minimum force by a tilting chassis and a forklift.





- 1 Emptying system with a tilting chassis enables safe manual emptying
- Frame system enables ergonomic tilted emptying using the roll-off mechanism.
- 2 Easy and safe emptying system without removal of drive head
- Drain hose on the container for safe draining of oils and coolants.
- Filling level indicator on the drain hose and machine to prevent overfilling.

#### IVR-L 100/40 Sc

#### IVR-L 100/30 Sc

		<ul><li>Compact design that takes up very little floor space</li><li>Sound-damping</li></ul>	<ul><li>■ Compact design that takes up very little floor space</li><li>■ Sound-damping</li></ul>
Technical data			
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	4.7	3
Air flow rate	I/s / m³/h	137.5 / 495	87.5 / 315
Vacuum	mbar / kPa	140 / 14	260 / 26
Container capacity	Ī	100	100
Filter area	m²	0.45	0.45
Main filter dust class		L	L
Sound pressure level	dB(A)	71	68
Cable length	m	7.5	7.5
Nominal diameter of connection		DN 70	DN 70
Nominal diameter of accessory		DN 70 / DN 50	DN 70 / DN 50
Weight	kg	168	141
Dimensions (L × W × H)	mm	855 × 760 × 1890	855 × 760 × 1800
Order No.		9.989-401.0	9.986-064.0
Price			

#### IVR-L 400/24-2 Tc

- Tilting chassisVisual filling level indicator

Technical data		
Current type	Ph / V / Hz	1 / 220-240 / 50-60
Rated input power during operation	kW	2.4
Air flow rate	I/s / m³/h	148 / 532
Vacuum	mbar / kPa	230 / 23
Container capacity	I	400
Filter area	m²	0.45
Main filter dust class		L
Sound pressure level	dB(A)	68
Cable length	m	10
Nominal diameter of connection		DN 50
Nominal diameter of accessory		DN 50 / DN 40
Weight	kg	201
Dimensions (L × W × H)	mm	1730 × 805 × 1390
Order No.		9.989-402.0
Price		

INDUSTRIAL VACUUMS LIQUID / SWARF

#### **ROBUST CLASS**



#### Large quantities - perfectly separated.

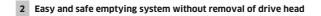
Liquid and swarf vacuums in the IVR-L-200 range have a huge capacity and, when used with the swarf basket, can reliably separate large quantities of solids and liquids. A drum pump makes it particularly quick and easy to empty the liquid suction media.







An autonomous drum pump significantly increases the ability for vacuumed matter to be returned at a high emptying level.



- Drain hose on the container for safe draining of oils and coolants.
- Filling level indicator on the drain hose and machine to prevent overfilling.

#### **ROBUST CLASS**

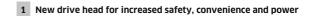


## Works all kinds of miracles with large suction volumes.

With a 120-litre capacity, the IVR-L 120 vacuums offer the longest emptying intervals. The oil-resistant design makes the machine ideal for removing oil.







- The low weight of the drive head ensures easier handling during transport, emptying and servicing.
- Greater work safety during transport due to cable storage on the machine head.



■ Clean in all directions thanks to the rotatable hose connection on the suction head. Tangle-free suction hose.

#### IVR-L 200/24-2 Tc Dp

Drum pump functionVisual filling level indicator

Technical data **Ph / V / Hz** 1 / 220-240 / 50-60 Current type Rated input power during operation kW I/s / m³/h 148 / 532 Air flow rate mbar / kPa 230 / 23 Vacuum Container capacity 200 0.45 Main filter dust class 68 Sound pressure level dB(A) Cable length 10 Nominal diameter of connection Nominal diameter of accessory DN 50 / DN 40 Weight kg 134 Dimensions (L × W × H) 1485 × 760 × 1550 9.989-404.0

#### 

■ Tilting chassis ■ Tilting chassis Stainless steel container ■ Stainless steel container ■ Tilting chassis ■ Drum pump function ■ Visual filling level indicator ■ Visual filling level indicator Technical data 1 / 220-240 / 50-60 Current type **Ph / V / Hz** 1 / 220-240 / 50-60 1 / 220-240 / 50-60 2.4 Rated input power during operation kW 148 / 532 148 / 532 Air flow rate I/s / m³/h 148 / 532 mbar / kPa 235 / 23 235 / 23 235 / 23 Vacuum Container capacity 120 120 120 0.45 0.45 Main filter dust class 68 68 68 Sound pressure level dB(A) Cable length 10 10 10 DN 50 Nominal diameter of accessory DN 50 / DN 40 DN 50 / DN 40 DN 50 / DN 40 Weight kg 65 Dimensions (L × W × H) 745 × 710 × 1420 740 × 620 × 1180 740 × 620 × 1180 9.987-890.0 9.987-889.0 9.987-888.0

INDUSTRIAL VACUUMS LIQUID / SWARF

#### **ROBUST CLASS**



## Diverse applications in everyday industrial use

Whether with stainless steel container, tilting chassis or drum pump function: the dual-motor IVR-L variants offer the greatest versatility and the right solution for any application.















#### 1 New drive head for increased safety, convenience and power

- The low weight of the drive head ensures easier handling during transport, emptying and servicing.
- Greater work safety during transport due to cable storage on the machine head
- Integrated exhaust air cover prevents dirt ingress in the motor compartment.

#### 2 360° working radius

Clean in all directions thanks to the rotatable hose connection on the suction head. Tangle-free suction hose.

#### 3 Safe accessory storage

Suction hose storage hook and specific accessory storage for a clean, tidy and ready-to-use machine.

#### 4 Drum pump function

An autonomous drum pump significantly increases the ability for vacuumed matter to be returned at a high emptying level

## **TECHNICAL DATA AND EQUIPMENT**

		IVR-L 100/24-2 Tc Me Dp	IVR-L 100/24-2 Tc Me	IVR-L 100/24-2 Tc Dp
		<ul><li>Tilting chassis</li><li>Stainless steel container</li><li>Drum pump function</li></ul>	<ul><li>Tilting chassis</li><li>Stainless steel container</li><li>Visual filling level indicator</li></ul>	<ul><li>Tilting chassis</li><li>Drum pump function</li><li>Visual filling level indicator</li></ul>
Technical data				
Current type	Ph / V / Hz	1 / 220-240 / 50-60	1 / 220-240 / 50-60	1 / 220-240 / 50-60
Rated input power during operation	kW	2.4	2.4	2.4
Air flow rate	I/s / m³/h	148 / 532	148 / 532	148 / 532
Vacuum	mbar / kPa	230 / 23	230 / 23	230 / 23
Container capacity	I	100	100	100
Filter area	m²	0.45	0.45	0.45
Main filter dust class		L	L	Ĺ
Sound pressure level	dB(A)	68	68	68
Cable length	m	10	10	10
Nominal diameter of connection		DN 50	DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 50 / DN 40	DN 50 / DN 40
Weight	kg	56	58.8	57
Dimensions (L × W × H)	mm	840 × 660 × 1320	840 × 660 × 1320	840 × 660 × 1320
Order No.		9.987-887.0	9.987-886.0	9.989-400.0
Price				

	IVR-L 100/24-2 Tc	IVR-L 100/24-2 Me	IVR-L 100/24-2
	<ul><li>Tilting chassis</li><li>Visual filling level indicator</li></ul>	<ul><li>Compact design that takes up very little floor space</li><li>Stainless steel container</li></ul>	<ul><li>Compact design that takes up very little floor space</li><li>Visual filling level indicator</li></ul>
Ph / V / Hz	1 / 220-240 / 50-60	1 / 220-240 / 50-60	1 / 220-240 / 50-60
kW	2.4	2.4	2.4
$I/s / m^3/h$	148 / 532	148 / 532	148 / 532
mbar / kPa	230 / 23	230 / 23	230 / 23
I	100	100	100
m²	0.45	0.45	0.45
	L	L	L
dB(A)	68	68	68
m	10	10	10
	DN 50	DN 50	DN 50
	DN 50 / DN 40	DN 50 / DN 40	DN 50 / DN 40
kg	50	41	44
mm	640 × 620 × 1060	640 × 620 × 1060	640 × 620 × 1060
	9.987-885.0	9.987-884.0	9.987-883.0
	kW I/s / m³/h mbar / kPa I m² dB(A) m	■ Tilting chassis ■ Visual filling level indicator  Ph / V / Hz 1 / 220-240 / 50-60  kW 2.4  I/s / m³/h 148 / 532  mbar / kPa 230 / 23  I 100  m² 0.45  L dB(A) 68  m 10  DN 50  DN 50 / DN 40  kg 50  mm 640 × 620 × 1060	Tilting chassis  ■ Visual filling level indicator  Ph / V / Hz  1 / 220-240 / 50-60

#### **ROBUST CLASS**

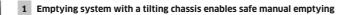


## Compact, robust and suitable for universal use.

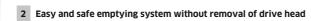
Fitted with powerful bypass turbines, the sturdy liquid and swarf vacuums in the IVR-L-65 range produce impressive results in harsh industrial applications such as daily machine and maintenance cleaning. Thanks to their extremely compact design, the vacuums take up very little floor space.







Frame system enables ergonomic tilted emptying using the roll-off mechanism.



- Drain hose on the container for safe draining of oils and coolants.
- $\hfill \blacksquare$  Filling level indicator on the drain hose and machine to prevent overfilling.

#### **ROBUST CLASS**



## Powerful entry-level model in the world of liquid vacuums.

Machines in the IVR-L range for the metalworking industry are exceptionally robust and durable, and deliver outstanding results in day-to-day heavy-duty use.







- 1 Long-lasting
- High-quality materials and robust welding techniques guarantee a long
- An oil-resistant power cable is included as standard and further prolongs the machine's service life.
- 2 Float ball for volume flow disruption
- A float ball in the machine head interrupts the suction flow as soon as the maximum filling capacity is reached.
- Implemented as an emergency circuit. The filter must be dry when restarting.

#### IVR-L 65/20-2 Tc

#### IVR-L 65/12-1 Tc

		<ul> <li>Tilting chassis</li> <li>Compact design that takes up very little floor space</li> <li>Visual filling level indicator</li> </ul>	<ul> <li>Tilting chassis</li> <li>Compact design that takes up very little floor space</li> <li>Visual filling level indicator</li> </ul>
Technical data			
Current type	Ph / V / Hz	1 / 220-240 / 50-60	1 / 220-240 / 50-60
Rated input power during operation	kW	2	1.2
Air flow rate	$l/s / m^3/h$	100 / 360	59 / 212.4
Vacuum	mbar / kPa	220 / 22	230 / 23
Container capacity	1	65	65
Filter area	m²	0.25	0.25
Main filter dust class		L	L
Sound pressure level	dB(A)	70	70
Cable length	m	10	10
Nominal diameter of connection		DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 40
Weight	kg	46	40
Dimensions (L × W × H)	mm	730 × 570 × 1330	730 × 570 × 1330
Order No.		9.989-403.0	9.986-055.0

#### IVR-L 40/12-1

- Compact design that takes up very little floor space
- Visual filling level indicator

Technical data		
Current type	Ph / V / Hz	1 / 220-240 / 50-60
Rated input power during operation	kW	1.2
Air flow rate	I/s / m³/h	59 / 212.4
Vacuum	mbar / kPa	230 / 23
Container capacity	1	40
Filter area	m²	0.25
Main filter dust class		L
Sound pressure level	dB(A)	70
Cable length	m	10
Nominal diameter of connection		DN 50
Nominal diameter of accessory		DN 40
Weight	kg	33
Dimensions (L × W × H)	mm	720 × 525 × 1180
Order No.		9.986-054.0
Price		

#### THE VACUUM CLEANER WITH THE SPECIAL FILTER TECHNOLOGY

Diverse substances and media have to be vacuumed in different industries. Discharged media, hazardous dust, fine and coarse swarf, sand, spray agents, all types of fibres, food remnants, organic substances, very light to very heavy materials all place strict requirements on the filter engineering used. In our Kärcher industry system you will find the optimal filter for every task, regardless of whether it is for daily use at hourly intervals or continuous operation 24/7 directly in the process.



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#### 1 Products designed specially for industry

Durable filters suitable for industrial use with very high separation degrees guarantee that no hazardous substances reach the surrounding area. Effective filter cleaning maximises the service life of the filters. A pre-separation system using the cyclone principle with intake manifolds at the side ensures that the suction material is curbed and less of it reaches the filter. This extends the service life of the filter and the machine. Userfriendly discharge and emptying systems for solids allow fast emptying without having to remove the suction head. Special systems are available as optional equipment for dust-free emptying.

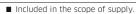
#### 2 For tough everyday cleaning tasks

Industrial vacuums for solids and dust for use over 2 to 3 hours per day are essential for many applications. Typical applications include maintenance cleaning of production lines in the entire process chain, e.g. floors, pipes, machine interiors, filling plants, the cleaning of workshops with excessive dust accumulation such as joineries and paintshops and, last but not least, workpiece cleaning after dry machining such as grinding, brushing or milling. You can also connect these vacuum cleaners directly to machining centres. Extremely high suction powers are available thanks to the compact design of the turbines and up to 3 single-phase bypass turbines.

#### 3 For tough continuous industrial use

Continuous stationary use 24/7 for vacuuming dry residues in the machining process directly at the point of origin places strict requirements on industrial vacuums. We provide multi-site solutions which you can extend as required with one or several manual suction points or machine connections. These solutions combine high suction power with formidable energy efficiency for low operating costs in continuous operation. Our three-phase side channel blowers in energy efficiency class IE2 are extremely durable with a guaranteed continuous use of 20,000 hours.

	Order no.	Price	Container capacity (I)	Power supply (Ph / V / Hz)	Rated input power (kW)	Max. air flow rate (l/s / m³/h)	Vacuum (mbar / kPa)	Flat pleated filter	Star/pocket filter	Cartridge filter	Surface filter	
Super Class	0	•	ŭ	<u> </u>	~	Σ	>	E	Ñ	ű	Ñ	1
Super Class IVS 100/75 M	1.573-822.0	1	100	3 / 400 / 50-60	7.5	103.6 / 373	305 / 30.5	-		1 -	_	Ī
IVS 100/75 M	1.573-722.0	_	100	3 / 400 / 50-60	5.5	98.1 / 353	250 / 25	-	-	-	-	+
IVS 100/40 M	1.573-622.0		100	3 / 400 / 50-60	4.2	61.1 / 220	150 / 15	-	-	-		+
IVS 100/40 W	1.573-620.0		100	3 / 400 / 50-60	4.2	61.1 / 220	150 / 15	-		+-		+
IVS 100/40	1.573-821.0		100	3 / 400 / 50-60	7.5	149 / 536	290 / 29	-	-	-		+
IVS 100/75 Longopac	1.573-721.0		100	3 / 400 / 50-60	5.5	139 / 500	250 / 25		÷	-		+
	1.573-621.0		100		4.2		175 / 17.5	-	-	-	<u> </u>	+
IVS 100/40 Longopac	1.575-021.0		100	3 / 400 / 50-60	4.2	139 / 500	1/5 / 1/.5		_	1 -	_	1
Robust Class IVR 100/40 Sc	9.986-069.0	1	100	3 / 400 / 50-60	4.7	137.5 / 495	150 / 15	I _ I		L	_	ī
IVR 100/40 Sc	9.989-413.0		100	3 / 400 / 50-60	3	87.5 / 315	260 / 26	-	-	-	-	+
IVR 100/30 3C			100					-	-	-	<u> </u>	+
	9.989-414.0 9.978-764.0		100	1 / 220-240 / 50-60	7.5	148 / 532	230 / 23 500 / 50	-	-	-	<u> </u>	+
IVR 100/75-Pp Sc	9.978-763.0		100	1 / 220-240 / 50-60 1 / 220-240 / 50-60		203 / 732 95 / 341	-	-		+	<u> </u>	+
IVR 100/40-Pp Sc	9.989-405.0		100	3 / 400 / 50-60	4.7	175 / 630	500 / 50 260 / 26	-		-	<u> </u>	+
IVR 100/60 Ef IVR 100/30 Ef	9.989-406.0		100	3 / 400 / 50-60	3	87.5 / 315	260 / 26	-	÷	-	-	+
IVR 100/24-2 Ef	9.989-407.0		100	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	-	÷	+-	<u> </u>	+
IVR 100/24-2 EI	9.978-765.0		100	1 / 220-240 / 50-60	7.5	230 / 732	500 / 50	-	÷	-	<u> </u>	+
·			50			138 / 495		-	-	+	-	+
IVR 50/40 Sc IVR 50/30 Sc	9.989-412.0 9.989-411.0	-	50	3 / 400 / 50-60 3 / 400 / 50-60	4.7	87.5 / 315	140 / 14 260 / 26	-		-	<u> </u>	+
IVR 50/15 Sc	9.989-409.0		50	3 / 400 / 50-60	1.5	58 / 210	200 / 20	-	÷	-	-	+
IVR 50/24-2 Sc	9.989-410.0		50	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	-	-	-		+
RI 331 D4 IE2-IS-H	9.987-559.0		50	3 / 400 / 50-60	4.7	138 / 495	140 / 14	-	÷	+-		+
RI 331 D3 IE2-IS-H	9.987-558.0		50	3 / 400 / 50-60	3	88 / 315	260 / 26	-		-	<u> </u>	+
IVR 40/30 Sc	9.986-067.0		40	3 / 400 / 50-60	3	88 / 315	260 / 26	-	-	+-		+
IVR 40/15 Sc	9.986-066.0		40		1.5	58 / 210	210 / 21	-	-	-		+
IVR 40/24-2 Sc	9.989-408.0		40	3 / 400 / 50-60 1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	-	-	+-	Ė	+
IVR 35/20-2 Sc Me	9.986-065.0		35	1 / 220-240 / 50-60	2.4	100 / 360	230 / 23		-	+-	Ė	+
Middle Class	] 5.560-005.0		رر	1,220 240 / 30-00		100 / 300	220 / 22		_	1		1
IVM 60/30	1.573-520.0		60	3 / 400 / 50-60	3	68 / 245	286 / 28.6	_		l -	-	I
IVM 60/36 -3	1.573-320.0		60	1 / 220-240 / 50-60	3.6	221 / 799	254 / 25.4	-	-	-	-	+
Compact Class	1.373 320.0		00	1 / 220 240 / 30 00	3.0	221/733	234 / 23.4					1
IVC 60/30 Tact <sup>2</sup>	1.576-101.0		60	3 / 400 / 50-60	3	68 / 245	286 / 28.6		_	l -	-	1
IVC 60/30 Ap	1.576-107.0		60	3 / 400 / 50-60	3	68 / 245	286 / 28.6		-	-	-	t
IVC 60/30 Tact <sup>2</sup> Lp	1.576-115.0		60	3 / 400 / 50-60	3	68 / 245	286 / 28.6		_	<del> </del>	-	t
IVC 60/24-2 Tact <sup>2</sup> M	1.576-105.0		60	1 / 220-240 / 50-60	2.4	72.2 / 260	224 / 22.4		_	-	-	†
IVC 60/24-2 Tact <sup>2</sup>	1.576-100.0		60	1 / 220-240 / 50-60	2.4	148 / 532	254 / 25.4		-	+-	-	†
IVC 60/24-2 Ap	1.576-104.0		60	1 / 220-240 / 50-60	2.4	148 / 532	254 / 25.4		-	-	-	†
IVC 60/24-2 Tact <sup>2</sup> Lp	1.576-114.0		60	1 / 220-240 / 50-60	2.4	148 / 532	254 / 25.4	-	_	1-	-	+
IVC 60/12-1 Tact Ec	1.576-102.0		60	1 / 220-240 / 50-60	1.2	62.5 / 225	244 / 24.4		_	-	<u> </u>	+
Build-in units	1.370-102.0		00	1 / 220-240 / 30-60	1.2	02.3 / 223	244 / 24.4			1 -	Ĺ	1
IVR-B 50/30	9.989-415.0		50	3 / 400 / 50-60	3	87.5 / 315	260/26	_	_		-	I
IVR-B 30/30	9.989-416.0		30	3 / 400 / 50-60	1.5	58 / 210	200/20			-	Ė	+
IVR-B 30/15	9.989-417.0		20	3 / 400 / 50-60	0.8	38.8/140	90/9	1	_		Ě	+





#### 1 Diverse filter engineering

Our industrial vacuums in dust classes L, M, H with filter types such as surface filter, star filter, pocket filter, cartridge filter and flat pleated filter provide the appropriate solution for every requirement.

#### 2 Effective filter cleaning

Manual filter cleaning guarantees a consistently high suction power and long life of the filter.

#### 3 Application-oriented collecting containers

With capacities from 20 to 100 litres, our containers for solids and dust cover every requirement appropriate to the application. We use steel containers for normal solids and swarf or stainless steel containers for collecting tough media.

#### 4 Easy emptying

A settling container with roller collecting container makes ergonomic emptying possible with little effort, particularly for heavy suction material. Vacuum cleaners with crane lugs or crane yokes guarantee safe grabbing and emptying by crane. Welded forklift inserts allow safe and convenient emptying with a forklift.

#### 5 Dust-free emptying

For dust-free emptying our vacuum cleaners are equipped either with collecting containers or our Longopac emptying system. You can insert a disposal bag in the collecting container, which ensures that hazardous dust does not reach the surrounding area again. The Longopac emptying system with endless hose allows quick, dust-free dust disposal in considerably less time and with reduced operating costs.

#### 6 Simple discharge

A manual emptying flap allows the discharge of heavy media into underfloor conveyors or containers without the removal of the drive head.

#### 7 Perfect mobility

Large rollers on vacuum cleaners and containers are the basis for the high mobility of our vacuum cleaners, even on uneven terrain. For safe loading by crane or forklift, many of our vacuum cleaners are fitted with crane lugs and/or welded forklift inserts.

#### **SUPER CLASS**



#### High-power machines with stamina

The new Kärcher Super class IVS 100 industrial vacuums are powerful, robust and highly reliable machines. With a motor runtime of about 20,000 hours – which corresponds to 2,500 days in continuous operation for eight hours a day – they are real workhorses. The large star filter ensures optimum suction power.















#### 1 Optional remote control

- Optional radio remote control for machine operation from a distance of up to 30 m.
- Convenient, time-saving operation of the machine in a single forward movement.
- Optimal space utilisation: the vacuum cleaner can be stored in unused or safety areas.

#### 2 Power-saving soft start

- Low starting current prevents power supply voltage dips.
- Low energy peaks ensure lower energy costs.
- Only low machine fuse protection necessary (16 A fuse protection is sufficient for up to 5.5. A).

#### 3 User-friendly machine handling

- Hose hook and accessory storage ensure fast tool access and tidy
- Integrated cable hook for secure cable storage.
- All hooks can be hung freely on the machine via a clip system.

#### 4 User-friendly settling chassis

- Easy and time-saving container removal directly on the handle.
- The practical container handle serves as an aid for pulling and pushing the machine to the emptying point.
- Large industrial rollers ensure maximum mobility even on uneven floors and under heavy load.

## **TECHNICAL DATA AND EQUIPMENT**

		IVS 100/75 M	IVS 100/55 M	IVS 100/40 M IVS 100/40
		<ul><li>Certified for dust class M</li><li>Extra-large filter area</li><li>Pole reverse plug</li></ul>	<ul><li>Certified for dust class M</li><li>Extra-large filter area</li><li>Pole reverse plug</li></ul>	<ul><li>Certified for dust class M</li><li>Extra-large filter area</li><li>Pole reverse plug</li></ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	7.5	5.5	4.2
Air flow rate	I/s / m³/h	103.6 / 373	98.1 / 353	61.1 / 220   138 / 500
Vacuum	mbar / kPa	305 / 30.5	240 / 24	154 / 15.4
Container capacity	1	100	100	100
Filter area	m²	2.2	2.2	2.2
Main filter dust class		M	M	M
Sound pressure level	dB(A)	73	77	75
Cable length	m	8	8	8
Nominal diameter of connection		DN 70	DN 70	DN 70
Nominal diameter of accessory		DN 70 / DN 50	DN 70 / DN 50	DN 70 / DN 50
Weight	kg	165	148	142
Dimensions (L × W × H)	mm	1202 × 686 × 1465	1202 × 686 × 1465	1202 × 686 × 1465   1202 × 771 × 1470
Order No.		1.573-822.0	1.573-722.0	1.573-622.0   -620.0
Price				

		IVS 100/75 Lp	IVS 100/55 Lp	IVS 100/40 Lp
		<ul><li>Longopac disposal system</li><li>Extra-large filter area</li><li>Pole reverse plug</li></ul>	<ul><li>Longopac disposal system</li><li>Extra-large filter area</li><li>Pole reverse plug</li></ul>	<ul><li>Longopac disposal system</li><li>Extra-large filter area</li><li>Pole reverse plug</li></ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	7.5	5.5	4.2
Air flow rate	I/s / m³/h	148 / 536	138 / 500	138 / 500
Vacuum	mbar / kPa	290 / 29	240 / 24	175 / 17.5
Container capacity	I	-	-	-
Filter area	m²	2.2	2.2	2.2
Main filter dust class		M	M	M
Sound pressure level	dB(A)	73	77	75
Cable length	m	8	8	8
Nominal diameter of connection		DN 70	DN 70	DN 70
Nominal diameter of accessory		DN 70 / DN 50	DN 70 / DN 50	DN 70 / DN 50
Weight	kg	173	158	155
Dimensions (L × W × H)	mm	1202 × 686 × 1465	1202 × 771 × 1470	1202 × 686 × 1465
Order No.		1.573-821.0	1.573-721.0	1.573-621.0
Price				

#### **ROBUST CLASS**



## The robust machine with the highest performance

A long-lasting, powerful, energy-efficient side channel blower is at the core of the extremely reliable IVR 100 industrial vacuum with set-down container. Not only does it provide the best suction power, it also enables very long operating cycles. Suitable for safe vacuuming of flammable dusts. For installation in non-explosion areas.















