

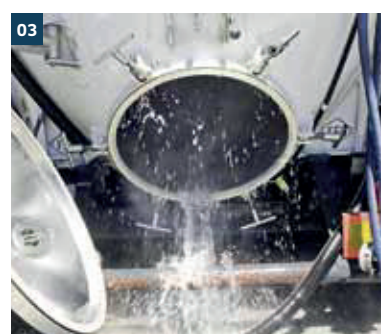