With comparably rated input power, the IE2 motor delivers 5% more suction power than conventional motors.

#### 2 High-quality washable pocket filter

- Longer service life, less maintenance effort and lower costs. Ideal for industrial use
- Unrivalled effective manual filter cleaning thanks to reinforcement lattice in every filter bag.

#### **ROBUST CLASS**



## Pneumatic drive provides maximum suction power

A wear-free, pneumatic drive gives our machines high vacuum levels and air flow rates so that long suction distances can also be achieved without losing any suction power. In addition, the low operating noise also means they are suitable for use in noise-sensitive areas.







- 1 Low-dust emptying system with PE bag
- Low-dust emptying thanks to closing mechanism and pressure compensation hose.
- 2 Easy filter cleaning thanks to manual shaking mechanism
- Regular operation of the shaking lever for constantly high suction power.
- Unrivalled effective manual filter cleaning thanks to reinforcement lattice in every filter bag.

		IVR 100/40 Sc	IVR 100/30 Sc	IVR 100/24-2 Sc
		<ul><li>Compact design that takes up very little floor space</li><li>Manual filter cleaning</li><li>Sound-damping</li></ul>	<ul> <li>Compact design that takes up very little floor space</li> <li>Manual filter cleaning</li> <li>Sound-damping</li> </ul>	<ul><li>Compact design that takes up very little floor space</li><li>Manual filter cleaning</li></ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power during operation	kW	4.7	3	2.4
Air flow rate	I/s / m³/h	138 / 495	88 / 315	148 / 532
Vacuum	mbar / kPa	140 / 14	260 / 26	230 / 23
Container capacity	1	100	100	100
Filter area	m²	1.75	1.75	1.75
Main filter dust class		M	M	M
Sound pressure level	dB(A)	71	62	68
Cable length	m	7.5	7.5	10
Nominal diameter of connection		DN 50	DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 50 / DN 40	DN 50 / DN 40
Weight	kg	184	159	103
Dimensions (L × W × H)	mm	915 × 760 × 2270	915 × 760 × 1975	915 × 760 × 1580
Order No.		9.986-069.0	9.989-413.0	9.989-414.0
Price				

		IVR 100/75-Pp Sc	IVR 100/40-Pp Sc
		-	
		<ul> <li>Cyclone-like pre-separation system</li> <li>Manual filter cleaning</li> <li>Compact design that takes up very little floor space</li> </ul>	<ul> <li>Cyclone-like pre-separation system</li> <li>Manual filter cleaning</li> <li>Compact design that takes up very little floor space</li> </ul>
Technical data			
Current type		-	-
Rated input power during operation	kW	7.5	4
Air flow rate	$I/s / m^3/h$	203 / 732	95 / 341
Vacuum	mbar / kPa	500 / 50	500 / 50
Container capacity	I	100	100
Filter area	m²	1.75	1.75
Main filter dust class		M	M
Sound pressure level	dB(A)	80	80
Cable length		-	-
Nominal diameter of connection		DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN	DN 50
Weight	kg	107	101
Dimensions (L × W × H)	mm	915 × 760 × 1583	915 × 760 × 1620
Order No.		9.978-764.0	9.978-763.0
Price			

#### **ROBUST CLASS**



## Extremely heavy suction media, quick emptying.

The IVR 100 range with emptying flap is particularly good at reliably vacuuming very heavy suction media. Powerful drive turbines provide the very high suction power required while a sloping outlet makes emptying the collection container much easier.











- 1 Simple manual and customer-specific emptying of suction waste
- Emptying flap can be adapted to the customer-specific emptying site.
- Emptying flap can be adapted, for example for underfloor conveyors or containers.
- 2 Convenient and time-saving emptying option using a forklift
- Welded forklift plug-in units enable safe grabbing and emptying.

#### IVR 100/60 Ef IVR 100/30 Ef IVR 100/24-2 Ef ■ With large emptying flap ■ With large emptying flap ■ With large emptying flap Compact design that takes up very Manual filter cleaning Compact design that takes up very Manual filter cleaning little floor space ■ Sound-damping little floor space ■ Sound-damping Technical data **Ph/V/Hz** 3/400/50 3 / 400 / 50 1 / 220-240 / 50-60 Current type 2.4 Rated input power during operation kW 148 / 532 Air flow rate I/s / m³/h 175 / 630 88 / 315 **mbar / kPa** 260 / 26 230 / 23 260 / 26 Vacuum 100 100 100 Container capacity 1.75 1.75 1.75 Filter area Main filter dust class М М 68 68 65 Sound pressure level dB(A) Cable length 7.5 7.5 10 Nominal diameter of connection DN 70 Nominal diameter of accessory DN 70 / DN 50 DN 70 / DN 50 DN 50 / DN 40 Weight kg 260 172 Dimensions (L × W × H) 1670 × 760 × 1840 950 × 715 × 1985 950 × 715 × 1640 9.989-405.0 9.989-406.0 9.989-407.0

#### **ROBUST CLASS**



#### Pneumatic drive, very quick to empty.

With its extremely powerful and wear-free pneumatic drive, our IVR 100/75-Pp Ef industrial vacuum cleaner is specifically designed for demanding applications. It can vacuum even the heaviest of suction media effortlessly, even over long distances. The user-friendly integrated sloping outlet allows it to be emptied easily.



- 1 Convenient and time-saving emptying option using a crane
- Crane eyes enable safe grabbing and emptying by crane.
- 2 Easy filter cleaning thanks to manual shaking mechanism
- Regular operation of the shaking lever ensures constant suction power.
- Unrivalled effective manual filter cleaning thanks to reinforcement lattice in every filter bag.

#### IVR 100/75-Pp Ef

- With large emptying flap
- $\ensuremath{\blacksquare} \ensuremath{\text{Cyclone-like pre-separation system}}$
- Manual filter cleaning

Technical data		
Current type		-
Rated input power during operation	kW	7.5
Air flow rate	I/s / m³/h	203 / 732
Vacuum	mbar / kPa	500 / 50
Container capacity	1	100
Filter area	m²	1.75
Main filter dust class		M
Sound pressure level	dB(A)	80
Cable length		-
Nominal diameter of connection		DN 50
Nominal diameter of accessory		DN 50
Weight	kg	123
Dimensions (L × W × H)	mm	972 × 714 × 1629
Order No.		9.978-765.0
Price		

#### **ROBUST CLASS**



#### The robust model - equipped for every eventuality

Where other industrial vacuums with large container volumes need a correspondingly large amount of room, the vacuums in the IVR 50 range are characterised by taking up a comparatively small floor space. Suitable for safe vacuuming of flammable dusts. For installation in non-explosion areas.















- 1 Easy and safe emptying system without removal of drive head
- Easy and time-saving container removal directly on the handle.
- 3 Complies with dust class M for high occupational safety
- Dust class M filter engineering for vacuuming hazardous dust.

- 2 Easy filter cleaning thanks to manual shaking mechanism
- Regular operation of the shaking lever for constantly high suction power.

## **TECHNICAL DATA AND EQUIPMENT**

		IVR 50/40 Sc	IVR 50/30 Sc	IVR 50/15 Sc
		<ul><li>Cyclone-like pre-separation system</li><li>Sound-damping</li><li>Ergonomic container guide</li></ul>	<ul><li>Cyclone-like pre-separation system</li><li>Sound-damping</li><li>Ergonomic container guide</li></ul>	<ul><li>Cyclone-like pre-separation system</li><li>Sound-damping</li><li>Ergonomic container guide</li></ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	4.7	3	1.5
Air flow rate	I/s / m³/h	138 / 495	88 / 312	58 / 210
Vacuum	mbar / kPa	140 / 14	260 / 26	200 / 20
Container capacity	I	50	50	50
Filter area	m²	1.75	1.75	1.75
Main filter dust class		M	M	M
Sound pressure level	dB(A)	71	62	57
Cable length	m	7.5	7.5	7.5
Nominal diameter of connection		DN 50	DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 50 / DN 40	DN 50 / DN 40
Weight	kg	179	154	139
Dimensions (L × W × H)	mm	855 × 760 × 1795	855 × 760 × 1675	855 × 760 × 1675
Order No.		9.989-412.0	9.989-411.0	9.989-409.0
Price				

		IVR 50/24-2 Sc	RI 331 D4 IE2-IS-H	RI 331 D3 IE2-IS-H
		<ul><li>Cyclone-like pre-separation system</li><li>Ergonomic container guide</li></ul>	<ul> <li>Cyclone-like pre-separation system</li> <li>Sound-damping</li> <li>Ergonomic container guide</li> </ul>	<ul> <li>Cyclone-like pre-separation system</li> <li>Sound-damping</li> <li>Ergonomic container guide</li> </ul>
Technical data				
Current type	Ph / V / Hz	1 / 220-240 / 50-60	3 / 400-500 / 50-60	3 / 400 / 50-60
Rated input power during operation	kW	2.4	4	3
Air flow rate	$l/s / m^3/h$	148 / 532	138 / 495	88 / 315
Vacuum	mbar / kPa	230 / 23	140 / 14	260 / 26
Container capacity	1	50	50	50
Filter area	m²	1.75	1.75	1.75
Main filter dust class		M	H	H
Sound pressure level	dB(A)	68	70	65
Cable length	m	10	7.5	7.5
Nominal diameter of connection		DN 50	DN 70	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 70 / DN 50	DN 50 / DN 40
Weight	kg	99	197	173
Dimensions (L × W × H)	mm	855 × 760 × 1290	855 × 760 × 2090	855 × 760 × 1970
Order No.		9.989-410.0	9.987-559.0	9.987-558.0
Price				

#### **ROBUST CLASS**



#### The robust model for confined spaces

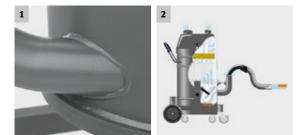
Industrial vacuums in the IVR 40 range with set-down container are particularly suitable for tight spaces thanks to their compact dimensions and low height. As they are torque-operated, they can also be used in continuous operation 24/7. Suitable for safe vacuuming of flammable dusts. For installation in non-explosion areas.











#### 1 Robust material and a design suitable for industrial purposes

- Ideal for use in the metals processing industry.
- The material thickness of 1.25 mm and mostly welded joints ensure a long service life even with abrasive suction waste.

#### 2 Cyclone-like pre-separation system

Protects the filter and increases its working time. This saves on costs and increases versatility.

#### **ROBUST CLASS**



#### The entry-level model in the robust class

Industrial vacuums in the IVR series are characterised by agility, robustness and durability. Powerful turbines with intelligent sound-damping combine convenient working with excellent performance.







- Ideal for use in the metals processing industry.
- The material thickness of 1.25 mm and mostly welded joints ensure a long service life even with abrasive suction waste.

#### 2 Pleasant operating noise

Sound absorbers on the air outlet pipes make for a comfortable operating noise with high suction power.

## IVR 40/30 Sc IVR 40/15 Sc IVR 40/24-2 Sc

		<ul><li>Cyclone-like pre-separation system</li><li>Sound-damping</li><li>Safe accessory storage</li></ul>	<ul><li>Cyclone-like pre-separation system</li><li>Sound-damping</li><li>Safe accessory storage</li></ul>	<ul><li>Cyclone-like pre-separation system</li><li>Ergonomic container guide</li></ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power during operation	kW	3	1.5	2.4
Air flow rate	I/s / m³/h	88 / 315	58 / 210	148 / 532
Vacuum	mbar / kPa	260 / 26	200 / 20	230 / 23
Container capacity	1	40	40	40
Filter area	m²	1.75	1.75	1.75
Main filter dust class		M	M	M
Sound pressure level	dB(A)	62	57	68
Cable length	m	7.5	7.5	10
Nominal diameter of connection		DN 50	DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 50 / DN 40	DN 50 / DN 40
Weight	kg	128	113	76
Dimensions (L × W × H)	mm	855 × 715 × 1530	855 × 715 × 1530	855 × 715 × 1135
Order No.		9.986-067.0	9.986-066.0	9.989-408.0
Duice				

#### IVR 35/20-2 Sc Me

- Compact design that takes up very little floor space
- Cyclone-like pre-separation system
- Stainless steel container

Technical data		
Current type	Ph / V / Hz	1 / 220-240 / 50-60
Rated input power during operation	kW	2
Air flow rate	l/s / m³/h	100 / 360
Vacuum	mbar / kPa	220 / 22
Container capacity	1	35
Filter area	m²	1.4
Main filter dust class		M
Sound pressure level	dB(A)	70
Cable length	m	10
Nominal diameter of connection		DN 50
Nominal diameter of accessory		DN 50 / DN 40
Weight	kg	53
Dimensions (L × W × H)	mm	740 × 580 × 1105
Order No.		9.986-065.0
Price		

INDUSTRIAL VACUUMS SOLID / DUST INDUSTRIAL VACUUMS SOLID / DUST

#### **MIDDLE CLASS**



#### Perfect combination of power and size

Developed especially for demanding applications in industry and ideal for removing solids such as fine dusts. Maximum performance in 1-phase operation thanks to the three-motor suction head, while in the 3-phase operation the durable side channel blower ensures long runtimes.

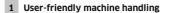












- Hose hook and accessory storage for simple storage and carrying.
- Integrated

- $\hfill \blacksquare$  Extends the service life of the continuous filter, thus reducing the maintenance effort
- Comfortable: a gearbox ensures consistent cleaning results.

#### **COMPACT CLASS**



#### With three-phase drive for daily continuous use

The IVC 60/30 features a low-maintenance three-phase motor for multiple shift operation with high loads. With reliable liquid cut-off function and efficient Tact<sup>2</sup> technology: this vacuum is ideal for both dry and wet cleaning tasks.







■ A side channel blower delivers high suction power with a very long service life of at least 20,000 hours. These machines are therefore ideal for multiple shift



- The two filters are cleaned with targeted, powerful blasts of air. The procedure is triggered automatically, the suction power remains constantly high, and the work can be continued without interruption.
- Filter designed to allow uninterrupted use with constant high suction power.

ed cable hook for secure cable storage.	I MARKET	Clean Filter
filter vibration for low operating costs		Constant Airflow

<ul> <li>Anti-static equipment</li> <li>Extra-large filter area</li> <li>Robust wheels and castors</li> </ul> Hz 3 / 400 / 50 3	■ Anti-static equipment ■ Extra-large filter area ■ Robust wheels and castors  1 / 220-240 / 50-60
Extra-large filter area Robust wheels and castors  3 / 400 / 50	Extra-large filter area Robust wheels and castors  1 / 220–240 / 50–60
3	2.6
	3.6
<b>h</b> 68 / 244.8	221 / 799
<b>Pa</b> 286 / 28.6	254 / 25.4
60	60
2.2	2.2
M	M
79	79
7.5	10
DN 70	DN 70
DN 70 / DN 50 / DN 40	DN 70 / DN 50 / DN 40
99	68
1030 × 680 × 1650	1020 × 680 × 1490
1.573-520.0	1.573-320.0
	APA 286 / 28.6 60 2.2 M 79 7.5 DN 70 DN 70 / DN 50 / DN 40 99 1030 × 680 × 1650

		IVC 60/30 Tact <sup>2</sup>	IVC 60/30 Ap	IVC 60/30 Tact <sup>2</sup> Lp
		<ul> <li>Anti-static equipment</li> <li>Liquid cut-off</li> <li>Integrated cyclone for pre-separation system</li> </ul>	<ul> <li>Anti-static equipment</li> <li>Manual filter cleaning</li> <li>Integrated cyclone for pre-separation system</li> </ul>	<ul> <li>Longopac disposal system</li> <li>Anti-static equipment</li> <li>Integrated cyclone for pre-separation system</li> </ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	3	3	3
Air flow rate	$l/s / m^3/h$	68 / 244.8	68 / 244.8	68 / 244.8
Vacuum	mbar / kPa	286 / 28.6	286 / 28.6	286 / 28.6
Container capacity	1	60	60	60
Filter area	m²	1.9	1.9	1.9
Main filter dust class		M	M	M
Sound pressure level	dB(A)	77	77	77
Cable length	m	7.5	5	7.5
Nominal diameter of connection		DN 70	DN 70	DN 70
Nominal diameter of accessory		DN 50 / DN 40	DN 70 / DN 50 / DN 40	DN 50 / DN 40
Weight	kg	95	95	108
Dimensions (L × W × H)	mm	970 × 690 × 1240	970 × 690 × 1240	970 × 690 × 1240
Order No.		1.576-101.0	1.576-107.0	1.576-115.0
Price				

#### **COMPACT CLASS**



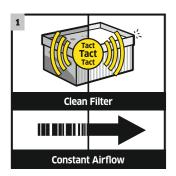
#### The powerful entry-level machines

These entry-level machines feature two powerful motors. The basic and standard variants feature an easy-to-move and sturdy settling container and stainless steel suction containers. The electronic motor control ensures low starting currents.



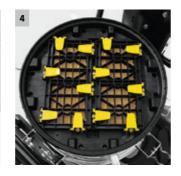












#### 1 Automatic Filter Cleaning System Tact<sup>2</sup>

- Filter designed to allow uninterrupted use with constant high suction power.
- The filter automatically cleans itself with targeted, powerful blasts of air. The procedure is triggered automatically whilst maintaining constant high suction power. Further benefits: low maintenance costs, long filter service life.

#### 2 2 blower motors

Powerful cleaning performance with 2 blowers. Electronically controlled motors avoid high starting currents.

#### 3 Waste container with settling chassis

■ The waste container with settling chassis ensures ergonomic emptying, even when the vacuumed waste is heavy.

#### 4 With compact flat pleated filter

■ The compact flat pleated filter allows a large filter area with a small

## **TECHNICAL DATA AND EQUIPMENT**

		IVC 60/24-2 Tact <sup>2</sup> M	IVC 60/24-2 Tact <sup>2</sup>	IVC 60/24-2 Ap
		<ul> <li>Anti-static equipment</li> <li>Certified for dust class M</li> <li>Integrated cyclone for pre-separation system</li> </ul>	<ul><li>Anti-static equipment</li><li>Liquid cut-off</li><li>Integrated cyclone for pre-separation system</li></ul>	<ul> <li>Anti-static equipment</li> <li>Manual filter cleaning</li> <li>Integrated cyclone for pre-separation system</li> </ul>
Technical data				
Current type	Ph / V / Hz	1 / 220-240 / 50-60	1 / 220-240 / 50-60	1 / 220-240 / 50-60
Rated input power during operation	kW	2.4	2.4	2.4
Air flow rate	I/s / m³/h	72.2 / 260	148 / 532	148 / 532
Vacuum	mbar / kPa	224 / 22.4	254 / 25.4	254 / 25.4
Container capacity	I	60	60	60
Filter area	m²	0.95	0.95	0.95
Main filter dust class		M	M	M
Sound pressure level	dB(A)	73	73	73
Cable length	m	10	10	10
Nominal diameter of connection		DN 70	DN 70	DN 70
Nominal diameter of accessory		DN 50 / DN 40	DN 50 / DN 40	DN 70 / DN 50 / DN 40
Weight	kg	60	-	59
Dimensions (L × W × H)	mm	970 × 690 × 995	970 × 690 × 995	970 × 690 × 995
Order No.		1.576-105.0	1.576-100.0	1.576-104.0
Price				

#### IVC 60/24-2 Tact<sup>2</sup> Lp

- Longopac disposal system
   Anti-static equipment
   Integrated cyclone for pre-separation system

Technical data		
Current type	Ph / V / Hz	1 / 220-240 / 50-60
Rated input power during operation	kW	2.4
Air flow rate	I/s / m³/h	148 / 532
Vacuum	mbar / kPa	254 / 25.4
Container capacity	1	60
Filter area	m²	0.95
Main filter dust class		M
Sound pressure level	dB(A)	73
Cable length	m	10
Nominal diameter of connection		DN 70
Nominal diameter of accessory		DN 50 / DN 40
Weight	kg	73
Dimensions (L × W × H)	mm	950 × 690 × 1170
Order No.		1.576-114.0
Price		

#### **COMPACT CLASS**



## The entry-level model for continuous operation

The IVC 60/12-1 vacuum cleaner is perfect for stationary non-stop use thanks to an electronically controlled drive and compact design.







Constant Airflow

- 1 Designed for continuous operation
- The brushless Ec motors are wear-resistant and have a minimum service life of 5,000 hours, ideal for three-shift operation.
- 2 Tact system (Tact Automatic Filter Cleaning System)
- The two filters are cleaned with targeted, powerful blasts of air for constant high suction power.

#### IVC 60/12-1 Tact Ec

- Anti-static equipment
- Liquid cut-off
- Integrated cyclone for pre-separation system

		■ Integrated cyclone for pre-separation system
Technical data		
Current type	Ph / V / Hz	1 / 220-240 / 50-60
Rated input power during operation	kW	1.2
Air flow rate	$I/s / m^3/h$	62.5 / 225
Vacuum	mbar / kPa	244 / 24.4
Container capacity	I	60
Filter area	m²	0.95
Main filter dust class		M
Sound pressure level	dB(A)	74
Cable length	m	10
Nominal diameter of connection		DN 70
Nominal diameter of accessory		DN 50 / DN 40
Weight	kg	59
Dimensions (L × W × H)	mm	970 × 690 × 995
Order No.		1.576-102.0
Price		

#### **BUILD-IN UNITS**



## Extremely compact – for the smallest installation spaces

Torque-operated built-in units in the IVR B range are specially designed for applications where limited space is available. The compact design and low installation height enable them to be installed even in narrow installation spaces. They are fully conductive, suitable for vacuuming aggressive media thanks to the stainless steel collection container, and they can be used in continuous operation.













- 1 Compact dimensions
- Space-saving storage and trouble-free attachment between, onto or underneath production machinery.
- The compact size and powerful side channel blower enable various possible uses.
- 2 Durable, compact cartridge filter for large suction volumes
- Large filter area enables uninterrupted vacuuming at constantly high suction power.
- Compact and space-saving filter design.

		IVR-B 50/30	IVR-B 30/15	IVR-B 20/8
		<ul><li>Low installation height</li><li>Cartridge filter</li><li>Stainless steel container</li></ul>	<ul><li>Low installation height</li><li>Cartridge filter</li><li>Stainless steel container</li></ul>	<ul><li>Low installation height</li><li>Cartridge filter</li><li>Stainless steel container</li></ul>
Technical data				
Current type	Ph / V / Hz	3 / 400 / 50-60	3 / 400 / 50-60	3 / 400 / 50-60
Rated input power during operation	kW	3	1.5	0.8
Air flow rate	I/s / m³/h	88 / 315	58 / 210	39 / 140
Vacuum	mbar / kPa	260 / 26	200 / 20	90 / 9
Container capacity	1	50	30	20
Filter area	m²	1	1	0.7
Main filter dust class		M	M	М
Sound pressure level	dB(A)	72	77	70
Cable length	m	7.5	7.5	7.5
Nominal diameter of connection		DN 50	DN 50	DN 50
Nominal diameter of accessory		DN 50 / DN 40	DN 50 / DN 40	DN 50 / DN 40
Weight	kg	70	53	32
Dimensions (L × W × H)	mm	835 × 715 × 570	810 × 575 × 520	610 × 450 × 480
Order No.		9.989-415.0	9.989-416.0	9.989-417.0
Price				

#### **CERTIFIED SAFETY FOR POTENTIALLY EXPLOSIVE ATMOSPHERES**

Vacuuming in potentially explosive atmospheres places the highest demands on machine quality. Kärcher ex vacuums satisfy these standards, some of which are certified by TÜV Süd and IBEXU.



#### Table of contents: Industrial vacuums Ex

Super Class Page 52 Middle Class Page 54 Compact Class Page 55







#### 1 Constructive explosion protection

Our industrial vacuums for the Ex zone satisfy all occupational health requirements for handling explosive dust thanks to their design and equipment. The end-to-end conductivity is just as decisive as special filters with very high separation rates and filter cleaning for a longer service life. A pre-separation system using the cyclone principle with intake manifolds at the side ensures that the suction material is curbed and less of it reaches the filter, which in turn further increases the service life of the filter. Special devices for dust-free emptying ensure that explosive dust does not reach the surrounding area again. Important advantages of our Ex-proof vacuum cleaners are stable, compact tubular steel constructions, the service-friendly design, easy-to-reach controls and the clever accessory storage directly on the machine.

#### 2 Protected during daily cleaning

Ex-proof industrial vacuums for mobile use over 2 to 3 hours per day are essential in hazardous areas. Typical applications include maintenance cleaning of production lines in the entire process chain, e.g. floors, pipes, machine interiors, filling plants and the cleaning of workshops with excessive dust accumulation such as joineries and paintshops. You can also connect these vacuum cleaners directly to machining centres. Extremely high suction powers are available thanks to the compact design and optional 1 or 2 single-phase bypass turbines.

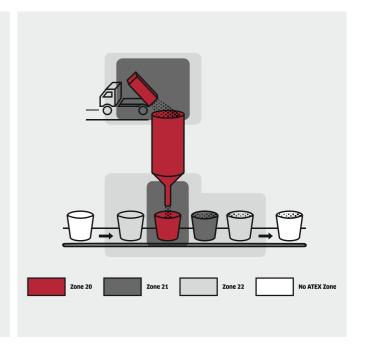
#### 3 For tough continuous industrial use

Continuous stationary use 24/7 for vacuuming explosive substances in production and at filling plants directly at the point of origin places extremely high demands on industrial vacuums. For this, we provide multisite solutions that can be integrated in the process. These solutions combine high suction power with formidable energy efficiency for low operating costs in continuous operation. Our three-phase side channel blowers in energy efficiency class IE2 are extremely durable with a guaranteed continuous use of 20,000 hours. Alternatively, pneumatic engine with a very long service life are available for noise-sensitive areas.

<b>98</b>		Order no.	Price	Container capacity (I)	Power supply (Ph / V / Hz)	Rated input power (kW)	Max. air flow rate (l/s / m³/h)	Vacuum (mbar / kPa)	Flat pleated filter	Star/pocket filter	Cartridge filter	Surface filter	Page
d las	Super Class												
79 1	IVS 100/75 M Z22	9.987-900.0		100	3 / 400 / 50-60	7.5	148 / 536	305 / 30.5	-		-	-	53
C. S. F.	IVS 100/55 M Z22	9.987-899.0		100	3 / 400 / 50-60	5.5	138 / 500	235 / 23.5	-	•	-	-	53
-	Middle Class												
71	IVM 60/30 M Z22	1.573-521.0		60	3 / 400 / 50-60	3	55 / 198	250 / 25	-	•	-	-	54
ON	Compact Class												
die	IVC 60/30 Ap M Z22	1.576-106.0		60	3 / 400 / 50-60	3	49 / 177	250 / 25	•	-	-	-	55
-	IVC 60/12-1 Ec H Z22	1.576-103.0		60	1 / 220-240 / 50-60	1.0	39 / 140	223 / 22.3		-	-	-	55

■ Included in the scope of supply.





#### Zoning

There is an acute risk of explosion if a critical quantity of flammable dust or gas forms and mixes with air, which could then be ignited by a suitable ignition source. If conditions within the production areas are favourable to the formation of a flammable mixture, the operator is legally required to divide the affected areas into zones in accordance with Directive 999/92/EC.

#### Zone 22

Zone 22 includes all areas where there is at least briefly an explosive atmosphere from flammable dusts. Possible sources of ignition must be avoided or effectively enclosed. All Kärcher EX vacuums are suitable for operation in Ex Zone 22.

#### Typical industries for Ex zones

- Pharmaceutical and chemical industry
- Food industry
- Metalworking industry
- Paper manufacture

You can find more examples in the application overview on page 156.

#### Flammable dusts

The formation of an explosive mixture is largely dependent on the particle size of the substance dispersed in the air. In general, every flammable dust with a particle size under 0.5 millimetre is assessed as explosive.

#### Examples of potentially explosive dusts

Apart from powder coating, grinding dust from metal, plastic and wood processing, cereal flour, powdered milk, powdered medicine such as ascorbic acid, carrageen and ibuprofen, there are numerous other explosive types of dust. If in doubt, obtain information from your relevant professional association and the fire brigade.

#### **EX SUPER CLASS**



#### **Uncompromising safety in** continuous operation.

Safety at the highest level with excellent suction power and filter service life: our new explosion-proof vacuum cleaners stand out in every respect. The large star filters provide continuous protection against explosive suction waste, even in large quantities.

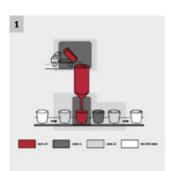


















#### 1 Suitable for Zone 22

- IVS EX vacuums guarantee the highest level of safety thanks to the latest technology.
- Reliable vacuuming of substances which could put health at risk such as explosive dusts.

#### 2 Power-saving soft start

- Low starting current prevents power supply voltage dips.
- Low energy peaks ensure lower energy costs.
- Only low machine fuse protection necessary (16 A fuse protection is sufficient for up to 5.5. A).

#### 3 User-friendly settling chassis

- Easy and time-saving container removal directly on the handle.
- The practical container handle serves as an aid for pulling and pushing the machine to the emptying point.
- $\hfill \blacksquare$  Large industrial rollers ensure maximum mobility even on uneven floors and under heavy load.

#### 4 Horizontal operation of filter cleaning system

- The handle for manual filter cleaning is located at a convenient operating height and makes working comfortable.
- Regardless of the amount of force applied by the user, a gearbox ensures consistent cleaning results.
- $\hfill \blacksquare$  Longer filter service life due to more frequent filter cleaning and metered power transmission to the filter.

## **TECHNICAL DATA AND EQUIPMENT**

		IVS 100/75 M Z22	IVS 100/55 M Z22
		<ul> <li>Constructed according to</li> <li>DIN EN 60335-2-69:2010</li> <li>Extra-large filter area</li> <li>Manual filter cleaning</li> </ul>	<ul> <li>Constructed according to</li> <li>DIN EN 60335-2-69:2010</li> <li>Extra-large filter area</li> <li>Manual filter cleaning</li> </ul>
Technical data			
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	7.5	5.5
Air flow rate	I/s / m³/h	148 / 536	138 / 500
Vacuum	mbar / kPa	305 / 30.5	235 / 23.5
Container capacity	1	100	100
Filter area	m²	2	2
Main filter dust class		M	M
Sound pressure level	dB(A)	73	77
Cable length	m	8	8
Nominal diameter of connection		DN 70	DN 70
Nominal diameter of accessory		DN 70 / DN 50	DN 70 / DN 50
Weight	kg	180	157
Dimensions (L × W × H)	mm	1202 × 686 × 1495	1202 × 686 × 1495
Order No.		9.987-900.0	9.987-899.0
Price			

INDUSTRIAL VACUUMS EX

#### **EX MIDDLE CLASS**



#### Maximum safety. Maximum convenience.

Our Middle Class EX vacuums for industrial applications permit work in potentially explosive atmospheres to be carried out safely and simultaneously and provide impressive ease of use. The durable side channel blower and extra large filter area ensure long operating periods.













#### 1 Certified according to 94/9/EC (ATEX)

- Industrial vacuum certified according to 94/9/EU for ATEX Zone 22 and dust class M.
- Reliable vacuuming of substances which could put health at risk such as explosive dusts.

#### 2 User-friendly machine handling

- Hose hook and accessory storage for simple storage and carrying.
- $\hfill \blacksquare$  Integrated cable hook for secure cable storage.

#### **EX COMPACT CLASS**



#### **Compact performance for Zone 22**

The Compact Class, ATEX-certified industrial vacuums are approved for potentially explosive Zone 22 atmospheres. Thanks to innovative motor technology, the machines are ideal for continuous use.

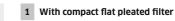












The compact flat pleated filter allows a large filter area with a small and neat design.

#### 2 Certified according to 94/9/EC (ATEX)

Explosion-proof industrial vacuum certified according to 94/9/EC (ATEX) for zone 22 and dust filter class M.

#### IVM 60/30 M Z22

- Certified according to 94/9/EC
- Manual filter cleaning
- Anti-static equinment

		Anti-static equipment
Technical data		
Current type	Ph / V / Hz	3 / 400 / 50
Rated input power during operation	kW	3
Air flow rate	$l/s / m^3/h$	55 / 198
Vacuum	mbar / kPa	250 / 25
Container capacity	I	60
Filter area	m²	2.2
Main filter dust class		M
Sound pressure level	dB(A)	79
Cable length	m	7.5
Nominal diameter of connection		DN 70
Nominal diameter of accessory		DN 40
Weight	kg	102
Dimensions (L × W × H)	mm	1040 × 680 × 1840
Order No.		1.573-521.0
Price		

#### IVC 60/30 Ap M Z22

#### IVC 60/12-1 Ec H Z22

		<ul><li>Certified according to 94/9/EC</li><li>Manual filter cleaning</li><li>Anti-static equipment</li></ul>	<ul> <li>Certified according to DIN EN 60335-2-69:2010</li> <li>Dust-free and low-dust disposal</li> <li>Anti-static equipment</li> </ul>
Technical data			
Current type	Ph / V / Hz	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power during operation	kW	3	1
Air flow rate	$l/s / m^3/h$	49.2 / 177	39 / 140
Vacuum	mbar / kPa	250 / 25	223 / 22.3
Container capacity	I	60	60
Filter area	m²	1.9	0.95
Main filter dust class		M	Н
Sound pressure level	dB(A)	77	76
Cable length	m	8	10
Nominal diameter of connection		DN 70	DN 70
Nominal diameter of accessory		DN 40	DN 40
Weight	kg	95	59
Dimensions (L × W × H)	mm	970 × 690 × 1240	970 × 690 × 995
Order No.		1.576-106.0	1.576-103.0

#### **CONTINUOUS EXTRACTION OF UNSETTLED PARTICLES**

Continuous dust extraction directly at the point of origin in the process, as well as from the surrounding area, makes an important contribution to process reliability and occupational safety. Our industrial dedusters for use in production are suitable for all kinds of dust and fine swarf that occur in the machining process.





Industrial deduster standard Page 58
Industrial deduster Ex Page 66





#### 1 Versatile industrial dedusters

Our industrial dedusters reliably remove unsettled particles and hazardous substances from the ambient air.

#### 2 Industrial deduster Ex

We build our explosion-proof industrial dedusters strictly according to the Z22 directive for explosive suspended and flammable particles.

(not certified)

#### How to read the machine names:

Model	Air flow rate	Rated input power	Motor	Equipment					
		during operation							
Example: ID	130	22							
ID = industrial dust extractor ID Ex = EX industrial dust extractor	in Nm³/h × 10 100 = 1000 Nm³/h 200 = 2000 Nm³/h 	in kW/10 (no comma) e.g.: 30 = 3.0 55 = 5.5 kW	-1 = 1-phase, 1 motor -2 = 1-phase, 2 motors -3 = 1-phase, 3 motors without designation = 3-phases, 1 motor	without designation = standard equipment Tact/Tact² = fully automatic filter cleaning Afc = automatic filter cleaning Tc = tilting chassis Sc = set-down container Ef = emptying flap Me = stainless steel container H = high hazardous dusts M = medium hazardous dusts L = light hazardous dusts Table 1 - Willt ia w. Zono 23 directive					

#### FOR THE EFFECTIVE COLLECTION OF UNSETTLED PARTICLES

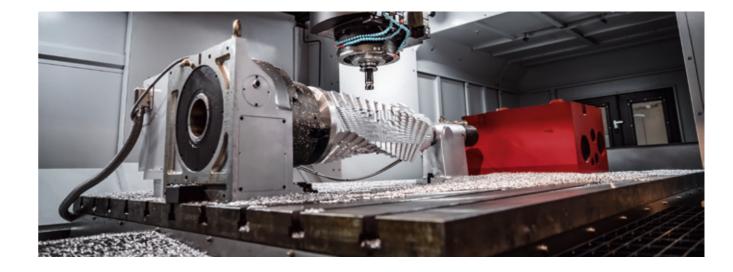
Unsettled particles can vary greatly: fine dust, hazardous dust, fine swarf and all kinds of abrasion. In many industries the continuous vacuuming of process dusts from metals, glass, stone, textile fibres, agricultural products or chemicals directly in the process is essential. Our industrial dedusters reliably capture unsettled particles, even in large quantities, in continuous operation 24/7 directly at connected machining centres or filling plants.





Industrial deduster standard

Page 62



#### 1 Reliable dust extraction around the clock

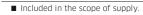
Continuous stationary use 24/7 for dust extraction in the machining process Continuous stationary use 24/7 directly at machining centres places places extremely high demands on machines and filter engineering. The end-to-end conductivity of the machine is just as decisive as special filters with very high separation rates and filter cleaning for a longer service life. Special devices for dust-free emptying minimise interruptions and ensure that hazardous dust does not reach the surrounding area again. Our industrial dedusters are built so that servicing is easy to carry out. For the protection of health at the workplace, our dedusters have special sound insulation on the turbine housing.

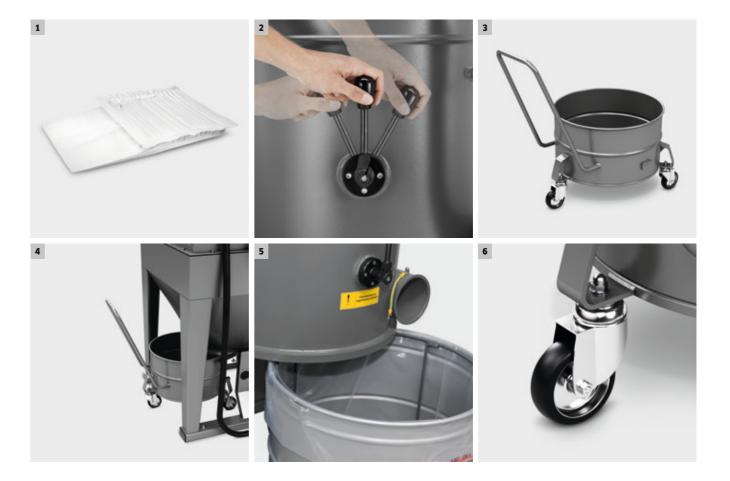
#### 2 For tough continuous industrial use

extremely high demands on the dust extractor. Our industrial dedusters are perfect for vacuuming unsettled particles such as those that occur when machining metals, fibre materials, glass or mineral materials. These solutions combine high volume flows with formidable energy efficiency for low operating costs in continuous operation. Our three-phase radial compressors in energy efficiency class IE2 or IE3 are extremely durable and offer a guaranteed continuous use of 20,000 hours.

INDUSTRIAL DEDUSTER STANDARD INDUSTRIAL DEDUSTER STANDARD

		Order no.	Price	Container capacity (I)	Power supply (Ph / V / Hz)	Rated input power (kW)	Max. air flow rate (I/s / m³/h)	Vacuum (mbar / kPa)	Flat pleated filter	Star/pocket filter	Cartridge filter	Surface filter	Page
	Industrial dust extractor												
	ID 350/110 Afc	9.988-784.0		100	3 / 400 / 50-60	11	972 / 3500	71 / 7.1	-		-	-	62
	ID 265/55 Afc	9.987-208.0		50	3 / 400 / 50-60	5.5	778 / 2800	52 / 5.2	-		-	-	62
	ID 130/22 Afc	9.985-410.0		170	3 / 400 / 50-60	2.2	370 / 1329	33 / 3.3	-	•	-	-	63
	ID 130/22	9.982-506.0		170	3 / 400 / 50-60	2.2	370 / 1329	33 / 3.3	-		-	-	63
1	ID 90/30	9.987-840.0		100	3 / 400 / 50-60	3	250 / 900	46 / 4.6	-		-	-	64
	ID 50/40 Afc	9.986-460.0		50	3 / 400 / 50-60	4	138 / 495	140 / 14	-		-	-	65
	ID 30/30 Afc	9.986-412.0		50	3 / 400 / 50-60	3	87.5 / 315	260 / 26	-	•	-	-	65
<ul> <li>Implicated in</li> </ul>													





#### 1 Always the right filter

Our industrial dedusters in dust classes M and H offer you the appropriate solution for every requirement with pocket filters or cartridge filters.

#### 2 Reliable filter cleaning

Manual or electrical filter cleaning (depending on the machine type) ensures

5 The dust is safely in the bag consistently high suction power and a long filter life.

#### 3 For all quantities of dust

With capacities from 50 to 170 litres, our collecting containers cover every requirement appropriate to the application.

#### 4 Fast emptying. Fast transportation.

The settling container with roller collecting container allows ergonomic emptying. For safe loading by crane or forklift, our vacuum cleaners are fitted with crane lugs and/or welded forklift inserts.

For dust-free emptying you can insert a disposal bag in the collecting container, which ensures that hazardous dust does not reach the surrounding area again.

#### 6 Stationary, but also mobile

Our industrial dedusters are generally designed for stationary use. However, some versions are also available with rollers for semistationary use.

#### STANDARD INDUSTRIAL DUST EXTRACTOR



#### Suspended particles reliably removed

Powerful industrial dedusters such as the ID 265/55 suck in a very large volume of air and reliably vacuum all the unsettled particles in it. The IE3 efficiency of the drive turbine ensures a low energy consumption and thus also low operating costs.



- 1 Equipped for dust class M for high occupational safety
- Dust class M filter engineering for vacuuming hazardous dust.
- 2 Easy and safe emptying system without removal of drive head
- Settling container and rolling container for ergonomic emptying.





#### Maximum performance in continuous operation

With its energy-efficient drive unit with high air flow, the compact ID 130 industrial dust extractor is designed for continuous operation. The large, easily expandable 170-litre collection container rarely needs emptying, ensuring long operating intervals.



- 1 Certified for dust class M
- Dust class M filter engineering for vacuuming hazardous dust.
- 2 Simple and safe emptying without removing the drive head
- Settling container and rolling container for ergonomic emptying.

ID 350/110 Afc

ID 265/55 Afc

		<ul><li>Automatic filter cleaning system</li><li>Sound-damping</li></ul>	<ul><li>Automatic filter cleaning system</li><li>Sound-damping</li></ul>
Technical data			
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	11	5.5
Air flow rate	l/s / m³/h	972 / 3500	738 / 2655
Vacuum	mbar / kPa	71 / 7.1	47 / 4.7
Container capacity	1	100	50
Filter area	m²	24	14
Sound pressure level	dB(A)	75	68
Cable length		-	-
Nominal diameter of connection		DN 250	DN 175
Nominal diameter of accessory		-	-
Weight	kg	630	370
Dimensions (L × W × H)	mm	1278 × 1090 × 3055	1086 × 1363 × 2667
Order No.		9.988-784.0	9.987-208.0
Price			

ID 130/22 Afc

ID 130/22

		<ul><li>Automatic filter cleaning system</li><li>Set-down trolley</li><li>Dust-free emptying</li></ul>	<ul><li>Manual filter cleaning</li><li>Set-down trolley</li><li>Dust-free emptying</li></ul>
Technical data			
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50
Rated input power during operation	kW	2.2	2.2
Air flow rate	I/s / m³/h	370 / 1329	370 / 1329
Vacuum	mbar / kPa	33 / 3.3	33 / 3.3
Container capacity	I	170	170
Filter area	m²	9	9
Sound pressure level	dB(A)	75	75
Cable length	m	5	5
Nominal diameter of connection		DN 140	DN 140
Nominal diameter of accessory		-	-
Weight	kg	139	158
Dimensions (L × W × H)	mm	1170 × 790 × 1580	1170 × 790 × 1580
Order No.		9.985-410.0	9.982-506.0
Price			

#### STANDARD INDUSTRIAL DUST EXTRACTOR

#### Efficient, compact, long-lasting

Long operating times are effortlessly achieved with the compact industrial dust extractor thanks to its large collection container. The high air flow generated by the drive unit ensures high suction performance.



- 1 Simple and safe emptying without removing the drive head
- Settling container and rolling container for ergonomic emptying.
- 2 Low-dust emptying system with PE bag
- Low-dust emptying thanks to closing mechanism and pressure compensation hose.
- Simple and safe dust disposal thanks to PE bag.

#### STANDARD INDUSTRIAL DUST EXTRACTOR



#### Efficient, compact, long-lasting

The machines in this range boast maximum efficiency whilst still featuring an extremely compact and space-saving design. Ideal for spot cleaning of unsettled particles whilst automatic filter cleaning ensures consistently high suction power at all times.



- 1 Easy and safe emptying system without removal of drive head
- Settling container and rolling container for ergonomic emptying.
- 2 Low-dust emptying system with PE bag for harmful materials
- Low-dust emptying thanks to closing mechanism and pressure compensation hose.
- Simple and safe dust disposal thanks to PE bag.

#### ID 90/30

- Manual filter cleaning
- Set-down trolley

		Sound-damping
Technical data		
Current type	Ph / V / Hz	3 / 400 / 50
Rated input power during operation	kW	3
Air flow rate	l/s / m³/h	250 / 900
Vacuum	mbar / kPa	48 / 4.8
Container capacity	1	100
Filter area	m²	3.2
Sound pressure level	dB(A)	64
Cable length	m	7.5
Nominal diameter of connection		DN 120
Nominal diameter of accessory		-
Weight	kg	270
Dimensions (L × W × H)	mm	1450 × 760 × 1680
Order No.		9.987-840.0
Price		

ID 50/40 Afc ID 30/30 Afc

■ Sound-damping ■ Sound-damping Ergonomic container guide Ergonomic container guide Technical data Current type Ph / V / Hz 3 / 400 / 50 3 / 400 / 50 Rated input power during operation I/s / m³/h 138 / 495 87.5 / 315 Air flow rate mbar / kPa 140 / 14 260 / 26 Vacuum Container capacity 50 50 Filter area 3.2 3.2 70 68 Sound pressure level dB(A) Cable length 7.5 7.5 DN 50 Nominal diameter of accessory 174 193 Weight Dimensions (L × W × H) 915 × 777 × 1824 915 × 777 × 1938 9.986-460.0 9.986-412.0

INDUSTRIAL DEDUSTER EX

#### FOR EVERYTHING THAT FLOATS AND IS EXPLOSIVE

The continuous suction of suspended, explosive particles directly at the point of origin in the process places extremely high requirements on industrial dedusters. Our dedusters and Ex dedusters have been proving themselves for many years in continuous stationary use 24/7 in many areas of industry, particularly in metal and wood processing, in the automotive, chemical and pharmaceutical industries, food industry, paper manufacture, in the rubber and plastic processing industry, as well as in Zone 22.





Industrial deduster Ex

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#### 1 Explosion protection without interruptions

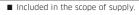
The end-to-end conductivity of the machine is just as decisive for occupational safety in the Ex zone as special filters with very high separation rates and filter cleaning for a longer service life. Special devices for dust-free emptying minimise interruptions and ensure that hazardous dust does not reach the surrounding area again. Our Ex-proof industrial dedusters are built so that servicing is easy to carry out. For the protection of health at the workplace, our Ex-proof dedusters have special sound insulation on the turbine housing. There are versions with pressure relief for installation inside buildings.

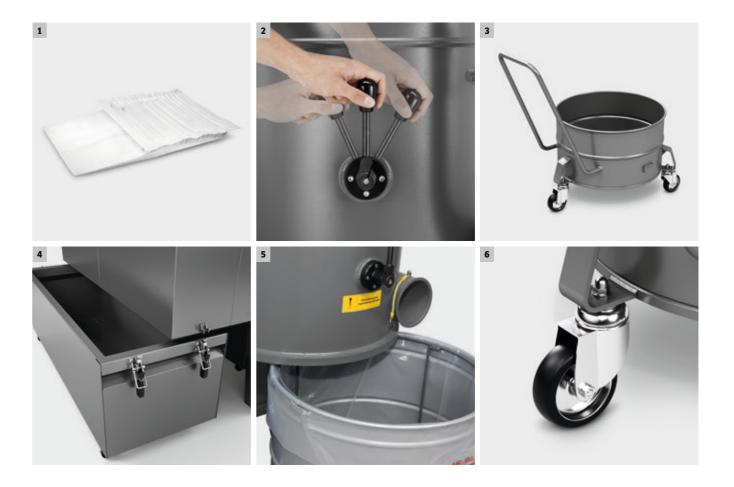
#### 2 Continuously reliable and safe

The continuous stationary use 24/7 directly at machining centres in the Ex zone places extremely high demands on the dust extractor. Our explosion-proof industrial dedusters are perfect for suctioning unsettled particles, such as those that arise when filling flour or in paper manufacture. These solutions combine high volume flows with formidable energy efficiency for low operating costs in continuous operation. Our three-phase radial compressors in energy efficiency class IE2 or IE3 are extremely durable and offer a guaranteed continuous use of 20,000 hours.

INDUSTRIAL DEDUSTER EX INDUSTRIAL DEDUSTER EX

		Order no.	Price	Container capacity (I)	Power supply (Ph / V / Hz)	Rated input power (kW)	Max. air flow rate (l/s / m³/h)	Vacuum (mbar / kPa)	Flat pleated filter	Star/pocket filter	Cartridge filter	Surface filter	Page
	EX industrial dust extractor												
	ID 650/75 Afc Z22	9.987-426.0		102	3 / 400 / 50-60	7.5	1806 / 6500	22 / 2.2	-	-		-	71
-	ID 650/75 Afc Z22 (Indoor)	9.988-361.0		102	3 / 400 / 50-60	7.5	1806 / 6500	22 / 2.2	-	-		-	71
	ID 400/40 Afc Z22	9.987-425.0		90	3 / 400 / 50-60	4	1111 / 4000	23 / 2.3	-	-		-	71
	ID 400/40 Afc Z22 (Indoor)	9.988-360.0		90	3 / 400 / 50-60	4	1111 / 4000	23 / 2.3	-	-		-	71
	ID 300/30 Afc Z22	9.987-424.0		80	3 / 400 / 50-60	3	833 / 3000	22 / 2.2	-	-		-	71
	ID 300/30 Afc Z22 (Indoor)	9.988-359.0		80	3 / 400 / 50-60	3	833 / 3000	22 / 2.2	-	-		-	71
Par 1 10	ID 220/22 Afc Z22	9.987-423.0		80	3 / 400 / 50-60	2.2	611 / 2200	22 / 2.2	-	-		-	71
	ID 220/22 Afc Z22 (Indoor)	9.988-358.0		80	3 / 400 / 50-60	2.2	611 / 2200	22 / 2.2	-	-		-	71
	ID 130/22 Z22	9.985-600.0		170	3 / 400 / 50-60	2.2	369 / 1329	25 / 2.5	-		-	-	72
	ID 90/30 Afc Z22	9.987-920.0		100	3 / 400 / 50-60	3	250 / 900	48 / 4.8	-		-	-	73





#### 1 High-performance, safe filter engineering

Our explosion-proof industrial dedusters in dust classes M and H offer you the appropriate solution for every requirement with pocket filters or cartridge filters.

#### 2 Reliable filter cleaning

consistently high suction power and a long filter life.

#### 3 Suitable for all quantities

With capacities from 50 to 240 litres, our collecting containers cover every 6 Stationary, but also mobile requirement appropriate to the application.

#### 4 Convenient emptying, easy transportation

The settling container with roller collecting container allows ergonomic emptying. For safe loading by crane or forklift, our vacuum cleaners are fitted with crane lugs and/or welded forklift inserts.

#### 5 Safe collection - safe emptying

Manual or electrical filter cleaning (depending on the machine type) ensures For dust-free emptying you can insert a disposal bag in the collecting container, which ensures that explosive dust does not reach the surrounding area again.

Our explosion-proof industrial dedusters are generally designed for stationary use. However, some versions are also available with rollers for semi-stationary use.

#### **EX INDUSTRIAL DUST EXTRACTOR**



#### With maximum air flow in Zone 22

Industrial dedusters suitable for applications in potentially explosive areas of Zone 22 generate the highest air flows and can optionally be set up indoors using flameless pressure relief.







#### 1 Horizontally arranged filter cartridges

- Enables maintenance work from the clean air side without causing contamination.
- 3 With automatically controlled countercurrent compressed air filter cleaning
- Enables uninterrupted operation without downtime.
- Efficient, convenient filter cleaning for constant suction power.

#### 2 Suitable for Zone 22

■ With flameless pressure relief for the most stringent explosion protection requirements.

## **TECHNICAL DATA AND EQUIPMENT**

		ID 650/75 Afc Z22 ID 650/75 Afc Z22 (indoor)	ID 400/40 Afc Z22 ID 400/40 Afc Z22 (indoor)	ID 300/30 Afc Z22 ID 300/30 Afc Z22 (indoor)		
		<ul> <li>Automatic filter cleaning system</li> <li>Effective separation of fine and coarse dusts</li> <li>Sound-damping</li> </ul>	<ul> <li>Automatic filter cleaning system</li> <li>Effective separation of fine and coarse dusts</li> <li>Sound-damping</li> </ul>	<ul> <li>Automatic filter cleaning system</li> <li>Sound-damping</li> <li>Effective separation of fine and coarse dusts</li> </ul>		
Technical data						
Current type	Ph / V / Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50		
Rated input power during operation	kW	7.5	4	3		
Air flow rate	I/s / m³/h	1806 / 6500	1111 / 4000	833 / 3000		
Vacuum	mbar / kPa	22 / 2.2	23 / 2.3	22 / 2.2		
Container capacity	I	102	90	80		
Filter area	m²	108	72	48		
Main filter dust class		M	M	M		
Sound pressure level	dB(A)	87	81	78		
Cable length		-	-	-		
Nominal diameter of connection		2 × DN 224	2 × DN 175	DN 224		
Nominal diameter of accessory		-	-	-		
Weight	kg	620	470	385		
Dimensions (L × W × H)	mm	1389 × 1545 × 2338	1412 × 1100 × 2344	1454 × 928 × 1904		
Order No.		9.987-426.0   -361.0	9.987-425.0   -360.0	9.987-424.0   -359.0		
Price						

#### ID 220/22 Afc Z22 ID 220/22 Afc Z22 (indoor)

- Automatic filter cleaning systemEffective separation of fine and coarse dustsSound-damping

Technical data		
Current type	Ph / V / Hz	3 / 400 / 50
Rated input power during operation	kW	2.2
Air flow rate	$I/s / m^3/h$	611 / 2200
Vacuum	mbar / kPa	22 / 2.2
Container capacity	I	80
Filter area	m²	48
Main filter dust class		M
Sound pressure level	dB(A)	78
Cable length		-
Nominal diameter of connection		DN 175
Nominal diameter of accessory		-
Weight	kg	380
Dimensions (L × W × H)	mm	1405 × 930 × 2100
Order No.		9.987-423.0   -358.0
Price		

71

### **EX INDUSTRIAL DUST EXTRACTOR**

### For very long applications in Zone 22.

Thanks to the large collection container, the highly compact ID 130/22 Z22 industrial dust extractor is also suitable for very long work assignments in the potentially explosive areas of Zone 22.



- 1 Simple and safe emptying without removing the drive head
- Settling container and rolling container for ergonomic emptying.
- 2 Certified for dust class M
- Dust class M filter engineering for vacuuming hazardous dust.

#### ID 130/22 Z22

- Manual filter cleaning ■ Set-down trolley

		■ Dust-free emptying
Technical data		
Current type	Ph / V / Hz	3 / 400 / 50
Rated input power during operation	kW	2.2
Air flow rate	$l/s / m^3/h$	369 / 1329
Vacuum	mbar / kPa	25 / 2.5
Container capacity	I	170
Filter area	m²	9
Main filter dust class		M
Sound pressure level	dB(A)	72
Cable length	m	5
Nominal diameter of connection		DN 140
Nominal diameter of accessory		-
Weight	kg	139
Dimensions (L × W × H)	mm	1170 × 790 × 1580
Order No.		9.985-600.0
Price		

### **EX INDUSTRIAL DUST EXTRACTOR**



### The space-saving solution in Zone 22.

The ID 90/30 Afc Z22 industrial dust extractor features a particularly compact design, requires very little floor space and boasts high air flows for reliable vacuuming in potentially explosive areas.



- 1 Durable, washable pocket filter and electric filter cleaning
- Longer service life, less maintenance effort and lower costs. Ideal for
- Efficient, convenient filter cleaning for constantly high suction power.
- 2 Simple and safe emptying without removing the drive head
- Settling container and rolling container for ergonomic emptying.

#### ID 90/30 Afc Z22

- Automatic filter cleaning system
- Set-down trolley
- Sound-damping

rechnical data		
Current type	Ph / V / Hz	3 / 400 / 50
Rated input power during operation	kW	3
Air flow rate	l/s / m³/h	250 / 900
Vacuum	mbar / kPa	48 / 4.8
Container capacity	I	100
Filter area	m²	3.2
Main filter dust class		M
Sound pressure level	dB(A)	64
Cable length	m	6
Nominal diameter of connection		DN 120
Nominal diameter of accessory		-
Weight	kg	314
Dimensions (L × W × H)	mm	1497 × 800 × 1690
Order No.		9.987-920.0
Price		

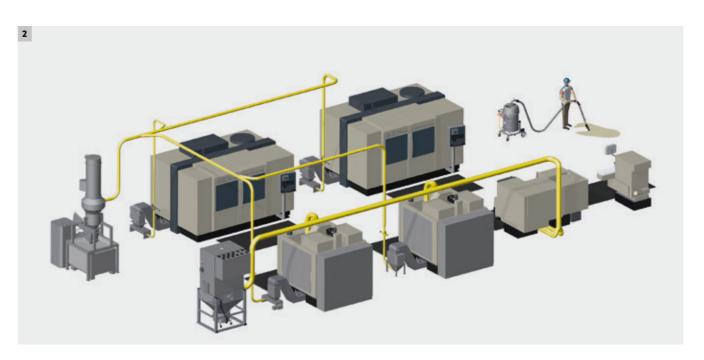
### **EVERYTHING YOU NEED: STANDARD ACCESSORIES**

You can optimally complete every cleaning task to optimum effect with the right accessories. Choose the appropriate parts or kits for your requirements from our complete and clever range of accessories for vacuuming systems - from comprehensive floor cleaning through to stationary accessories for vacuuming in the process.



Table of contents: Accessories for Industrial Vacuuming / **Dedusting Solutions** 

Accessories Stationary accessories Page 100



### 1 Accessories for every application

3 nominal diameters: DN 40, DN 50, DN 70.

#### 2 Accessories for stationary applications

Our range of accessories is modular and can be individually combined, from For industrial vacuums and dedusters in tough, stationary continuous use the filter through to the nozzle. All accessories are conductive. Available in you will find accessories for every purpose in our range of accessories from pipes to manual suction points.

### THE RIGHT ACCESSORY FOR EVERY APPLICATION

With our original accessories for industrial vacuums and dedusters we give you every possibility to optimally exhaust the potential of your machines in every application. All accessories are optimised for tough industrial use.

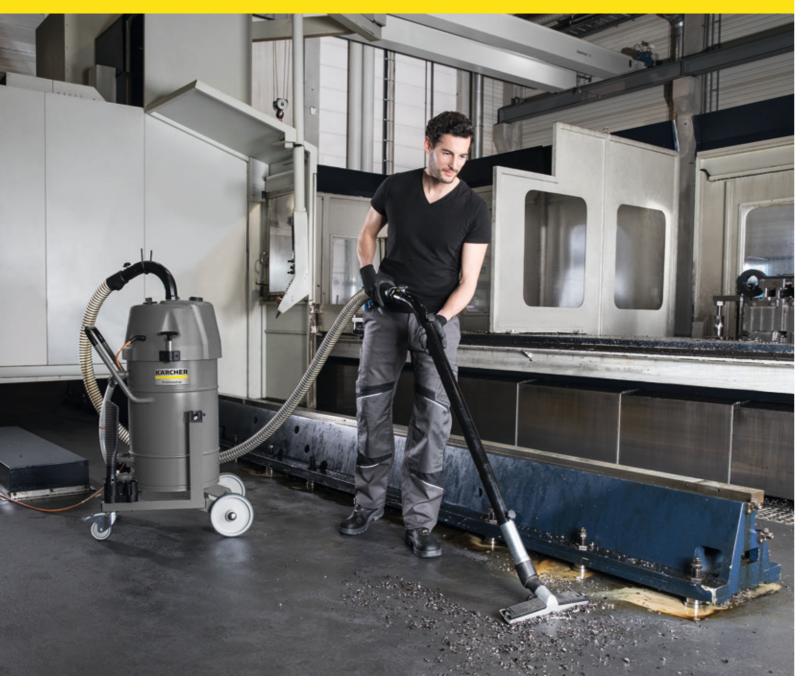


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Adapters / Reducers / Distributors	Page	8
Hoses	Page	8
Handles / Suction tubes	Page	8
Nozzles	Page	8
Brushes	Page	9
Pre-separators	Page	9
Accessory kits	Page	9
Other accessories	Page	9



### 1 Perfect filtering and simple emptying

There are various filters available for filtering dust made of paper or PE, with and without PTFE coating. Practical disposal bags made of paper or PE able to work ergonomically and extend your working radius. make dust-free emptying possible.

#### 2 Adapters, distributors and reducers

Flexibility and versatility are particularly important in industry. We offer you various adapters, distributors and reducers. With our Kärcher adapters you can, for example, easily connect our accessories to Professional NT vacuum cleaners. Distributors allow you to connect two suction hoses to one vacuum cleaner at the same time. And with our compatible reducers you can freely combine all nominal diameters.

#### 3 Everything passes through here: hoses

Suction hoses are the key link between suction head and vacuum cleaner. In our range of hoses you will find the appropriate hose for every application.

#### 4 Secure hold and guidance

With the appropriate handle for our coated bends and suction tubes you are

#### 5 Variety at the top: nozzles and brushes

Choose the appropriate nozzle and brush from our variety of crevice, flat and floor nozzles and brushes in order to vacuum quickly and efficiently in every situation.

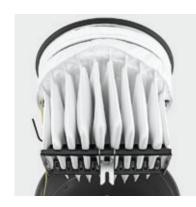
### 6 Perfectly separated: pre-separator

Our mobile pre-separators separate liquids, solids and dust directly during vacuuming. This means you can also pick up large quantities of dirt and liquids much easier and dispose of them in a time-saving manner.

### 7 Always ready to help: accessory kits

Kärcher provides accessory kits for the most common applications. With our practical accessory kits you always have all accessories immediately to hand for the typical applications.

## **FILTERS**



The best suction power is useless without a powerful filter. Industrial filters from Kärcher boast advanced technology, a high separation effect and a particularly long service life.





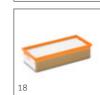












	Order No. Qu	antity Price	Description		IVR-L 100/40 Sc IVR-L 100/30 Sc IVR-L 200/24-2 Tc Dp IVR-L 400/24-2 Tc	IVR-L 120/24-2 TC Me Dp IVR-L 120/24-2 TC Me IVR-L 120/24-2 TC	IVR-L 100/24-2 Tc Me Dp IVR-L 100/24-2 Tc Me IVR-L 100/24-2 Tc Dp	IVR-L 100/24-2 TC IVR-L 100/24-2 Me IVR-L 100/24-2	IVR-L 65/20-2 IC IVR-L 65/12-1 TC IVR-L 40/12-1	IVS 100/75 M IVS 100/55 M IVS 100/40 M IVS 100/75 Lp IVS 100/55 Lp	IVS 100/40 Lp IVR 100/40 Sc	IVR 100/30 SC IVR 100/60 Ef	IVR 50/40 SC IVR 50/30 SC IVR 50/15 SC	IVR 40/30 SC IVR 40/15 SC IVR 35/20-2 Sc Me	IVC 60/30 Tact <sup>2</sup> IVC 60/30 Tact <sup>2</sup> Lp	IVC 60/24-2 Tact <sup>2</sup> IVC 60/24-2 Tact <sup>2</sup> IVC 60/24-2 Tact <sup>2</sup> IVC 60/12-1 Tact Er	IVM 60/30 M 222 IVC 60/12-1 EC H 222 ID 265/55 Afc	ID 90/30 ID 50/40 Afc ID 30/30 Afc	ID 400/40 Afc Z22 ID 90/30 Afc Z22
Pocket/star filter																			
Pocket filter PE M 1.4 m <sup>2</sup>	1 9.980-227.0			1										=					
Pocket filter PE L 1.75 m <sup>2</sup>	2 9.981-692.0		]	2															
Pocket filter PE M 1.75 m²	3 9.981-681.0			3															
Pocket filter PE L 3.2 m <sup>2</sup>	4 9.981-693.0		]	4															
Pocket filter PE M 3.2 m <sup>2</sup>	5 9.981-684.0			5													1		
Pocket filter PE M 14 m²	6 9.980-184.0		]	6															
Star filter PE M 2.2 m <sup>2</sup>	7 6.907-611.0			7															
Star filter PE/PTFE M 2.2 m <sup>2</sup>	8 6.907-651.0		]	8															
Star filter PE/PTFE el. M 2.2 m²	9 9.439-542.0			9															
Fine fleece																			
Fine fleece PE 20 I	10 9.989-612.0		Suitable for 20 I strainer basket. For separating fine metal shavings and liquids.	10															
Fine fleece PE 40 I	11 9.981-048.0		Suitable for 40 I strainer basket. For separating fine metal shavings and liquids.	11															
Surface filter																			
Surface filter PE L 0.25 m <sup>2</sup>	12 9.980-225.0			12															
Surface filter PE L 0.45 m <sup>2</sup>	13 9.980-180.0			13															
	14 9.988-256.0			14															
Flat pleated filter, PTFE																		4	
Flat pleated filter, PTFE	15 6.907-449.0 1 p	piece(s)	Polyester fleece with PTFE coating, dust class M, for Tact <sup>2</sup> vacuum cleaners.  Particularly suitable for very adhesive materials.	15															
Flat pleated filter, paper																			
Flat pleated filter, paper	16 6.907-276.0 1 p	piece(s)	Paper, approved for dust class M.	16															
Flat pleated filter, PES																			
Flat pleated filter, PES	17 6.907-277.0 1 p	piece(s)	Polyester fleece, rot-proof, dust class M.	17															
HEPA, dust class H filter																			
HEPA flat pleated filter	18 6.904-364.0 1 p	piece(s)	HEPA flat pleated filter, dust class H (HEPA 13).	18															

■ Included in the scope of supply. 

Available accessories. More Kärcher original accessories can be found on the following pages.

## **EMPTYING SUPPORTS**



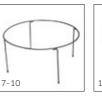
Emptying supports make it even easier to empty the collection containers. Integrated strainer baskets, for example, ensure the efficient separation of liquids and solids, while the crane or stacker yoke minimises the amount of effort required by the user. Depending on the relevant suction waste, we offer you a wide range of emptying bags in various designs in order to ensure emptying is low-dust or dust-free.

























	Order No.	Quantity	Price Description	INR-L100/30 SC INR-L100/30 SC INR-L120/24-2 TC Me DP INR-L120/24-2 TC Me DP INR-L120/24-2 TC Me DP INR-L100/24-2 TC Me DP INR-L100/24-2 TC Me DP INR-L100/24-2 TC INR-L100/24-2 TC INR-L100/24-2 TC INR-L100/24-2 TC INR-L65/12-1 TC INR-L65/12-1 TC INR-L65/12-1 TC INR-L65/12-1 TC INR-L65/12-1 TC INR-L00/40 M INS 100/75 M INS 100/75 M INS 100/75-PP EF INS 100/75-PP
Emptying bags				
Disposal bag PE Ø 510 mm 100 l	1 6.904-348.0	20 piece(s)	For safe, dust-free emptying.	
Disposal bag PE Ø 540 mm 100 l	2 9.989-607.0			
Disposal bag PE Ø 460 mm 120 l	3 6.907-646.0			3
Disposal bag Longopac PE Ø 357 mm 60 l 4 ×	4 6.907-506.0	4 piece(s)	For Longopac disposal system. Length: 22 m.	
PE disposal bag ID130/22 150 I	5 9.980-828.0		For safe, dust-free emptying.	5
Safety filter bags	6 6.904-420.0	5 piece(s)	For safe, dust-free emptying.	6
Disposal bag holder			·	
Disposal bag holder Ø 420 mm 30 l	7 9.975-398.0		For 30 I disposal bag. Prevents this from being sucked up.	7
Disposal bag holder Ø 517 mm 30 l	8 9.980-126.0			8
Disposal bag holder Ø 517 mm 50 l	9 9.980-140.0		For 50 I disposal bag. Prevents this from being sucked up.	9
Disposal bag holder Ø 517 mm 100 l	10 9.980-141.0		For 100 I disposal bag. Prevents this from being sucked up.	10
Swarf baskets			•	
Swarf basket, stainless steel, Ø 400 mm, 20 l	11 9.980-852.0		With hole diameter of 1.5 mm.	11
Swarf basket Ø 452 mm 35 l	12 2.860-268.0			12
Swarf basket, stainless steel, Ø 495 mm, 40 l	13 9.980-849.0			13
Swarf basket IVC	14 5.731-645.0		With hole diameter of 4.0 mm.	14
Other emptying aids			'	
Longopac add-on system IVC	15 2.013-050.0		To be attached instead of the collecting container for holding the Longopac	15
Longopac add-on system IVS	16 2.013-092.0		emptying bag.	16
Emptying support crane/forklift ∅ 452 mm	17 2.642-842.0		For crane and forklift emptying via crank mechanism. 452 mm diameter, 260 kg maximum load capacity.	17
Emptying support crane	18 9.980-832.0		For hooking onto the existing crane eyes. Enables convenient emptying and transport using a crane.	
Overfill protection Ø 435 mm	19 9.982-118.0		Stainless steel. Prevents the container from overfilling.	19
Overfill protection Ø 540 mm	20 9.982-117.0			20

■ Included in the scope of supply. 

Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

# **ADAPTERS/REDUCERS/DISTRIBUTORS**



A large selection of adapters and reducers are available for securely connecting various types of vacuums and/or hoses of different nominal widths. Special distributors enable two hoses to be connected to one machine.















	Order No.	Nominal diameter	Price	Description		DN 40 DN 50 DN 70
Adapter product				1		
Adapter product NT to DN50	1 9.989-605.0	DN 50		Enables the use of industrial vacuum accessories with wet/dry vacuums.	1	
Adapter product IV to DN70	2 9.977-596.0	DN 70		Enables the use of industrial vacuum accessories with IV 60 and IV 100 vacuums.	2	
Adapter accessory			'			
Adapter accessory DN50 to DN51	3 9.989-603.0	DN 50		Enables the use of IV 60 and IV 100 accessories on industrial vacuum accessories.	3	
Adapter accessory DN51 to DN50	4 9.989-601.0	DN 50		Enables the use of industrial vacuum accessories on IV 60 and IV 100 accessories.	4	
Adapter accessory DN50 to DN61	5 9.989-602.0	DN 50		Enables the use of IV 60 and IV 100 accessories on industrial vacuum accessories.	5	
Adapter accessory DN61 to DN50	6 9.989-604.0	DN 50		Enables the use of industrial vacuum accessories on IV 60 and IV 100 accessories.	6	
Reducers/expanders						
Reducer DN70 to DN50	7 9.977-772.0				7	
Reducer DN70 to DN50	8 9.980-470.0	DN 70			8	
Reducer DN70 to DN40	9 9.989-690.0	DN 70			9	
Reducer DN50 to DN40	10 9.981-231.0	DN 50			10	
Reducer DN70 to DN50	11 9.989-712.0	DN 70			11	
Reducer DN70 to DN40	12 9.989-713.0	DN 70			12	
Expander						
Expander DN40 to DN50	13 9.981-936.0				13	
Expander DN50 to DN70	14 9.981-921.0	DN 50			14	
Distributor						
Distributor Y-piece DN70 to DN50	15 9.989-611.0				15	
Distributor Y-piece DN50 to DN40	16 9.981-149.0	DN 50			16	

 $<sup>\</sup>hfill\square$  Available accessories. More Kärcher original accessories can be found on the following pages.

### **HOSES**



The right hose for the relevant application is required for reliable vacuuming. These range from applications such as vacuuming mineral dust as well as vacuuming abrasive and liquid suction waste such as liquids and oil containing shavings through to metal shavings and hot slag. Take the nominal width of the accessories and the hose lengths into consideration during selection.

















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No.								
Micros   State   Sta								
Micros   State   Sta								
Micros   State   Sta								
Not PC   100   20			Order No	1	Duise	Description		N N I S N I
Sept   Control Contr	DVC		Order No.	uiailietei	Price	Description		
		1	989-6470	DN 40	1	Lightweight and flevible design. Suitable for dusts lightweight solids as well as		
1		_						
No. PC (2004) 1								
See PER PRINCE OF The AIRCHARD AND SEE OF SERVICE AND SERVICE AS AIRCHARD AN						-		
Part						-		
Proce Not Post 20 State						-		
Property Control 5 mm without end stocks   1								
No.   Post   P	-							8
Note   Part   Mode   Part	Hose PVC DN70 15 m without end cones	_						9
Probe 19th 0.04 of 3 m	EVA		_1		-			
Mose PACA MEAS   18   Willhout red records   2   2   2   2   2   2   2   2   2		10	9.988-088.0	DN 40		Extra lightweight and flexible design. Suitable for all types of fine dust and	1	10
Probe EAV NORSO 3 m   31   3088 0000   0 N 50	Hose EVA DN40 5 m	11	9.988-089.0	DN 40		lightweight solids. Temperature resistant up to max. 65°C.	1	11
Hote DRA DRAS 5 in without end cores   15   948-951   948-95   948-952   9	Hose EVA DN40 15 m without end cones	12	9.989-630.0	DN 40			1	12
Note PACK NOTE 15 m without end context   1	Hose EVA DN50 3 m	13	9.988-090.0	DN 50			1	13
Hote EAV DAYO 3 m	Hose EVA DN50 5 m	14	9.988-091.0	DN 50			1	14
Hote PLA (DING) 5 m willhout end cones   13   988+67-20   DING	Hose EVA DN50 15 m without end cones	15	9.989-631.0	DN 50			1	15
Note   PUD NACE   Str. without end comes   18   98-96-130   0 N 40   No. 10   No.	Hose EVA DN70 3 m	16	9.989-613.0	DN 70			1	16
No. PL   DNAO 3 m	Hose EVA DN70 5 m	17	9.989-624.0	DN 70			1	17
Note PLI DNA 0 3 m	Hose EVA DN70 15 m without end cones	18	9.989-632.0	DN 70			1	18
Horse PLI DNAIG 5 m	PU							
Mose PU DN40 15 m without end cones	Hose PU DN40 3 m	19	9.989-617.0	DN 40		Robust, oil-resistant design. Suitable for abrasive fluids and dusts,	1	19
Hobe PU DN50 3 m	Hose PU DN40 5 m	20	9.989-618.0	DN 40		temperature-resistant up to 80°C.	2	20
Hose PU DN50 5 m	Hose PU DN40 15 m without end cones	21	9.989-637.0	DN 40			2	21 0
Hose PU DN70 5 m without end cones	Hose PU DN50 3 m	22	9.989-619.0	DN 50			2	22
Hose PU DN70 5 m	Hose PU DN50 5 m	23	9.989-620.0	DN 50			2	23
Hose PL DN70 5 m	Hose PU DN50 15 m without end cones	_						
Hose PU DN70 15 m without end cones	Hose PU DN70 3 m	25	9.989-644.0	DN 70			2	25
Nex	Hose PU DN70 5 m	_						
Hose ME-PU DN40 3 m	Hose PU DN70 15 m without end cones	27	9.989-639.0	DN 70			2	27
Hose ME-PU DN40 15 m without end cones   30   9.989-622.0   DN 40   Mith fluids. Temperature-resistant up to 110°C.   29   30   30   30   30   30   30   30   3	ME-PU			,				
Hose ME-PU DN40 15 m without end cones 30 9.989-64.00 DN 40								
Hose ME-PU DN50 3 m   31   9.989-623.0   DN 50	Hose ME-PU DN40 5 m					with fluids. Temperature-resistant up to 110°C.		
Hose ME-PU DN50 5 m   32   9.89-625.0   DN 50     1   1   1   1   1   1   1   1   1	Hose ME-PU DN40 15 m without end cones	30	9.989-640.0	DN 40			3	30
Hose ME-PU DN50 15 m without end cones   3   9,899-64.0   DN 50								
Hose ME-PU DN70 3 m	Hose ME-PU DN50 5 m	32	9.989-625.0	DN 50				
Hose ME-PU DN70 5 m   35   9.989-648.0   DN 70   Box ME-PU DN70 15 m without end cones   36   9.989-642.0   DN 70   Box ME-PU DN70 15 m without end cones   36   9.989-642.0   DN 70   Box ME-PU DN70 15 m without end cones   36   9.989-642.0   DN 70   Box ME-PU DN70 15 m without end cones   36   Box ME-PU DN70 15 m without end cones	Hose ME-PU DN50 15 m without end cones	33	9.989-641.0	DN 50			3	33
Hose ME-PU DN70 15 m without end cones   36   9.989-642.0   DN 70	Hose ME-PU DN70 3 m	_						
Hose assembly kit Hose assembly kit DN40	Hose ME-PU DN70 5 m	35	9.989-648.0	DN 70			3	35
Hose assembly kit DN40 37 9.989-627.0 DN 40 Comprising 2 hose end cones, 2 hose end covers. 37 Hose assembly kit DN50 38 9.989-628.0 DN 50 38 DN 50 DN 50 38 DN 50 DN 50 38 DN 50 DN	Hose ME-PU DN70 15 m without end cones	36	9.989-642.0	DN 70			3	36
Hose assembly kit DN50 38 9.989-628.0 DN 50	Hose assembly kit							
		_				Comprising 2 hose end cones, 2 hose end clamps, 2 hose end covers.		
Hose assembly kit DN70   39   9.989-629.0   DN 70   39   39   39   39   39   39   39   3								
	Hose assembly kit DN70	39	9.989-629.0	DN 70			3	39

☐ Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

# **HANDLES/SUCTION TUBES**



Our handles and suction tubes have been developed with ergonomics in mind so that the user can adopt a comfortable working posture without tiring during longer periods of work.















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		Nominal					DN 40 DN 50 DN 70
	Order No.	diameter	Price	Description			
Handles							
Handle DN40	1 9.977-679.0	DN 40			1		
Handle DN50	2 9.977-678.0	DN 50			2		
Handle DN70	3 9.977-677.0	DN 70			3		
Handle st. steel DN40	4 9.989-036.0	DN 40			4		
Handle st. steel DN50	5 9.988-111.0	DN 50			5		
Suction tubes							
Suction tube carbon 1500 mm DN40	6 9.989-552.0	DN 40		As an extension for convenient overhead cleaning.	6		
Suction tube carbon 1500 mm DN50	7 9.989-553.0	DN 50			7		
Suction tube 850 mm DN40	8 9.977-525.0	DN 40			8		
Suction tube 850 mm DN40	9 9.977-531.0	DN 50			9		
Suction tube 850 mm DN70	10 9.981-910.0	DN 70			10		
Suction tube aluminium 1500 mm DN40	11 9.989-038.0	DN 50		As an extension for convenient overhead cleaning.	11		
Suction tube aluminium 1500 mm DN50	12 9.989-035.0	DN 50			12		
Suction tube st. steel 850 mm DN40	13 9.989-039.0	DN 40			13		
Suction tube st. steel 850 mm DN50	14 9.988-114.0	DN 50			14		

 $<sup>\</sup>hfill \square$  Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

## **NOZZLES**



Whether large or small areas, wet or dry suction waste: the nozzles for our industrial vacuums are impressive in every respect. Designed for the toughest applications, they will also impress in terms of their robustness and resistance to external influences.



























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						20 20
		Nominal				DN 5 NO
Chan double and a	Order No.	diameter	Price	Description		
Standard nozzles	1 1 0 000 6740	L DN 40	1			
Standard nozzle PVC DN40	1 9.989-674.0					
Standard nozzle PVC DN50	2 9.989-673.0				2	
Standard nozzle PVC DN70	3 9.989-676.0				3	
Standard nozzle silicone DN40	4 9.988-401.0 5 9.988-402.0				4	
Standard nozzle silicone DN50					5	
Standard nozzle silicone DN70	6 9.989-672.0				6	
Standard nozzle rubber cuttable DN40	7 9.989-677.0				7	
Standard nozzle rubber cuttable DN50	8 9.989-675.0				8	
Standard nozzle aluminium DN40	9 9.980-748.0				9	141
Standard nozzle aluminium DN50	10 9.980-749.0				10	$\perp$
Standard nozzle aluminium DN70	11 9.989-663.0	DN 70			11	
Flexible standard nozzles	1 12   0 001 120 0	L DN 40	1			
Standard nozzle bendable PVC DN40	12 9.981-420.0				12	
Standard nozzle bendable PVC DN50	13 9.981-421.0				13	$\square$
Standard nozzle bendable PVC DN70	14 9.981-422.0				14	
Standard nozzle bendable, angled 90° PP DN40	15 9.981-429.0				15	
Standard nozzle bendable, angled 90° PP DN50	16 9.981-430.0	DN 50			16	
Floor nozzles			1			
Floor nozzle aluminium 370 mm DN40	17 9.989-683.0			Not electrically conductive.	17	
Floor nozzle aluminium, el. 370 mm, DN40	18 9.989-682.0				18	1-1-1
Floor nozzle aluminium 200 mm DN50	19 9.981-426.0			Not electrically conductive.	19	1
Floor nozzle aluminium 370 mm DN50	20 9.989-664.0				20	$\perp$
Floor nozzle aluminium, el. 370 mm, DN50	21 9.987-612.0				21	
Floor nozzle aluminium 500 mm DN50	22 9.989-684.0				22	
Floor nozzle aluminium, el. 500 mm, DN50	23 9.981-925.0				23	
Floor nozzle st. steel, el. 370 mm DN40	24 9.989-558.0				24	
Floor nozzle st. steel, el. 370 mm DN50	25 9.988-115.0	DN 50			25	
Floor nozzle rubber strip oil-resistant. 220 mm	26 9.981-923.0			For floor nozzle width 220 mm.	26	
Floor nozzle rubber strip 370 mm	27 9.981-914.0			For floor nozzle width 370 mm.	27	
Floor nozzle rubber strip 500 mm	28 9.981-915.0			For floor nozzle width 500 mm.	28	
Floor nozzle brush strip, el. 370 mm	29 9.984-939.0			For floor nozzle width 370 mm.	29	
Floor nozzle brush strip 500 mm	30 9.980-764.0			For floor nozzle width 500 mm.	30	
Lane nozzle			1			
Lane nozzle IVC 877 mm DN70	31 2.642-864.0	DN 70		Can be connected directly to the frame of IVC machines.	31	
Crevice nozzles	1 22   200 115	L DN 40				
Crevice nozzle PP 15 mm × 145 mm DN40	32 9.988-116.0					
Crevice nozzle PP 15 mm × 145 mm DN50	33 9.988-117.0				33	
Crevice nozzle PU 19 mm × 160 mm DN40	34 9.981-483.0				34	
Crevice nozzle PU 22 mm × 175 mm DN50	35 9.981-482.0				35	
Crevice nozzle 17 mm × 120 mm DN40	36 9.989-680.0		-		36	
Crevice nozzle 25 mm × 120 mm DN40	37 9.989-678.0				37	
Crevice nozzle 18 mm × 120 mm DN50	38 9.981-442.0				38	
Crevice nozzle 25 mm × 120 mm DN50	39 9.981-465.0				39	
Crevice nozzle 28 mm × 120 mm DN70	40 9.981-444.0	DN 70			40	

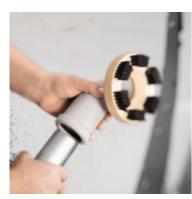
☐ Available accessories. More Kärcher original accessories can be found on the following pages.



	Order No.	Nominal diameter	Price	Description	DN 40 DN 50 DN 50
Stainless steel crevice nozzle 17 mm × 120 mm DN40	41 9.989-19	3.0 DN 40			
Stainless steel crevice nozzle 22 mm × 220 mm DN50	42 9.988-12	3.0 DN 50			42
Crevice nozzles bendable					
Crevice nozzle bendable 65 mm DN50	43 9.988-40	3.0 DN 50			43
Crevice nozzle bendable 11 mm × 58 mm DN40	44 9.989-68	1.0 DN 40			44
Crevice nozzle bendable 20 mm × 45 mm DN40	45 9.981-42	3.0 DN 40			45
Crevice nozzle bendable 12 mm × 45 mm DN50	46 9.981-42	1.0 DN 50		7	46
Crevice nozzle bendable 20 mm × 45 mm DN50	47 9.981-42	5.0 DN 50			47
Surface nozzles					
Surface nozzle silicone 120 mm DN40	48 9.988-11	3.0 DN 40			48
Surface nozzle silicone 120 mm DN50	49 9.988-11	0.0 DN 50		7	49
Surface nozzle aluminium 150 mm DN40	50 9.989-66	5.0 DN 40			50
Surface nozzle aluminium 150 mm DN50	51 9.989-66	5.0 DN 50		7	51
Liquid nozzles					
Liquid nozzle 900 mm DN50	52 9.981-42	7.0 DN 50		Suitable for vacuuming large quantities of liquids from collecting	52
				containers and collection trays.	
Borehole nozzles			_		
Blind hole nozzle DN40	53 9.989-67			For cleaning blind holes.	53
Blind hole nozzle bended 60° DN40	54 9.989-66				54
Blind hole nozzle bended 90° DN40	55 9.989-66				55
Blind hole nozzle bended 90°, 200 mm extension DN40	56 9.989-67	0.0 DN 40			56

<sup>☐</sup> Available accessories. More Kärcher original accessories can be found on the following pages.

## **BRUSHES**



Robust and durable brushes play a decisive role in daily, harsh industrial applications. They are always ready to use and available for a variety of applications and are quick and easy to change where needed.















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		Nominal			0 0 0
	Order No.		Price Description		Q   Z   Z   Q   Q   Z   Q   Q   Q   Q
Standard brushes	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				
Standard brush 40 mm DN40	1 9.981-431.0	DN 40		1	
Standard brush 40 mm DN50	2 9.981-432.0			2	
Pencil brushes					
Pencil brush Ø 82 mm DN40	3 9.989-609.0	DN 40		3	
Pencil brush Ø 82 mm DN50	4 9.989-608.0	DN 50		4	
Surface brushes					
Surface brush PP 24 mm DN40	5 9.989-610.0	DN 40		5	
Surface brush 300 mm DN40	6 9.981-911.0	DN 40		6	
Surface brush 300 mm DN50	7 9.981-912.0	DN 50		7	
Cylinder brushes					
Cylinder brush Ø 101.6 mm DN40	8 9.989-047.0	DN 40	For vacuuming cylinder-shaped bodies such as pipes.	8	
Cylinder brush Ø 101.6 mm DN50	9 9.989-050.0	DN 50		9	
Cylinder brush Ø 203.2 mm DN40	10 9.989-048.0	DN 40		10	
Cylinder brush Ø 203.2 mm DN50	11 9.989-051.0	DN 50		11	
Cylinder brush Ø 304.8 mm DN40	12 9.989-049.0	DN 40		12	
Cylinder brush Ø 304.8 mm DN50	13 9.989-052.0	DN 50		13	

 $<sup>\</sup>hfill\square$  Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

## **PRE-SEPARATOR**



Pre-separators for industrial applications not only ensure the effective and efficient pre-separation of the suction waste, they also increase the service life of the filters used and enable much longer work intervals.







					Sc Sc Sc Sc Sc Sc Sc 2 Tr Me Dp 2 Tr Me Dp 2 Tr Me 2 Tr Me 3 T			
	Order No.	Nominal diameter	Price	Description		IVR-L 100/40 5 IVR-L 100/30 5 IVR-L 200/24-1 IVR-L 200/24-1 IVR-L 400/24-1 IVR-L 1100/24-1 IVR-L 1100/24-1 IVR-L 100/24-2 IVR-L 000/24-2 IVR 100/75-PP IVR 50/24-2 SG IVR 40/75-2 IVR 40/70-2 IVR 50/24-2 IVR 5		
Pre-separator cover								
Pre-separator cover Op liquids Ø 517 mm DN70	1 9.981-666.0	DN 70			1			
Pre-separator cover Op liquids Ø 575 mm DN70	2 9.981-662.0	DN 70			2			
Pre-separator cover solids Ø 517 mm DN70	3 9.981-665.0	DN 70			3			
Pre-separator cover solids Ø 575 mm DN70	4 9.981-661.0	DN 70			4			
Pre-separator barrel 200 l	5 9.989-685.0			Standard barrel. Complies with the ISO 15750-2 standard.	5			
Pre-separator								
Pre-separator Tc Op liquids 125   DN70	6 9.989-686.0	DN 70			6			
Pre-separator Ef solids 100   DN70	7 9.982-238.0	DN 70			7			
Pre-separator Dust 60 I DN40	8 9.989-687.0	DN 40			8			
Pre-separator Dust 60   DN50	9 9.989-688.0	DN 50			9			

<sup>☐</sup> Available accessories. More Kärcher original accessories can be found on the following pages.

## **ACCESSORY KITS**



Accessory kits developed especially for different applications and requirements increase performance and thereby help to further improve cleaning results. The clever suction kits are designed for harsh, industrial everyday use.













	Order No.	Nominal diameter	Brico	Description		DN 40
Liquids/swarf	Order No.	ulailletei	Price	Description		
Standard kit liquids/swarf DN40	1 9.989-657.0	DN 40		ME-PU hose, 3 m (9.989-621.0); Handle (9.977-679.0); Suction tube (9.977-525.0); Floor nozzle (9.989-683.0); Standard nozzle (9.989-674.0).	1	
Standard kit liquids/swarf DN50	2 9.989-658.0	DN 50		ME-PU hose, 3 m (9.989-623.0); Handle (9.977-678.0); Suction tube (9.977-531.0); Floor nozzle (9.989-664.0); Surface nozzle (9.988-119.0); Standard nozzle (9.989-673.0).	2	
Liquids	' '	·				
Standard kit liquid DN40	3 9.989-660.0	DN 40		PU hose 3 m (9.989-617.0); Handle (9.977-679.0); Suction tube (9.977-525.0); Floor nozzle (9.989-683.0); Crevice nozzle (9.981-483.0).	3	
Standard kit liquid DN50	4 9.989-661.0	DN 50		PU hose 3 m (9.989-619.0); Handle (9.977-678.0); Suction tube (9.977-531.0); Floor nozzle (9.989-664.0); Crevice nozzle (9.981-482.0).	4	
Solids/dusts	' '	·				
Standard kit solids/dusts DN40	5 9.989-659.0	DN 40		EVA hose, 3 m (9.988-088.0); Handle (9.977-679.0); Suction tube (9.977-525.0); Floor nozzle (9.989-682.0); Crevice nozzle (9.988-116.0); Surface nozzle (9.988-118.0); Standard brush (9.981-432.0).	5	
Standard kit solids/dusts DN50	6 9.989-662.0	DN 50		EVA hose, 3 m (9.988-090.0); Handle (9.977-678.0); Suction tube (9.977-531.0); Floor nozzle (9.987-612.0); Crevice nozzle (9.988-117.0); Standard brush (9.981-432.0).	6	

 $<sup>\</sup>hfill\square$  Available accessories. More Kärcher original accessories can be found on the following pages.

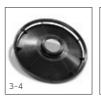
ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

## **OTHER ACCESSORIES**



Accessories such as remote controls for industrial vacuums or cable drums for extending working areas enable users to simplify the many work steps in their daily lives.









	Order No. Price	e Description		IVR-L 200/24-2 Tc Dp IVR-L 120/24-2 Tc Me Dp IVR-L 120/24-2 Tc Me Dp IVR-L 120/24-2 Tc Me IVR-L 100/24-2 Tc Me IVR-L 100/24-2 Tc Me IVR-L 100/24-2 Tc IVR-L
Machine accessories				
Universal carrying strap	1 2.042-017.0	Ergonomic double shoulder carrying strap for even weight distribution and for working without tiring with a high freedom of movement. Ideal for the BCU 260/36 Bp strimmer.	1	
Double-shoulder carrying strap	2 6.990-516.0	Ergonomic double-shoulder carrying strap for long, fatigue-free work with the battery-powered leaf blowers from the 50 V range. Comfortable and less strain for the user.	2	
Other accessories				
Baffle plate ∅ 410 mm	3 9.984-119.0	Prevents the suction waste from rebounding against the filter.	3	
Baffle plate ∅ 517 mm	4 9.980-857.0		4	
IVS remote control	5 2.273-001.0	For the control of different machines up to 30 m away.	5	
Cable drum 25 m	6 9.982-080.0	25 m cable (3 × 1.5 mm), for securing in accessories holder 6.645-412.0.	6	

<sup>■</sup> Included in the scope of supply. 

Available accessories. More Kärcher original accessories can be found on the following pages.

### **ON THE SPOT**

For the stationary use of industrial vacuums and industrial dedusters we offer you a complete range of accessories specially designed for continuous industrial use.



#### Table of contents: Accessories stationary

ndustrial vacuums, pipes	Page	10
ndustrial vacuums, pipes, connection and installation parts	Page	10
ndustrial dedusters, pipes	Page	10
ndustrial dedusters, pipes, connection and installation parts	Page	10
Extraction point accessories	Page	11













### 1 Accessories for stationary industrial vacuums

Our accessories for stationary industrial vacuums permanently withstand even robust suction media. One such example is special pipes with high wall thicknesses.

#### 2 Accessories for stationary industrial dedusters

Because industrial dedusters work with a high air flow, they need pipes with correspondingly large diameters in stationary operation. Also, due to the application the other accessories differ from the accessories for station— With our manual or pneumatic locking sliders and shut-off valves, you can ary industrial vacuums.

#### 3 All-rounder: pipes

Our robust pipeline systems allow you to use both industrial vacuums and industrial dedusters in stationary applications. Pipelines are available in various diameters and lengths. You can connect several machining centres and also several manual suction points, even across great distances.

#### 4 Robust, reliable connections

You need stable and durable connections for the variable combination of different pipeline parts. For the connection of stationary standard machines to pipes we have pipe-hose adapters, also special adapters for connecting suction hoses to pipes, as well as brackets and supporting feet for the installation of pipes.

#### 5 Special pipeline accessories

optimally control the air flow, as well as the transportation of the suction medium to the pipes, as required.

#### 6 Customer specific suction points

Permanently installed manual suction points for machine cleaning in the process are a standard application in industry. In order to customise these manual suction points according to requirements, various nozzles and nozzle holders, as well as single parts for the connection of hoses to pipes, are available.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

## **INDUSTRIAL VACUUM PIPES**



With special pipes for industrial vacuums, it is extremely easy to permanently connect them to the required suction point. Continuous suction during the work process makes it much easier to subsequently clean the workpieces and machines. The distributors also make it simple to connect several machines or hand-held suction points.













26-36	37-41

				20 30	
	Order No.	Price	Description		IVR-L 100/40 SC IVR-L 100/30 SC IVR 100/40 SC IVR 100/75-Pp SC IVR 100/75-Pp SC IVR 100/75-Pp Ef IVR 100/75-Pp Ef IVR 100/75-Pp Ef IVR 50/40 SC IVR 331 D3 IE2-IS-H IVR 40/73 SC IVR 40/75 SC IVR 40/75 SC IVR 40/75 SC IVR 80/30 SC IVR 80/30 SC
IV pipes					
IV pipe Ø 42.4 mm	1 9.980-451.0	_	Steel, wall thickness = 2 mm, bulk stock.	1	
IV pipe Ø 60 mm	2 9.980-452.0			2	
IV pipe Ø 75 mm	3 9.980-453.0			3	
IV pipe Ø 100 mm	4 9.980-455.0	_		4	
IV pipe bended 30° Ø 60.3 mm	5 9.980-545.0	_	Steel, wall thickness = 3.6 mm.	5	
IV pipe bended 30° Ø 76.1 mm	6 9.980-546.0			6	
IV pipe bended 30° Ø 101.6 mm	7 9.980-547.0		Steel, wall thickness = 4 mm.	7	
IV pipe bended 45° Ø 60.3 mm	8 9.980-548.0		Steel, wall thickness = 3.6 mm	8	
IV pipe bended 45° Ø 60.3 mm	9 9.980-549.0		Steel, wall thickness = 3.6 mm.	9	
IV pipe bended 45° Ø 101.6 mm	10 9.980-550.0		Steel, wall thickness = 4 mm.	10	
IV pipe bended 60° Ø 60.3 mm	11 9.980-551.0		Steel, wall thickness = 3.6 mm.	11	
IV pipe bended 60° Ø 76.1 mm	12 9.980-552.0			12	
IV pipe bended 60° Ø 101.6 mm	13 9.980-553.0		Steel, wall thickness = 4 mm.	13	
IV pipe bended 90° Ø 42.4 mm	14 9.985-373.0		Steel, wall thickness = 2.6 mm.	14	
IV pipe bended 90° Ø 60.3 mm	15 9.980-554.0		Steel, wall thickness = 3.6 mm.	15	
IV pipe bended 90° Ø 76.1 mm	16 9.980-555.0			16	
IV pipe bended 90° Ø 101.6 mm	17 9.980-556.0		Steel, wall thickness = 4 mm.	17	
IV pipe reducer Ø 120 mm to 100 mm	18 9.981-335.0		Steel, wall thickness = 2 mm.	18	
IV pipe reducer Ø 120 mm to 60 mm	19 9.981-337.0			19	
IV pipe reducer Ø 100 mm to 75 mm	20 9.981-334.0			20	
IV pipe reducer Ø 100 mm to 60 mm	21 9.981-336.0			21	
IV pipe reducer Ø 80 mm to 75 mm	22 9.980-494.0		Steel, wall thickness = 2 mm.	22	
IV pipe reducer Ø 80 mm to 60 mm	23 9.980-493.0			23	
IV pipe reducer Ø 75 mm to 60 mm	24 9.981-333.0		Steel, wall thickness = 2 mm.	24	
IV pipe reducer Ø 60 mm to 42.2 mm	25 9.981-228.0		Steel, wall thickness = 2 mm.	25	
IV pipe distributor 30° branch $\varnothing$ 120 mm to 100 mm	26 9.981-129.0		Steel, wall thickness = 2 mm; length = 550 mm.	26	
IV pipe distributor 30° branch $\varnothing$ 120 mm to 75 mm	27 9.981-127.0		Steel, wall thickness = 2 mm; length = 600 mm.	27	
IV pipe distributor 30° branch $\varnothing$ 100 mm to 75 mm	28 9.981-126.0		Steel, wall thickness = 2 mm; length = 700 mm.	28	
IV pipe distributor 30° branch $\varnothing$ 100 mm to 60 mm	29 9.981-124.0		Steel, wall thickness = 2 mm; length = 600 mm.	29	
IV pipe distributor 30° branch Ø 75 mm to 60 mm	30 9.981-123.0			30	
IV pipe distributor 30° branch $\varnothing$ 60 mm to 42.4 mm	31 9.981-258.0			31	
IV pipe distributor 30° branch Ø 120 mm	32 9.981-130.0			32	
IV pipe distributor 30° branch Ø 100 mm	33 9.981-128.0		Steel, wall thickness = 2 mm; length = 700 mm.	33	
IV pipe distributor 30° branch Ø 75 mm	34 9.981-125.0		Steel, wall thickness = 2 mm; length = 600 mm.	34	
IV pipe distributor 30° branch Ø 60 mm	35 9.981-122.0			35	
IV pipe distributor 30° branch Ø 42.4 mm	36 9.981-259.0			36	
IV pipe distributor Y-piece Ø 120 mm to 100 mm	37 9.981-135.0		Steel, wall thickness = 2 mm; length = 500 mm.	37	
IV pipe distributor Y-piece Ø 100 mm to 75 mm	38 9.981-134.0		Steel, wall thickness = 2 mm; length = 440 mm.	38	
IV pipe distributor Y-piece Ø 80 mm to 60 mm	39 9.981-133.0		Steel, wall thickness = 2 mm; length = 380 mm.	39	
IV pipe distributor Y-piece Ø 75 mm to 60 mm	40 9.981-132.0		Steel, wall thickness = 2 mm; length = 380 mm.	40	
IV pipe distributor Y-piece Ø 60 mm to 42 mm	41 9.981-131.0		Steel, wall thickness = 2 mm; length = 327 mm.	41	

 $\hfill \square$  Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

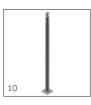
## **INDUSTRIAL VACUUM PIPE CONNECTIONS / CLAMPS**



A wide range of adapters, connection and installation parts are available for securely connecting pipes, e.g. when connecting industrial vacuums, for connecting suction hoses to hand-held suction points, for connecting various pipe shapes and for installing stable supports and stands for the pipes themselves.











	Order No.	Nominal diameter	Price	Description		IVR-L 100/40 SC IVR-L 100/40 SC IVR 100/30 SC IVR 100/30 SC IVR 100/75-Pp Ef IVR 100/30 SC IVR 50/30 SC IVR 40/30 SC IVR 40/30 SC IVR 40/30 SC IVR 40/15 SC IVR 8 30/15 IVR-B 20/8
IV pipe connectors/fastenings					·	
IV pipe connection Ø 42.4 mm	1 9.980-445.0			Steel; 3 clamping screws.	1	
IV pipe connection ∅ 60 mm	2 9.980-446.0				2	
IV pipe connection Ø 75 mm	3 9.980-447.0				3	
IV pipe connection Ø 100 mm	4 9.980-449.0				4	
IV pipe clamp ∅ 41-44 mm	5 9.980-463.0			Fastening screw M8.	5	
IV pipe clamp ∅ 60-63 mm	6 9.980-464.0				6	
IV pipe clamp ∅ 74-78 mm	7 9.980-465.0			Fastening screw M10.	7	
IV pipe clamp ∅ 99-103 mm	8 9.980-466.0				8	
IV pipe clamp ∅ 116-120 mm	9 9.980-467.0				9	
IV pipe ground support	10 9.981-118.0			H = 2200-3500 mm; for pipe mounting clamp with M10 thread.	10	
IV pipe to hose adapter, female Ø 42.2 to DN40	11 9.981-256.0	DN 40		Steel, wall thickness = 2 mm.	11	
IV pipe to hose adapter, female $\varnothing$ 60 to DN50	12 9.981-166.0	DN 50			12	
IV pipe to hose adapter, female $\varnothing$ 75 to DN70	13 9.981-170.0	DN 70			13	
IV pipe to hose adapter, male Ø 42.2 to DN40	14 9.981-257.0	DN 40			14	
IV pipe to hose adapter, male $\varnothing$ 60 to DN50	15 9.981-332.0	DN 50		1	15	
IV pipe to hose adapter, male Ø 75 to DN70	16 9.981-195.0	DN 70		1	16	

 $<sup>\</sup>hfill \square$  Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

## **INDUSTRIAL DUST EXTRACTOR PIPES**



Pipelines for industrial dedusters allow for the installation of additional extraction sections so that the extractor does not need to be positioned at the extraction point. In addition, they enable the connection of several suction points to a single extractor.

	Order No.	Nominal diameter	Price	Description		ID 265/55 Afc ID 130/22 Afc ID 130/22 Afc ID 130/22 ID 90/30 ID 50/40 Afc ID 30/30 Afc ID 50/75 Afc 222 ID 650/75 Afc 222 ID 650/75 Afc 222 ID 650/75 Afc 222 ID 50/30 Afc 222 ID 50/30 Afc 222 ID 20/30 Afc 222 ID 20/32 Afc 222 ID 20/22 Afc 222 ID 230/32 Afc 222 ID 230/32 Afc 222 ID 230/32 Afc 222 ID 230/22 Afc 222
Industrial dust extractor pipes						
ID pipe	1 On project request			Steel, various diameters, wall thicknesses and coatings available, bulk stock	1	
ID pipe bended 5°	2 On project request			Steel, various diameters, wall thicknesses and coatings available	2	
ID pipe bended 15°	3 On project request			Steel, various diameters, wall thicknesses and coatings available	3	
ID pipe bended 30°	4 On project request			Steel, various diameters, wall thicknesses and coatings available	4	
ID pipe bended 45°	5 On project request			Steel, various diameters, wall thicknesses and coatings available	5	
ID pipe bended 90°	6 On project request			Steel, various diameters, wall thicknesses and coatings available	6	
ID pipe reducer	7 On project request			Steel, various diameters, wall thicknesses and coatings available	7	
ID pipe distributor T-piece	8 On project request			Steel, various diameters, wall thicknesses and coatings available	8	
ID pipe distributor 45° branch	9 On project request			Steel, various diameters, wall thicknesses and coatings available	9	
ID pipe distributor 30° branch	10 On project request			Steel, various diameters, wall thicknesses and coatings available	10	
ID pipe distributor Y-piece	11 On project request			Steel, various diameters, wall thicknesses and coatings available	11	

 $\hfill\square$  Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

# **INDUSTRIAL DUST EXTRACTOR PIPE CONNECTIONS / CLAMPS**



A wide range of adapters, connection and installation parts are available for securely connecting pipes, e.g. when connecting dedusters, for connecting suction hoses to hand-held suction points, for connecting various pipe shapes and for installing stable supports and stands for the pipes themselves.

		Nominal				265/55 Afc 130/22 Afc 130/22 90/30 90/30 50/40 Afc 30/30 Afc 650/75 Afc Z22 650/75 Afc Z22 650/75 Afc Z22 400/40 Afc Z22 400/40 Afc Z22 300/30 Afc Z22 130/22 Afc Z22 130/22 Afc Z22 130/22 Afc Z22 130/22 Afc Z22 130/22 Afc Z22 130/22 Afc Z22
	Order No.	diameter	Price	Description		
Industrial dust extractor pipes, conne	ecting and installation parts					
ID pipe connection	1 On project request			Steel, various diameters, wall thicknesses and coatings available	1	
ID pipe clamp	2 On project request			Steel, various diameters, wall thicknesses and coatings available	2	
ID pipe ground support	3 On project request			Various lengths available	3	
ID pipe to hose adapter, female	4 On project request			Steel, various diameters, wall thicknesses and coatings available	4	
ID pipe to hose adapter, male	5 On project request			Steel, various diameters, wall thicknesses and coatings available	5	

 $<sup>\</sup>hfill \square$  Available accessories. More Kärcher original accessories can be found on the following pages.

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

ACCESSORIES FOR INDUSTRIAL VACUUMS AND DEDUSTERS

## **SUCTION POINT ACCESSORIES**



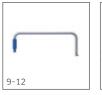
Robust and powerful nozzles and nozzle holders for special use with permanently installed hand-held suction points for machine cleaning.



























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	39, 40

	7 1		T	T			
			Nominal				70 07
		Order No.	diameter	Price	Description		
Suction point accessories							
Suction point standard brush PVC DN40	1	9.981-454.0	DN 40		For hand-held suction point, suitable for nozzle holder.	1	
Suction point standard brush PVC DN50	2	9.981-455.0	DN 50			2	
Suction point standard brush DN40	3	9.981-436.0	DN 40			3	
Suction point nozzle holder	4	9.981-520.0			For mounting to a wall. Suitable for DN 40, 50 and 70. Includes end	4	
Suction point nozzle holder with switch	5	9.982-111.0			switch for nozzle control.	5	
Suction point hose holder with end switch, Ø 60 mm	6	9.982-083.0			For fitting pipes with a diameter of 60 mm.	6	
Suction point hose holder with end switch, Ø 75 mm	7	9.982-092.0			For fitting pipes with a diameter of 75 mm.	7	
Suction point hose holder with end switch	8	9.982-093.0			For mounting to a wall. Includes end switch for nozzle control.	8	
Suction point suction arm DN50 without hose	9	9.981-776.0	DN 50		Swivel arm DN 50 with wall mount. Arm length 2 m.	9	
Suction point suction arm DN70 without hose	10	9.981-775.0	DN 70		Swivel arm DN 70 with wall mount. Arm length 2 m.	10	
Suction point suction arm DN50 without hose	11	9.981-781.0	DN 50		Swivel arm DN 50 with floor support. Arm length 2 m.	11	
Suction point suction arm DN70 without hose	12	9.981-780.0	DN 70		Swivel arm DN 70 with floor support. Arm length 2 m.	12	
Suction point suction arm DN70	13	9.981-920.0	DN 70		Arm length 2.5 m. Suction head with 150 mm diameter.	13	
Suction point suction arm DN100	14	9.983-121.0	DN 100			14	
Suction point hose PVC DN40 3 m	15	9.989-701.0	DN 40		Lightweight and flexible design. Suitable for dusts, lightweight solids	15	
Suction point hose PVC DN40 5 m	16	9.989-702.0	DN 40		as well as clumpy materials. Temperature-resistant up to max. 85°C.	16	
Suction point hose PVC DN50 3 m	17	9.989-693.0	DN 50			17	
Suction point hose PVC DN50 5 m	18	9.989-694.0	DN 50			18	
Suction point hose PVC DN70 3 m	19	9.989-703.0	DN 70			19	
Suction point hose PVC DN70 5 m	20	9.989-704.0	DN 70			20	
Suction point hose PU DN40 3 m	21	9.989-705.0	DN 40		Robust, oil-resistant design. Suitable for abrasive fluids and dusts,	21	
Suction point hose PU DN40 5 m	22	9.989-706.0	DN 40		temperature-resistant up to 80°C.	22	
Suction point hose PU DN50 3 m	23	9.989-695.0	DN 50			23	
Suction point hose PU DN50 5 m	24	9.989-696.0	DN 50			24	
Suction point hose PU DN70 3 m	25	9.989-707.0	DN 70			25	
Suction point hose PU DN70 5 m	26	9.989-708.0	DN 70			26	
Suction point hose ME-PU DN40 3 m	27	9.989-697.0	DN 40		Extremely robust, electrically conductive design. Suitable for highly	27	
Suction point hose ME-PU DN40 5 m	28	9.989-698.0	DN 40		abrasive suction media with fluids. Temperature-resistant up to 110°C.	28	
Suction point hose ME-PU DN50 3 m	29	9.989-699.0	DN 50			29	
Suction point hose ME-PU DN50 3 m		9.989-700.0				30	
Hose end cone rotatable female DN40		9.989-654.0				31	
Hose end cone rotatable female DN50	_	9.989-653.0				32	
Hose end cone rotatable female DN70	_	9.989-652.0				33	
Hose end connector male DN40	_	9.981-142.0				34	
Hose end connector male DN50	_	9.980-472.0				35	
Hose end connector male DN70		9.981-144.0				36	
Hose end connector female stainless steel DN40	_	9.989-716.0				37	
Hose end connector female stainless steel DN50		9.989-714.0				38	
Hose end connector male stainless steel DN40	_	9.989-717.0				39	
Hose end connector male stainless steel DN50		9.989-715.0				40	
Hose assembly kit DN40 without end cones	_	9.981-563.0			Comprising 2 hose end clamps, 2 hose end covers.	41	
Hose assembly kit DN50 without end cones		9.981-561.0				42	
Hose assembly kit DN70 without end cones	43	9.981-562.0	DN 70			43	

 $\hfill \square$  Available accessories. More Kärcher original accessories can be found on the following pages.

### YOU ALWAYS GET THE BEST SOLUTION

The requirements of vacuuming and dedusting solutions in industry can be very specific. We plan every system individually to your specific needs. Our services range from the simple mobile solution through to highly complex, specifically adapted and tightly piped vacuuming solutions. With more than 50 years of experience in the development and realisation of industrial vacuuming systems, we are your competent partner. As a result, you get efficient complete solutions from a single source.



#### Table of contents: Customer specific Industrial Vacuuming / **Dedusting Solutions**

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Rough / wet	Page	118
Rough / dry	Page	128
Fine / wet	Page	14
Fine / dry	Page	14
Fine / dry (unsettled particles)	Page	148







### 1 Application: Rough, Wet

The proven and efficient solution for coarse suction material with cooling for workpiece and machine cleaning and the direct connection for vacuum- 24/7 in the production process. ing in the process.

#### 2 Application: Rough, Dry

The proven and efficient solution for coarse, dry suction material in the area of metal, cast iron, plastic or composite materials is manual suction points for workpiece and machine cleaning and the direct connection for vacuuming 24/7 in the process.

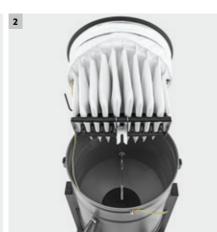
### 3 Application: Fine, Wet

The proven and efficient solution for fine, damp and wet suction material in lubricants in the area of metal, cast iron and plastic is manual suction points the area of metal, cast iron and plastic with direct connection for vacuuming

#### 4 Application: Fine, Dry

Proven and efficient solutions for fine, dry suction material in the area of metal, cast iron and plastic with direct connection for vacuuming 24/7 in the production process.









There is a choice of various engine for the individual design of your vacuuming solution: from the space-saving bypass turbine for workpiece and machine cleaning by means of manual suction L, M, H with various coatings, made from PTFE, points through to the powerful IE3 drive unit with 22 kW for continuous industrial operation.

### 2 Filter

You have numerous possible applications and we have the right filter with properties adapted for each application: filters in classes flame-retardant and membrane filters. Filter cleaning is effected either manually or automatically by a vibrating motor.

### 3 Collecting / Emptying System

We make collecting containers of various types and sizes, designed for fast, simple and dust-free emptying without removal of the suction head. With manual or automatic emptying flaps for discharge to the customer-specific site. Automatic discharge, e.g. by means of chip conveyors, during operation is also possible.





### 4 Chassis

We can adapt your machines to every operation site with individually designed base frames in different heights and designs. Frames with rollers for mobile, semi-stationary and stationary applications are used here.

### 5 Sensors

Our industrial vacuums and dedusters are equipped with modern sensors, which guarantee reliable protection and safety during operation: for monitoring the filling level and protection against overfilling of the container, for monitoring the filter condition for consistently high suction power, for monitoring the operating status, as well as for reporting blockages in hoses or pipes.

	Name	Order no.	Power supply (PH / V / Hz)	Rated input power (kW)	Max. air flow rate (l/s / m³/h)	Vacuum (mbar / kPa)	Max. recommended connection Ø (mm)	Max. simultaneous suction points <sup>1)</sup>	Max. cab size (m³)
Rough / wet									
Medium									
	Project IVR-L 400/30 Tc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR-L 400/24-2 Tc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
	Project IVR-L 200/30 Tc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR-L 200/15 Tc	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR-L 200/24-2 Tc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
	Project IVR-L 120/24-2 Tc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
	Project IVR-L 100/24-2 Tc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
	Project IVR-L 100/30 Sc Project IVR-L 100/15 Sc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1.	-
	Project IVR-L 100/15 Sc Project IVR-L 100/24-2 Sc	On project request	3 / 400 / 50 1 / 220-240 / 50-60	1.5 2.4	58 / 210 148 / 532	200 / 20 230 / 23	50 50	1	-
	Project IVR-L 100/24-2 Sc Project IVR-L 50/30 Sc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR-L 50/15 Sc	On project request  On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR-L 50/24-2 Sc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
Medium Ef		J. p. oject request	1 - 7 220 240 / 30 00	∠.→	1-0/332	230 / 23	1 /0	1	
vicaioni Li	Project IVR-L 100/40 Ef	On project request	3 / 400 / 50	4.0	138 / 495	140 / 14	70	1-2	_
	Project IVR-L 100/30 Ef	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR-L 100/15 Ef	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	70	1	-
	Project IVR-L 100/24-2 Ef	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
.arge									
0-	Project IVR-L 120/75 Sc Tc	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	100	1-2	-
	Project IVR-L 120/60 Sc Tc	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	100	1-2	-
	Project IVR-L 120/55 Sc Tc	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	100	1-2	-
	Project IVR-L 100/75 Tc	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	100	1-2	-
	Project IVR-L 100/60 Tc	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	100	1-2	-
	Project IVR-L 100/55 Tc	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	100	1-2	-
arge Ef	'		'	'					
	Project IVR-L 100/75 Ef	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	100	1-2	-
	Project IVR-L 100/60 Ef	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	100	1-2	-
	Project IVR-L 100/55 Ef	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	100	1-2	-
xtra Large (Ef)									
	Project IVR-L 120/110 Sc Tc	On project request	3 / 400 / 50	11.0	275 / 990	240 / 24	120	2-3	-
	Project IVR-L 100/110 Tc	On project request	3 / 400 / 50	11.0	275 / 990	240 / 24	120	2-3	-
	Project IVR-L 100/220 Ef	On project request	3 / 400 / 50	22.0	550 / 1980	240 / 24	140	3-5	-
	Project IVR-L 100/165 Ef	On project request	3 / 400 / 50	16.5	412 / 1485	240 / 24	140	3-5	-
	Project IVR-L 100/110 Ef	On project request	3 / 400 / 50	11.0	275 / 990	240 / 24	120	2-3	-
Rough / dry									
imall									
	Project IVR-B 100/30	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	50	1	-
	Project IVR-B 100/15	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR-B 50/30	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	50	1	-
	Project IVR-B 50/15	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR-B 30/15	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR-B 20/8	On project request	3 / 400 / 50	0.8	39 / 140	90 / 9	50	1	-
/ledium									
	Project IVR 100/40 Sc	On project request	3 / 400 / 50	4.0	138 / 495	140 / 14	70	1-2	-
	Project IVR 100/30 Sc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR 100/15 Sc	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR 100/24-2 Sc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
	Project IVR 50/40 Sc	On project request	3 / 400 / 50	4.0	138 / 495	140 / 14	70	1-2	-
	Project IVR 50/30 Sc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR 50/15 Sc	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR 50/24-2 Sc	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
Medium Ef	la	la	l a a . :	ı					
	Project IVR 100/40 Ef	On project request		4.0	138 / 495	140 / 14	70	1-2	-
	Project IVR 100/30 Ef	On project request		3.0	88 / 312	260 / 26	70	1	<del>-</del>
	Project IVR 100/24-2 Ef	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

	Name	Order no.	Power supply (PH / V / Hz)	Rated input power (kW)	Max. air flow rate (I/s / m³/h)	Vacuum (mbar / kPa)	Max. recommended connection Ø (mm)	Max. simultaneous suction points <sup>1)</sup>	Max. cab size (m³)
Rough / dry									
Large Pp									
	Project IVR 100/150-Pp Sc	On project request	Pneumatic	> 11	339 / 1219	500 / 50	70	2-3	-
	Project IVR 100/110-Pp Sc	On project request	Pneumatic	> 7.5	271 / 975	500 / 50	70	1-2	-
	Project IVR 100/75-Pp Sc	On project request	Pneumatic	7.5	203 / 732	500 / 50	70	1-2	-
	Project IVR 100/150-Pp Ef	On project request	Pneumatic	> 11	339 / 1219	500 / 50	70	2-3	-
	Project IVR 100/110-Pp Ef	On project request	Pneumatic	> 7.5	271 / 975	500 / 50	70	1-2	-
	Project IVR 100/75-Pp Ef	On project request	Pneumatic	7.5	203 / 732	500 / 50	70	1-2	-
	Project IVR 50/150-Pp Sc	On project request	Pneumatic	> 11	339 / 1219	500 / 50	70	2-3	-
	Project IVR 50/110-Pp Sc	On project request	Pneumatic	> 7.5 7.5	271 / 975	500 / 50	70	1-2	-
Large	Project IVR 50/75-Pp Sc	On project request	Pneumatic	7.5	203 / 732	500 / 50	70	1-2	1 -
Laige	Project IVR 120/75 Sc Tc	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	70	1-2	l -
	Project IVR 120/60 Sc Tc	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	70	1-2	<del>                                     </del>
	Project IVR 120/55 Sc Tc	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	70	1-2	-
	Project IVR 100/75 Sc	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	70	1-2	١.
	Project IVR 100/60 Sc	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	70	1-2	-
	Project IVR 100/55 Sc	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	70	1-2	_
Large Ef		1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	.,,		,	,			1
80	Project IVR 100/75 Ef	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	100	1-2	_
	Project IVR 100/60 Ef	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	100	1-2	-
	Project IVR 100/55 Ef	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	100	1-2	-
Extra Large (Ef	)	'						I	1
	Project IVR 120/110 Sc Tc	On project request	3 / 400 / 50	11.0	275 / 990	240 / 24	120	2-3	-
	Project IVR 100/110 Sc	On project request	3 / 400 / 50	11.0	275 / 990	240 / 24	120	2-3	-
	Project IVR 100/220 Ef	On project request	3 / 400 / 50	22.0	550 / 1980	240 / 24	140	3-5	-
	Project IVR 100/165 Ef	On project request	3 / 400 / 50	16.5	412 / 1485	240 / 24	140	3-5	-
	Project IVR 100/110 Ef	On project request	3 / 400 / 50	11.0	275 / 990	240 / 24	120	2-3	-
Fine / wet									
Medium Ef									
	Project IVR-L 100/30 Ef	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	_
	Project IVR-L 100/15 Ef	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	50	1	-
	Project IVR-L 100/24-2 Ef	On project request	1 / 220-240 / 50-60	2.4	148 / 532	230 / 23	70	1	-
Large Ef									
	Project IVR-L 100/75 Ef	On project request	3 / 400 / 50	7.5	254 / 915	175 / 17.5	100	1-2	-
	Project IVR-L 100/60 Ef	On project request	3 / 400 / 50	6.0	175 / 630	260 / 26	100	1-2	-
	Project IVR-L 100/55 Ef	On project request	3 / 400 / 50	5.5	138 / 495	240 / 24	100	1-2	-
Fine / dry									
Medium									
	Project IVR 40/40 Sc	On project request	3 / 400 / 50	4.0	138 / 495	140 / 14	70	1-2	_
	Project IVR 40/30 Sc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1	-
	Project IVR 40/15 Sc	On project request	3 / 400 / 50	1.5	58 / 210	200 / 20	15	1	-
	Project IVR 40/24-2	On project request		2.4	148 / 532	230 / 23	70		-
Fine / dry (uns	ettled particles)								
Small									
	Project ID 50/40 Afc	On project request	3 / 400 / 50	4.0	138 / 495	140 / 14	70	1-2	1-2
	Project ID 30/30 Afc	On project request	3 / 400 / 50	3.0	88 / 312	260 / 26	70	1-2	1-2
	Project ID 90/30	On project request		3.0	250 / 900	48 / 4.8	120	1-2	1-2
Medium									1
	Project ID 600/185 Afc	On project request	3 / 400 / 50	18.5	1666 / 6000	60 / 6	350	2-5	3-5
	Project ID 500/150 Afc	On project request		15.0	1408 / 5069	51 / 5.1	315	2-5	3-5
			i :						
	Project ID 350/110 Afc	On project request	3 / 400 / 50	11.0	972 / 3500	54 / 5.4	250	2-5	3-5
		On project request On project request		11.0 5.5	972 / 3500 738 / 2655	54 / 5.4 43 / 4.3	250 175	2-5 2-5	3-5

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

### **ROUGH / WET - MEDIUM**



Image shows Project IVR-L 100/30 Sc







Equipped with surface filter for dust class L and 0.45 m² filter area.

### 2 Collection and emptying systems

- The convenient collecting container with set-down function has a 100-litre capacity the following sizes are also available: 50, 120, 200 and 400 litres.
- On request, a settling container and a drum pump can be integrated for fast emptying of liquids.

# High suction power and flexible collection quantities

Perfect for wet, Rough: powerful vacuuming solution Project IVR-L XX/XX ... Medium with extendable collecting container in a compact footprint, as well as mobile chassis for flexible applications at different production sites. Suitable for quick machine cleaning or for three-shift operation when vacuuming medium quantities of coarse metal or cast iron swarf or plastic shavings, which arise when milling, turning, sawing, drilling or grinding, as well as during machining with cooling lubricants.









### 3 Chassis

■ The compact and mobile chassis allows the appropriate, flexible and fast set-up of the machine at different production sites.

### 4 Sensors

For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the filling level and overfill protection.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-L 400/30 Tc	Project IVR-L 400/24-2 Tc
Technical data			
Power supply	Ph/V/Hz	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power	kW	3.0	2.4
Air flow rate	$l/s / m^3/h$	88 / 312	148 / 532
Vacuum	mbar / kPa	260 / 26	230 / 23
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	70	70
Max. simultaneous suction points <sup>1)</sup>		1	1
Order no.		on request	on request
Price			

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material

		Project IVR-L 200/30 Tc	Project IVR-L 200/15 Tc	Project IVR-L 200/24-2 Tc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power	kW	3.0	1.5	2.4
Air flow rate	$l/s / m^3/h$	88 / 312	58 / 210	148 / 532
Vacuum	mbar / kPa	260 / 26	200 / 20	230 / 23
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \varnothing}$	mm	70	50	70
Max. simultaneous suction points <sup>1)</sup>		1	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

#### Project IVR-L 120/24-2 Tc ... Project IVR-L 100/24-2 Tc ...

Technical data			
Power supply	Ph/V/Hz	1 / 220-240 / 50-60	1 / 220-240 / 50-60
Rated input power	kW	2.4	2.4
Air flow rate	$l/s / m^3/h$	148 / 532	140 / 532
Vacuum	mbar / kPa	230 / 23	230 / 23
${\bf Max.}\ recommended\ connection\ {\it \varnothing}$	mm	70	70
Max. simultaneous suction points <sup>1)</sup>		1	1
Order no.		on request	on request
Price			

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

		Project IVR-L 100/30 Sc	Project IVR-L 100/15 Sc	Project IVR-L 100/24-2 Sc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power	kW	3.0	1.5	2.4
Air flow rate	I/s / m³/h	88 / 312	58 / 210	148 / 532
Vacuum	mbar / kPa	260 / 26	200 / 20	230 / 23
${\bf Max.}\ recommended\ connection\ \varnothing$	mm	70	50	70
Max. simultaneous suction points1)		1	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50; 3. Typical suction material

<sup>3.</sup> Typical suction material.

Project IVR-L 50/30 Sc ... Project IVR-L 50/15 Sc ... Project IVR-L 50/24-2 Sc ... Technical data 3 / 400 / 50 3 / 400 / 50 1 / 220-240 / 50-60 Ph/V/Hz Power supply Rated input power 3.0 1.5 2.4 Air flow rate 88 / 312 58 / 210 148 / 532 230 / 23 **mbar / kPa** 260 / 26 200 / 20 70 50 Max. recommended connection Ø Max. simultaneous suction points1

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

Typical suction material.

### **ROUGH / WET - MEDIUM Ef**



### Image shows Project IVR-L 100/24-2 Ef





### 1 Filter

- Equipped with surface filter for dust class L and 0.45 m² filter area.
- A more powerful pocket filter for dust class L with 1.75 m² filter area is also available as an option.

# customer specific discharge

High suction power and

Whether it is for machine cleaning with manual suction points and integrated in the work process for a few hours every day or in continuous use: our vacuum solutions Project IVR-L 100/XX Ef ... Medium are tailored exactly to customer requirements for wet, rough. Medium quantities of coarse swarf with lubricants, which arise during milling, turning, sawing, drilling and grinding metal, cast iron or plastics, are reliably vacuumed and thanks to the sloping outlet are discharged in customer-specific sites and containers.









### 3 Chassis

Depending on the customer's requirements, the chassis can be adapted exactly to the respective installation site with its specific spatial conditions.

### 2 Collection and emptying systems

- With emptying flap, which opens automatically using the force of gravity
- Other emptying systems are available as optional equipment, e.g. for manual or automatic, electro-pneumatic flap opening.
- A swarf hopper, a rinsing system for cast iron swarf or liquid separation for the separate emptying of liquids and solids can also be integrated.

### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level and the emptying flap.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-L 100/40 Ef	Project IVR-L 100/30 Ef	Project IVR-L 100/15 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	4.0	3.0	1.5
Air flow rate	$I/s / m^3/h$	138 / 495	88 / 312	57 / 210
Vacuum	mbar / kPa	140 / 14	260 / 26	200 / 20
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \varnothing}$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		1-2	1	1
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max, distance between machine and simultaneous suction point furthest away: 20 m; 2. Max, connection Ø: DN 50;

### Project IVR-L 100/24-2 Ef ...

Technical data		
Power supply	Ph/V/Hz	1 / 220-240 / 50-60
Rated input power	kW	2.4
Air flow rate	$I/s / m^3/h$	148 / 532
Vacuum	mbar / kPa	230 / 23
Tc		n/a
Sc		n/a
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	70
${\bf Max.\ simultaneous\ suction\ points^{{\bf 1}}}$		1
Order no.		on request
Price		

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

### **ROUGH / WET - LARGE**



Image shows Project IVR-L 120/75 Sc Tc



2 Collection and emptying systems



### 1 Filter

- Equipped with pocket filter for dust class L with 3.2 m² filter area and Incl. chassis for stationary set-up of the machine with extendable manual filter cleaning.
- A pocket filter for dust class L with 5.2 m² filter area, as well as automatic, electrical filter cleaning, are also available as an option.

- With 120-litre collecting container and convenient settling container
- On request, a set-down collecting container with 100-litre capacity is also available.

### Very high performance and extremely convenient emptying

The powerful vacuuming solution for wet, rough, during which very large quantities of coarse and wet swarf from metal and cast iron, as well as plastic shavings, arise, as is the case for example during machining with cooling lubricants when milling, turning, sawing, drilling and grinding. The extendable collecting container is extremely easy and fast to empty. The vacuuming solution Project IVR-L XX/XX ... Large is ideal for continuous use for vacuuming.









### 3 Chassis

collecting container.

### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the electrical operating status and filter condition, as well as the filling level.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-L 120/75 Sc Tc	Project IVR-L 120/60 Sc Tc	Project IVR-L 120/55 Sc Tc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	I/s / m³/h	254 / 915	175 / 630	138 / 495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	240 / 24
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	100	100	100
Max. simultaneous suction points1)		1-2	1-2	1-2
Order no.		on request	on request	on request

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

		Project IVR-L 100/75 Tc	Project IVR-L 100/60 Tc	Project IVR-L 100/55 Tc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	$I/s / m^3/h$	254 / 915	175 / 630	138 / 495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	240 / 24
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	100	100	100
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

### **ROUGH / WET - LARGE Ef**



Image shows Project IVR-L 100/55 Ef



### Maximum suction power and discharge even for continuous use

Thanks to the integrated sloping outlet of our vacuuming solution Project IVR-L 100/XX Ef ... Large, fast discharge of the suction medium in customer-specific sites, such as underfloor conveyors, is also possible. The very high suction power of the machine, which can be used continuously, permits the vacuuming of large quantities of coarse, wet swarf from metal or cast iron, as well as plastic shavings, which arise during wet, rough, as well as milling, turning, sawing, drilling or grinding, and also machining processes with cooling lubricants.











### 1 Filter

- Equipped with pocket filter for dust class L with 1.75 m² filter area and The compact chassis allows the appropriate, flexible and fast set-up of manual filter cleaning.
- A pocket filter for dust class L with 3.2 or 5.2 m² filter area, as well as automatic, electrical filter cleaning systems, are also available as an option.

### 3 Chassis

the machine at different production sites.

#### 2 Collection and emptying systems

- The machine has an emptying flap that opens automatically by electro-pneumatic means.
- Other versions are available as optional equipment, e.g. for manual operation or automatically using the force of gravity.
- Continuous emptying during operation via double-chamber lock or rotary valve, as well as the integration of a rinsing system for cast iron swarf, plus liquid separation for the separate emptying of liquids and solids, can also be implemented.

#### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level and the emptying flap.
- Also optionally available is a sensor that detects and alerts about any blockages in the connected suction hose or pipeline.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-L 100/75 Ef	Project IVR-L 100/60 Ef	Project IVR-L 100/55 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	I/s / m³/h	254 / 915	175 / 630	495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	24
$\textbf{Max. recommended connection } \varnothing$	mm	100	100	70
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø; DN 50;

<sup>3.</sup> Typical suction material.

### **ROUGH / WET - EXTRA LARGE (Ef)**

## Image shows Project IVR-L 100/110 Ef





### 1 Filter

well as automatic, electrical filter cleaning with vibrating motor.

### Maximum suction power, also during continuous use

This very powerful vacuuming solution Project IVR-L xx/xx (Ef) ... Extra Large can effortlessly vacuum and dispose of very large quantities of wet metal and cast iron swarf and plastic shavings, which arise during machining with cooling lubricants when milling, turning, sawing, drilling and grinding, in continuous operation. Equipped with automatic sloping outlet, also available with other systems from the rotary valve through to different collecting container systems.









■ Equipped with pocket filter for dust class L up to 10.4 m² filter area, as ■ Depending on the customer's requirements, the chassis can be adapted exactly to the respective installation site with its specific spatial conditions.

### 2 Collection and emptying systems

- The machine comes as standard with an emptying flap that opens automatically by electro-pneumatic means.
- An automatic emptying flap using the force of gravity can also be
- Continuous emptying during operation via double-chamber lock or rotary valve, as well as the integration of a rinsing system for cast iron swarf.
- On request also available as collecting container variant with 120-litre collecting container with settling container and tilting chassis.

#### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

#### Project IVR-L 120/110 Sc Tc ... Project IVR-L 100/110 Tc

Technical data			
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	11.0	11.0
Air flow rate	$I/s / m^3/h$	275 / 990	275 / 990
Vacuum	mbar / kPa	240 / 24	240 / 24
$\textbf{Max. recommended connection } \boldsymbol{\varnothing}$	mm	120	120
Max. simultaneous suction points <sup>1)</sup>		2-3	2-3
Order no.		on request	on request
Price			

1) Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø; DN 50;

Project IVR-L 100/220 Ef	Project IVR-L 100/165 Ef	Project IVR-L 100/110 Ef

Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	22.0	16.5	11.0
Air flow rate	$l/s / m^3/h$	550 / 1980	412 / 1485	275 / 990
Vacuum	mbar / kPa	240 / 24	240 / 24	240 / 24
Max. recommended connection $\emptyset$	mm	140	140	120
Max. simultaneous suction points <sup>1)</sup>		3-5	3-5	2-3
Order no.		on request	on request	
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

3. Typical suction material.

<sup>3.</sup> Typical suction material.

## **ROUGH / DRY - SMALL**

### High suction power with maximum compactness

Thanks to its very compact design, the vacuuming solution Project IVR-B XX/XX ... Small is perfect for dry machining processes such as milling, turning, sawing or drilling, also in unfavourable spatial conditions. With its high suction power, it is ideal for vacuuming medium quantities of metal, cast iron, plastic and composite materials during continuous use or for cleaning workpieces at manual suction points.





Image shows Project IVR-B 50/30









- Equipped as standard with cartridge filter for dust class M with 1 m²
- Cartridge filter for dust class L with 1 m² filter area, as well as a special The implementation of a soundproof housing for the 3 kW variants is textile filter, are also available.
- On request with automatic, pneumatically operated filter cleaning.

### 3 Chassis

- The machine is intended for stationary use.
- A mobile variant with rollers is also possible.
- also possible if required.

### 2 Collection and emptying systems

- With 50 I stainless steel container volume.
- Also possible with container sizes of 20, 30 and 100 litres.

### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level.
- Also optionally available is a sensor that detects and alerts about any blockages in the connected suction hose or pipeline.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-B 100/30	Project IVR-B 100/15	Project IVR-B 50/30
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	3.0	1.5	3.0
Air flow rate	I/s / m³/h	88 / 312	58 / 210	88 / 312
Vacuum	mbar / kPa	260 / 26	200 / 20	260 / 26
$\textbf{Max. recommended connection } \varnothing$	mm	50	50	50
Max. simultaneous suction points <sup>1)</sup>		1	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

		Project IVR-B 50/15	Project IVR-B 30/15	Project IVR-B 20/8
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	1.5	1.5	0.8
Air flow rate	$l/s / m^3/h$	58 / 210	58 / 210	39 / 140
Vacuum	mbar / kPa	200 / 20	200 / 20	90 / 9
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	50	50	50
Max. simultaneous suction points <sup>1)</sup>		1	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

### **ROUGH / DRY - MEDIUM**

Image shows Project IVR 50/30 Sc



2 Collection and emptying systems



### 1 Filter

- Equipped as standard with pocket filter for dust class M with 1.75 m² filter area and manual filter cleaning.
- A pocket filter for dust class L and with either 1.75 or 3.2 m² filter area is also available
- If required, a pocket filter for dust class M with 3.2 m² filter area and coatings with PTFE and flame-retardant membrane, is also available.
- Versions with automatic, electrical filter cleaning are also possible.

- Equipped as standard with 50-litre collecting container with set-down container.
- are also available.

### Mobile vacuuming solution with high suction power

Medium quantities of dry, coarse swarf and dust, which arise when milling, turning, sawing, drilling or grinding metal, cast iron, plastic and composite materials, are the domains of this mobile vacuuming solution Project IVR XX/XX ... Medium. Suitable for continuous use or at manual suction points for machine cleaning and with extendable set-down collecting container.









### 3 Chassis

■ The compact and mobile chassis allows the appropriate, flexible and fast set-up of the machine at different production sites.

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level.
- Also optionally available is a sensor that detects and alerts about any blockages in the connected suction hose or pipeline.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR 100/40 Sc	Project IVR 100/30 Sc	Project IVR 100/15 Sc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	4.0	3.0	1.5
Air flow rate	$I/s / m^3/h$	138 / 495	88 / 312	58 / 210
Vacuum	mbar / kPa	140 / 14	260 / 26	200 / 20
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	70	70	50
Max. simultaneous suction points <sup>1)</sup>		1-2	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1, Max. distance between machine and simultaneous suction point furthest away: 20 m; 2, Max. connection Ø: DN 50;

		Project IVR 100/24-2 Sc	Project IVR 50/40 Sc	Project IVR 50/30 Sc
Technical data				
Power supply	Ph/V/Hz	1 / 220-240 / 50-60	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	2.4	4.0	3.0
Air flow rate	$l/s / m^3/h$	148 / 532	138 / 495	88 / 312
Vacuum	mbar / kPa	230 / 23	140 / 14	260 / 26
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		1	1-2	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

		Project IVR 50/15 Sc	Project IVR 50/24-2 Sc
Technical data			
Power supply	Ph/V/Hz	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power	kW	1.5	2.4
Air flow rate	$I/s / m^3/h$	58 / 210	148 / 532
Vacuum	mbar / kPa	200 / 20	30 / 23
$\textbf{Max. recommended connection } \varnothing$	mm	50	70
Max. simultaneous suction points <sup>1)</sup>		1	1
Order no.		on request	on request
Price			

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

### **ROUGH / DRY - MEDIUM Ef**



Image shows Project IVR 100/30 Ef

# High suction power and flexible discharge

The vacuuming solution Project IVR 100/XX Ef ... Medium with high suction power for vacuuming medium quantities during dry, rough processes, as well as metal or cast iron swarf or plastic shavings, which arise during milling, turning, sawing, drilling and grinding, has only a minimal spatial requirement thanks to its compact footprint. Apart from continuous use, it is also perfect for machine cleaning at manual suction points. The integrated sloping outlet and the mobile chassis allow convenient discharge in customer-specific sites.











### 1 Filter

- Equipped as standard with pocket filter for dust class M with 1.75 m² filter area and manual filter cleaning.
- A filter version with PTFE coating or a membrane made of flameretardant material is also available as an option.

### 3 Chassis

- The compact and mobile chassis allows the appropriate, flexible and fast set-up of the machine at different production sites. Available with stationary chassis as an option.
- Optionally available with stationary chassis with double-chamber lock or rotary valve.

#### 2 Collection and emptying systems

- Emptying system with manual operation.
- A variant with an automatic emptying flap using the force of gravity is also possible.
- Stationary version without mobile chassis can also be implemented with continuous emptying with double-chamber lock or rotary valve.

#### Soncor

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR 100/40 Ef	Project IVR 100/30 Ef	Project IVR 100/24-2 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power	kW	4.0	3.0	2.4
Air flow rate	I/s / m³/h	138 / 495	88 / 312	148 / 532
Vacuum	mbar / kPa	140 / 14	260 / 26	230 / 23
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \varnothing}$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		1-2	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

### **ROUGH / DRY - LARGE Pp**



Image shows Project IVR 100/110-Pp Sc





#### 1 Filter

- Equipped with pocket filter for dust class M with 1.75 m² filter area.
- A filter version with PTFE coating or a membrane made of flameretardant material is also available as an option.

#### 2 Collection and emptying systems

- Extendable collecting container with 100-litre capacity and set-down container
- Can also be supplied with stainless steel containers with 50 or 100-litre capacity.
- On request a version with manual emptying flap is also available.

# Very high suction power without electricity for dry, rough

The durable and low-noise pneumatic drive of the vacuuming solution Project IVR XX/XX-Pp ... Large guarantees a very high vacuum level, high air flow rates and therefore maximum suction power in continuous use. Suitable for vacuuming large quantities of swarf and dusts from metal, cast iron, plastic and composite materials during dry, rough processes such as milling, turning, sawing, drilling and grinding. The extendable collecting container makes emptying much easier.









### 3 Chassis

The compact and mobile chassis allows the appropriate, flexible and fast set-up of the machine at different production sites.

#### 4 Sensors

For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the filter condition and filling level.

### **TECHNICAL DATA AND EQUIPMENT**

#### Project IVR 100/150-Pp Sc ... Project IVR 100/110-Pp Sc ... Project IVR 100/75-Pp Sc ...

Technical data				
Power supply	Ph/V/Hz	Pneumatic	Pneumatic	Pneumatic
Rated input power	kW	> 11	> 7.5	7.5
Air flow rate	I/s / m³/h	339 / 1219	271 / 975	203 / 732
Vacuum	mbar / kPa	500 / 50	500 / 50	500 / 50
$\textbf{Max. recommended connection } \varnothing$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		2-3	1-2	1-2
Order no.		on request	on request	on request
Price				

1) Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50:

### Project IVR 100/150-Pp Ef ... Project IVR 100/110-Pp Ef ... Project IVR 100/75-Pp Ef ...

Technical data				
Power supply	Ph/V/Hz	Pneumatic	Pneumatic	Pneumatic
Rated input power	kW	> 11	> 7.5	7.5
Air flow rate	$l/s / m^3/h$	339 / 1219	271 / 975	203 / 732
Vacuum	mbar / kPa	500 / 50	500 / 50	500 / 50
Max. recommended connection $\ensuremath{\mathcal{O}}$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		2-3	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

### Project IVR 50/150-Pp Sc ... Project IVR 50/110-Pp Sc ... Project IVR 50/75-Pp Sc ...

Technical data				
Power supply	Ph/V/Hz	Pneumatic	Pneumatic	Pneumatic
Rated input power	kW	> 11	> 7.5	7.5
Air flow rate	I/s / m³/h	339 / 1219	271 / 975	203 / 732
Vacuum	mbar / kPa	500 / 50	500 / 50	500 / 50
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	70	70	70
$\textbf{Max. simultaneous suction points} ^{1)}$		2-3	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

<sup>3.</sup> Typical suction material.

## **ROUGH / DRY - LARGE**



Image shows Project IVR 100/55 Sc Tc





### 1 Filter

- Equipped with pocket filter for dust class M with 1.75 m² filter area and A chassis for stationary set-up of the machine with extendable collectmanual filter cleaning.
- A pocket filter for dust class L with 3.2 or 5.2 m² filter area, as well as a pocket filter for dust class M with 3.2 or 5.2 m<sup>2</sup> filter area, and PTFE coating, membrane and flame-retardant membrane, are also available as optional equipment.
- On request automatic, electrical filter cleaning can also be integrated.

#### 2 Collection and emptying systems

- Equipped with collecting container with 100-litre capacity and set-down container.
- On request a 120-litre collecting container with settling container and tilting chassis can also be supplied.

### Very high suction power and convenient emptying

The powerful vacuuming solution Project IVR XX/XX ... Large is designed for stationary use for vacuuming large quantities of coarse swarf and dusts from metal, cast iron, plastic and composite materials, which arise during dry, rough processes, such as milling, turning, sawing, drilling or grinding. With extendable collecting container for particularly convenient emptying.









### 3 Chassis

ing container is included in the scope of delivery.

### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level.
- Also optionally available is a sensor that detects and alerts about any blockages in the connected suction hose or pipeline.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR 120/75 Sc Tc	Project IVR 120/60 Sc Tc	Project IVR 120/55 Sc Tc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	$l/s / m^3/h$	254 / 915	175 / 630	138 / 495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	240 / 24
$\textbf{Max. recommended connection } \varnothing$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

		Project IVR 100/75 Sc	Project IVR 100/60 Sc	Project IVR 100/55 Sc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	$l/s / m^3/h$	254 / 915	175 / 630	138 / 495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	240 / 24
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	70	70	70
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

3. Typical suction material.

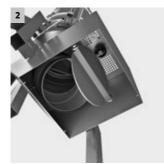
<sup>3.</sup> Typical suction material.

# **ROUGH / DRY - LARGE Ef**



#### Image shows Project IVR 100/55 Ef Afc





### 1 Filter

- Equipped with a pocket filter for dust class M with 1.75 m² filter area, as well as automatic, electrical filter cleaning.
- A pocket filter for dust class L with 1.75, 3.2 or 5.2 m² filter area, as well as a pocket filter for dust class M with 3.2 or 5.2 m² filter area, and PTFE coating, membrane and flame-retardant membrane, are also available as optional equipment.
- On request manual filter cleaning can also be integrated.

#### 2 Collection and emptying systems

- Automatic, electrical emptying system with sloping outlet.
- Also optionally available with automatic emptying flap using the force of gravity or with continuous emptying with double-chamber lock or rotary valve.

# Very high suction power and discharge

The powerful vacuuming solution Project IVR 100/XX Ef ... Large impresses when it comes to the vacuuming of large quantities of metal, cast iron, plastic and composite materials in dry, rough. Designed for continuous use in the production process, the integrated sloping outlet ensures the convenient discharge of the suction material, while automatic filter cleaning provides for constantly constantly high suction power.









### 3 Chassis

- Depending on the customer's requirements, the chassis can be adapted exactly to the respective installation site with its specific spatial conditions
- Optional mobile variant available with 5.5 kW drive unit.

#### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR 100/75 Ef	Project IVR 100/60 Ef	Project IVR 100/55 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	$l/s / m^3/h$	254 / 915	175 / 630	138 / 495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	240 / 24
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	100	100	100
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

### **ROUGH / DRY - EXTRA LARGE (Ef)**



#### Image shows Project IVR 100/110 Ef





#### 1 Filter

- Equipped with a pocket filter for dust class M with 3.2 m<sup>2</sup> filter area, as well as automatic, electrical filter cleaning.
- A pocket filter for dust class M with 5.2 and 10.4 m² filter area and PTFE coating, membrane and flame-retardant membrane are also available.
- On request manual filter cleaning can also be integrated.

#### 2 Collection and emptying systems

- With automatic, electrical emptying flap.
- On request an automatic emptying flap using the force of gravity is
- Optionally available with 100-litre collecting container with settling container or 120-litre collecting container with settling container and tilting chassis.
- Continuous emptying during operation via double-chamber lock or rotary valve can also be implemented.

# Maximum suction power even in continuous use

The vacuuming solution Project IVR XX/XX (Ef) ... Extra Large is designed for the reliable and safe vacuuming of very large quantities of swarf and dusts from metal, cast iron, plastic and composite materials, which arise during dry, rough processes, such as milling, turning, sawing, drilling or grinding. Can be used in continuous operation with different discharges – from the sloping outlet through to a double-chamber lock for continuous discharge without any interruptions.









### 3 Chassis

Depending on the customer's requirements, the chassis can be adapted exactly to the respective installation site with its specific spatial conditions

#### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level and the emptying flap.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

### Project IVR 120/110 Sc Tc ... Project IVR 100/110 Sc ...

Technical data			
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	11.0	11.0
Air flow rate	$l/s / m^3/h$	275 / 990	275 / 990
Vacuum	mbar / kPa	240 / 24	240 / 24
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	120	120
Max. simultaneous suction points <sup>1)</sup>		2-3	2-3
Order no.		on request	on request
Price			

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50:

		Project IVR 100/220 Ef	Project IVR 100/165 Ef	Project IVR 100/110 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	22.0	16.5	11.0
Air flow rate	$l/s / m^3/h$	550 / 1980	412 / 1485	275 / 990
Vacuum	mbar / kPa	240 / 24	240 / 24	240 / 24
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	140	140	120
Max. simultaneous suction points <sup>1)</sup>		3-5	3-5	2-3
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

Typical suction material.

### **FINE / WET - MEDIUM Ef**



Image shows Project IVR-L 100/30 Ef Afc





- Equipped with pocket filter for dust class L with 1.75 m² filter area.
- A pocket filter for dust class L with 3.2 m<sup>2</sup> filter area, as well as automatic, electrical filter cleaning, are also available as an option.

# filtering

High suction power with efficient

The convenient and powerful vacuuming solution Project IVR-L 100/XX Ef... Medium can be integrated in the production process and used in continuous operation for wet, fine applications. Thanks to the automatic, electrical filter cleaning and discharge, it is suitable for medium quantities of wet and fine metal and cast iron swarf and plastic shavings, which arise when sawing, grinding, milling, turning or drilling.









### 3 Chassis

Depending on the customer's requirements, the chassis can be adapted exactly to the respective installation site with its specific spatial

### 2 Collection and emptying systems

- With automatic, electro-pneumatically opening emptying flap.
- On request other versions of the emptying flap are available, either for manual operation or automatically using the force of gravity.
- The integration of a swarf hopper can also be implemented.

#### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level and the emptying flap.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-L 100/30 Ef	Project IVR-L 100/15 Ef	Project IVR-L 100/24-2 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	1 / 220-240 / 50-60
Rated input power	kW	3.0	1.5	2.4
Air flow rate	$I/s / m^3/h$	88 /312	58 / 210	148 / 532
Vacuum	mbar / kPa	260 / 26	200 / 20	230 / 23
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \varnothing}$	mm	70	50	70
Max. simultaneous suction points <sup>1)</sup>		1	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

### **FINE / WET - LARGE Ef**



Image shows Project IVR-L 100/55 Ef





### 1 Filter

- Equipped with pocket filter for dust class L with 1.75 m² filter area and manual filter cleaning.
- A pocket filter for dust class L with 3.2 m² filter area, as well as automatic, electrical filter cleaning, are also available as an option.

# Maximum suction power and customer specific discharge

Suitable for direct integration in the production process for wet, fine applications and designed for continuous use, this vacuuming solution Project IVR-L 100/XX Ef impresses with very high suction power and the option of convenient direct discharge to customerspecific sites. Particularly suitable for the fast and reliable vacuuming of wet and fine swarf from metal or cast iron or plastic shavings arising during sawing, grinding, milling, turning or drilling.









### 3 Chassis

 Depending on the customer's requirements, the chassis can be adapted exactly to the respective installation site with its specific spatial conditions

### 2 Collection and emptying systems

- Manually opening emptying flap.
- On request automatic versions of the emptying flap are available, either with electrically opening emptying flap or automatically using the force of gravity.
- Continuous emptying during operation via double-chamber lock or rotary valve can also be implemented.

### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level and the emptying flap.
- A sensor that detects and reports possible blockages of the connected suction hose or pipes is also available as optional equipment.

### **TECHNICAL DATA AND EQUIPMENT**

		Project IVR-L 100/75 Ef	Project IVR-L 100/60 Ef	Project IVR-L 100/55 Ef
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	7.5	6.0	5.5
Air flow rate	I/s / m³/h	254 / 915	176 / 630	138 / 495
Vacuum	mbar / kPa	175 / 17.5	260 / 26	240 / 24
$\textbf{Max. recommended connection } \varnothing$	mm	100	100	100
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

### **FINE / DRY - MEDIUM**



Image shows Project IVR 40/30 Sc







- Equipped with pocket filter for dust class M with 1.75 m<sup>2</sup> filter area and manual filter cleaning.
- Pocket filters for dust classes M and H with 1.75 m² filter area and PTFE coating, with membrane and flame-retardant membrane, are also available as optional equipment.
- On request automatic, electrical filter cleaning can be integrated.

#### 2 Collection and emptying systems

■ Equipped as standard with a 40-litre collecting container.

# High suction power for dry, fine suction material

A mobile chassis allows use of the vacuuming solution Project IVR 40/XX ... Medium exactly where it is needed in dry, fine applications. It can be used from time to time and in continuous operation and reliably vacuums medium quantities of dusts and swarf from metal, cast iron or plastic arising from sanding, sawing or milling. The compact machine also has an extendable set-down collecting container.









### 3 Chassis

The compact chassis allows the appropriate, flexible and fast set-up of the machine at different production sites.

### 4 Sensors

- For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the operating status and filter condition, as well as the filling level.
- Also optionally available is a sensor that detects and alerts about any blockages in the connected suction hose or pipeline.

## **TECHNICAL DATA AND EQUIPMENT**

		Project IVR 40/40 Sc	Project IVR 40/30 Sc	Project IVR 40/15 Sc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	4.0	3.0	1.5
Air flow rate	$l/s / m^3/h$	138 / 495	88 / 312	58 / 210
Vacuum	mbar / kPa	140 / 14	260 / 26	200 / 20
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	70	70	50
Max. simultaneous suction points <sup>1)</sup>		1-2	1	1
Order no.		on request	on request	on request
Price				

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

#### Project IVR 40/24-2 Sc

Technical data		
Power supply	Ph/V/Hz	1 / 220-240 / 50-60
Rated input power	kW	2.4
Air flow rate	$I/s / m^3/h$	148 / 532
Vacuum	mbar / kPa	230 / 23
${\bf Max.}\ recommended\ connection\ \varnothing$	mm	70
Max. simultaneous suction points <sup>1)</sup>		1
Order no.		on request
Price		

<sup>&</sup>lt;sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50; 3. Typical suction material.

<sup>3.</sup> Typical suction material.

## **FINE / DRY (UNSETTLED PARTICLES) - SMALL**



Image shows Project ID 30/30 Afc







- electrical filter cleaning.
- Filters with PTFE coating with membrane and flame-retardant membrane are also available.

### **Compact suction power for** unsettled particles

The vacuuming solution Project ID XX/XX ... Small is suitable for the safe vacuuming of small quantities of swarf and fine dusts in the ambient air, which arise when grinding, sawing or milling metal, cast iron or plastics. With a 50-litre collecting container, automatic, electrical filter cleaning and designed for continuous use in the production process in dry, fine applications.









### 3 Chassis

■ With pocket filter for dust class M with 3.2 m² filter area and automatic, ■ The compact and mobile chassis allows the appropriate, flexible and fast set-up of the machine at different production sites.

### 2 Collection and emptying systems

- Equipped with a 100-litre collecting container (ID 90/30).

■ Equipped with a 50-litre collecting container (ID 50/40 and ID 30/30). ■ For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the filter condition and filling level.

### **TECHNICAL DATA AND EQUIPMENT**

		Project ID 50/40 Afc	Project ID 30/30 Afc	Project ID 90/30
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	4.0	3.0	3.0
Air flow rate	$I/s / m^3/h$	138 / 495	88 / 315	250 / 900
Vacuum	mbar / kPa	140 / 14	260 / 26	48 / 4.8
$\textbf{Max. recommended connection } \varnothing$	mm	70	70	120
Max. simultaneous suction points <sup>1)</sup>		1-2	1-2	1-2
Max. cab size1)	m³	1-2	1-2	1-2
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

<sup>3.</sup> Typical suction material.

## **FINE / DRY (UNSETTLED PARTICLES) - MEDIUM**

# High suction power for unsettled particles in the air

Thanks to a high air flow, this vacuuming solution Project ID XX/XX ... Medium also removes very large quantities of fine and suspended dusts from metal, cast iron or plastic from the ambient air in continuous use. CNC machining centres, machine interiors, weighing systems or filling plants remain free of suspended dusts, like those that occur during grinding, sawing or milling in dry, fine.





Image shows Project ID 265/55 Afc









#### 1 Filter

- Equipped with a pocket filter for dust class M with 14 m² filter area, as well as automatic, electrical filter cleaning.
- A pocket filter for dust class M with 24 m² filter area is also available as optional equipment.
- Cartridge filter M in customer-specific design.

### 3 Chassis

At the customer's request, the chassis can be adapted in many versions exactly to the respective installation site with its specific spatial conditions.

### 2 Collection and emptying systems

- With 50-litre collecting container.
- Collecting containers also available with 100, 120 or 400-litre capacity.
- Continuous emptying during operation via double-chamber lock or rotary valve can also be implemented.

#### 4 Sensors

For the precise monitoring of the machine, sensors can be integrated as optional equipment for monitoring the filter condition and filling level.

### **TECHNICAL DATA AND EQUIPMENT**

		Project ID 600/185 Afc	Project ID 500/150 Afc	Project ID 350/110 Afc
Technical data				
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	18.5	15.0	11.0
Air flow rate	$I/s / m^3/h$	1666 / 6000	1408 / 5069	972 / 3500
Vacuum	mbar / kPa	60 / 6	51 / 5.1	54 / 5.4
${\bf Max.}\ {\bf recommended}\ {\bf connection}\ {\bf \emptyset}$	mm	350	315	250
Max. simultaneous suction points <sup>1)</sup>		2-5	2-5	2-5
Max. cab size1)	m³	10-20	10-20	10-20
Order no.		on request	on request	on request
Price				

<sup>1)</sup> Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50; 3. Typical suction material.

Project ID 265/55 Afc	Project ID 120/30 Afc
i i oject ib 200/00 Aic	i roject ib 120,50 Aic

Technical data			
Power supply	Ph/V/Hz	3 / 400 / 50	3 / 400 / 50
Rated input power	kW	5.5	3.0
Air flow rate	$I/s / m^3/h$	738 / 2655	333 / 1200
Vacuum	mbar / kPa	43 / 4.3	44 / 4.4
$\mathbf{Max.}\ \mathbf{recommended}\ \mathbf{connection}\ \boldsymbol{\varnothing}$	mm	175	140
$\textbf{Max. simultaneous suction points} ^{1)}$		2-5	2-5
Max. cab size1)	m³	3-10	3-10
Order no.		on request	on request
Price			

1) Based on the following assumptions: 1. Max. distance between machine and simultaneous suction point furthest away: 20 m; 2. Max. connection Ø: DN 50;

3. Typical suction material

CUSTOMER SPECIFIC ACCESSORIES

## **CUSTOMER SPECIFIC ACCESSORIES**

Very specific applications often require very special accessories. We provide custom-made accessories for all non-standard applications.



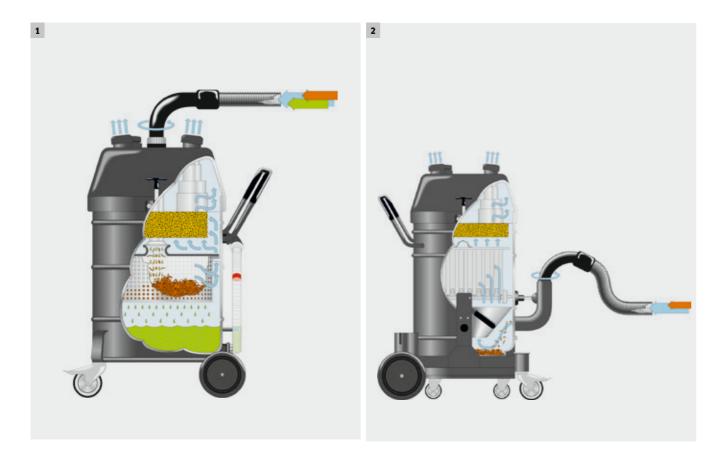


#### Custom-made nozzle

Depending on the application, custom-made nozzles may be required to capture dirt perfectly. We can manufacture nozzles using 3D printing techniques with geometries which are not possible using conventional manufacturing methods. This means you have all options to vacuum all types of particles directly at the point of origin.

OPERATING PRINCIPLE
OPERATING PRINCIPLE

# OPERATING PRINCIPLE OF INDUSTRIAL VACUUMS / INDUSTRIAL DEDUSTERS

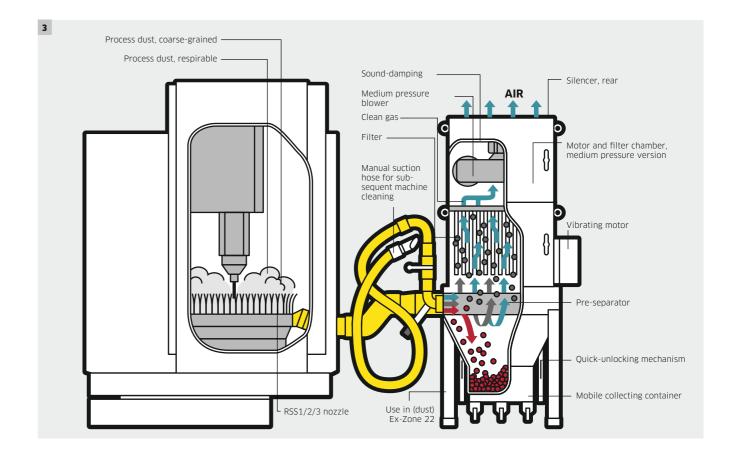


### 1 How industrial vacuums for liquids and swarf work

- The suction medium is vacuumed via the suction head.
- Coarse particles, such as swarf, are separated in the optional filter basket (1.5 mm perforated sheet).
- An integrated baffle plate prevents damage to the filter from coarse particles.
- Coarse particles and liquids are separated.
- For liquids: filling level control and emptying via the transparent emptying hose. Optional emptying via external drum nump
- For solids: emptying via tilting chassis or removal of filter basket.
- Air filtration is carried out with a surface filter for dust class L.

### 2 How industrial vacuums for solids and dusts work

- The suction medium is doubly redirected across large radii and transported into the pre-separator in a tangential process.
- Coarse particles are separated in the cyclone-type pre-separator (1st filtration stage). As a result, blockages in the inlet area are optimally prevented.
- Fine dust particles are retained in the pocket filter (2nd filtration stage).
- Filter cleaning is carried out manually after the vacuuming process or automatically by electric filter shaking.
- Emptying is implemented via a set-down container with or without PE disposal bag.



# 3 Operating principle of stationary industrial vacuums / industrial dedusters

- The suction medium is vacuumed via a pipeline system.
- Coarse particles are separated in the cyclone-type pre-separator (1st filtration stage).
- Fine dust particles are retained in the large pocket filter (2nd filtration stage)
- Filter cleaning is carried out manually after the vacuuming process or automatically by electric filter shaking.
- Emptying is implemented via a set-down container with or without PE disposal bag. Alternatively, pneumatic discharge flaps are possible.

#### Kärcher industrial vacuum application overview

Coarse, dry		Fine, dry		Potentially explosi	ve dust	Liquid	
Ø 2-3 h/day	Ø up to 24 h/day	Ø 2-3 h/day	Ø up to 24 h/day	Ø 2-3 h/day	Ø up to 24 h/day	Ø 2-3 h/day	Ø up to 24 h/day
-1 variant	~3 variants	~1 variant	~3 variants	~1 variant	~3 variants	~1 variant	~3 variants
Automotive indust	ry/machinery and pla	nt engineering/tool ma	nufacture/metal pro	cessing			
Metal shavings from ma (milling, drilling, punch		Dust from metal processing		Paint dust		Cutting fluid from m	etal processing
IVR-L 400 IVR-L 200 IVR-L 120 IVR-L 120 IVR-L 100	IVR-L 200 IVR-L 100 IVR 100 IVR-B	IVR 100 IVR 50 IVR 40 IVR 35	IVS 100 IVR 100 IVR 50 IVR 40		IVS 100 Z22 IVM 60/30 M Z22 IVC 60 Z22	IVR-L 400 IVR-L 200 IVR-L 120 IVR-L 100	IVR-L 200 IVR-L 100
IVR-L 65 IVR-L 40		IVM 60/36 -3	IVM 60/30			IVR-L 65 IVR-L 40	
Metallurgy and me	etal forming						
Slag				Flammable metal dust			
IVR-L 400 IVR-L 200 IVR-L 120 IVR-L 100 IVR-L 65 IVR-L 40 IVR 100 Ef	IVR-L 200 IVR-L 100 IVR 100 Ef IVR 100				IVS 100 Z22 IVM 60/30 M Z22		
Coking and minera	I oil processing						
Lumps of coal				Coal (daytime)			
IVR-L 400 IVR-L 2002 IVR-L 120 IVR-L 100 IVR-L 65 IVR 100 Ef	IVR-L 200 IVR-L 100 IVS 100 IVR 100 Ef IVR 100 IVR-B				IVS 100 Z22 IVM 60/30 M Z22		
Glass and stone pro	ocessing						
Cullet, gravel, crushed s		Gypsum, cement, concre	te, glass dust			Slurry	
IVR-L 400 IVR-L 200 IVR-L 120 IVR-L 100 IVR-L 65 IVR-L 40 IVC 60/24-2 Ap	IVR-L 200 IVR-L 100 IVS 100 IVR 100 IVR-B IVC 60/30 Ap	IVR 35 IVC Tact <sup>2</sup>	IVS 100 IVM 60/30 IVC 60/30 Tact <sup>2</sup>			IVR-L 400 IVR-L 200 IVR-L 120 TC IVR-L 100 TC IVR-L 65	IVR-L 200 IVR-L 100
Paper manufacture	/ manufacture of pri	nt media					
Cardboard packaging		Cellulose fibres		Paper dust		Liquid dyes, printing	inks
IVC 60/24-2 Ap	IVS 100 IVC 60/30 Ap IVC 60/12-1	IVM 60/36 -3 IVC 60/24-2 Tact <sup>2</sup>	IVS 100 IVM 60/30 IVC 60/30 Tact <sup>2</sup> IVC 60/12-1 Tact		IVS 100 Z22 IVM 60/30 M Z22 IVC 60/30 Ap M Z22	IVR-L 200 IVR-L 120 IVR-L 100 IVC 60/24-2	IVR-L 200 IVR-L 100 IVC 60/30
Food industry							
Broken food products o	n the production line, e.g.	In the production proces	s, e.g. ground coffee	Flour, sugar, water, pov	wdered foods	Food oil, drinks	
broken biscuits, chocola							
IVC 60/24-2 Ap	IVS 100 IVC 60/30 Ap IVC 60/12-1	IVM 60/36 -3	IVS 100 IVM 60/30		IVS 100 Z22 IVM 60/30 M Z22 IVC 60 Z22	IVR-L 200 IVR-L 120 Me IVR-L 100 Me IVC 60/24-2	IVC 60/30
Production of stard	ch and tobacco						
		Tobacco dust		Starch			
		IVC 60/24-2 Tact <sup>4</sup>	IVS 100 IVC 60/30 Tact <sup>2</sup> IVC 60/12-1 Tact		IVS 100 Z22 IVM 60/30 M Z22 IVC 60 Z22		
Production of rubb	er and plastic						
Plastic granulate, plasti	c casting residues	Plastic dust				Water	
IVC 60/24-2 Ap	IVS 100 IVC 60/30 Ap IVC 60/12-1 IVR-B	IVR 100 IVR 50 IVR 40 IVR 35 IVM 60/36 -3 IVC 60/24-2 Tact <sup>2</sup> M	IVS 100 IVR 100 IVR 50 IVR 40 IVM 60/30 IVC 60/30 IVC 60/12-1			IVR-L 200 IVR-L 120 Me IVR-L 100 Me IVC 60/24-2	IVR-L 200 IVC 60/30
Wood processing/f	furniture manufacture						
Coarse wood shavings	and small pieces of wood			Wood dust			
IVC 60/24-2 Tact <sup>2</sup> M IVC 60/24-2 Ap	IVS 100 IVC 60/30 Ap				IVS 100 Z22 IVM 60/30 M Z22		
					IVC 60 Z22		
Chemical industry							
Granulate	D/C 4.00	Plastic dust	D/C 463	Fertiliser, pigment	D/C 400 700	Detergents, aggressi	
IVC 60/24-2 Ap	IVS 100 IVC 60/30 Ap IVC 60/12-1	IVR 100 IVR 50 IVR 40 IVR 35 IVM 60/36 -3 IVC 60/24-2 Tact <sup>2</sup> M	IVS 100 IVR 100 IVR 50 IVR 40 IVC 60/30 IVC 60/12-1		IVS 100 Z22 IVM 60/30 M Z22 IVC 60 Z22	IVR-L 120 Me IVR-L 100 Me	IVR-L 200 IVR-L 100
Pharmaceutical inc	dustry						
Tablets		In the production proces	s, e.g. tablet press	Medicines, e.g. vitamir	ns, oestrogen, acids		
	IVS 100 IVM 60/30	IVM 60/36 -3 IVC 60/24-2 Tact <sup>2</sup> M	IVS 100 IVM 60/30		IVS 100 Z22 IVM 60/30 M Z22		

#### Dimensioning performance class: 1st air speed table: application overview

		Air speed [m/s]			Air speed [m/s]
The minimum require	ed air speeds are listed				
Wood	Wood shavings with pieces	25-30	Minerals	Coarse dry sand without gravel	21-25
	Damp sawdust	22-24		Foundry sand	35-45
	Coarse wood shavings without pieces	18-22*		Cement dust	25-30
	Wood wool	18-20*		Pebble stones up to Ø 5 cm	60-65
	Small pieces of wood and chips	16-18*		Sand Ø < 2 cm / Ø 2-3 cm	21-26 / 50-60
	Ultra-fine wood dust	12-14*		Ultra-fine dry sand dust	12-14
The minimum require	ed air speeds are listed				
Paper, plastics	Plastic granulate	20-23	Metal	Coarse metal dust	20-25
	Plastic powder	20-25		Metal dust	20-22
	Paper chips	15-22*		Fine metal dust	18-20*
	Rubber dust	18-20*		Shavings (dry)	25-27
	Edge strip suction	16-18*		Shavings (wet)	27-32
	Abrasive dust, leather	15-16*		Metal smoke (welding)	14-16
	Paint mist spray booths	14-16*		Steel balls	45-55
	Shorter textile fibres	12-16*		Oil (low viscosity), cooling lubricants	25-30
	Expanded polystyrene	8-10*		Oil (high viscosity), slurry	30-40
The minimum require	ed air speeds are listed				
Food	Tobacco dusts	15-16*	Max. flow rate	DN 40	approx. 90 m³/h
	Grain and fodder dusts	14-16*	depending on hose diameter	DN 50	approx. 140 m³/h
	Flour	12-14*		DN 70	approx. 270 m <sup>3</sup> /h
	Food residue, e.g. pasta	30+			

<sup>\*</sup> Safety vacuum cleaners and EX vacuums may only be operated with a minimum air speed of 20 m/s. If the minimum speed is not met, this is signalled by an indicator light.

#### Dimensioning performance class: 2nd air speed table

Drive performance			Suction hose diameter			
IVR drive heads			DN [Ø mm]	40	50	70
Alternating current	Max. volume flow [m³/h]	Max. vacuum [kPa]	Area [cm²]	12.6	19.6	38.5
1.2 kW	215	23		46.4	29.7	15.1
2.0 kW	360	22		79.6	50.9	26.0
2.4 kW	532	23		117.6	75.2	38.4
Three-phase current						
1.5 kW	210	20		46.4	29.7	15.2
3.0 kW	315	26		70.7	45.3	23.1
4.0 kW	495	14		114.9	73.6	37.5
IVC/IVM drive hea	ads					
Alternating current	Max. volume flow [m³/h]	Max. vacuum [kPa]	Air speed [m/s]	40	50	70
1.2 kW (Ec)	225	24	All speed [III/s]	49.0	31.8	-
2.4 kW	532	25		117.6	75.2	-
3.6 kW	799	25.4		133.7	85.6	43.7
Three-phase current						
3.0 kW	244	28		53.9	34.5	17.6
IVS drive heads						
Three-phase current						
4.0 kW	500	18		110.5	70.6	36.0
5.5 kW	500	25		110.5	70.6	36.0
		33		118.5	75.8	38.7

#### Example

#### Application example:

A customer would like to purchase an industrial vacuum for vacuuming metal shavings.

Refer to Table 1 for the required minimum For metal shavings (dry), an air speed of

25-27 m/s is required.

Table 2 shows the air speed generated during the suction process depending on the drive performance and suction hose diameter.

Example: A 1.2 kW IVR drive head with a DN 40 suction hose enables an air speed of 46.4 m/s

→ Dimensioning sufficient.

Choosing a DN 70 suction hose and 1.2 kW drive performance would result in an air speed of 15.1 m/s. → Dimensioning insufficient.

### ATTENTION:

➤ Values apply to suction hoses up to 10 metres long. Pressure losses in the suction hose must also be taken into account. ▶ For safety vacuum cleaners, the air speed must never be < 20 m/s.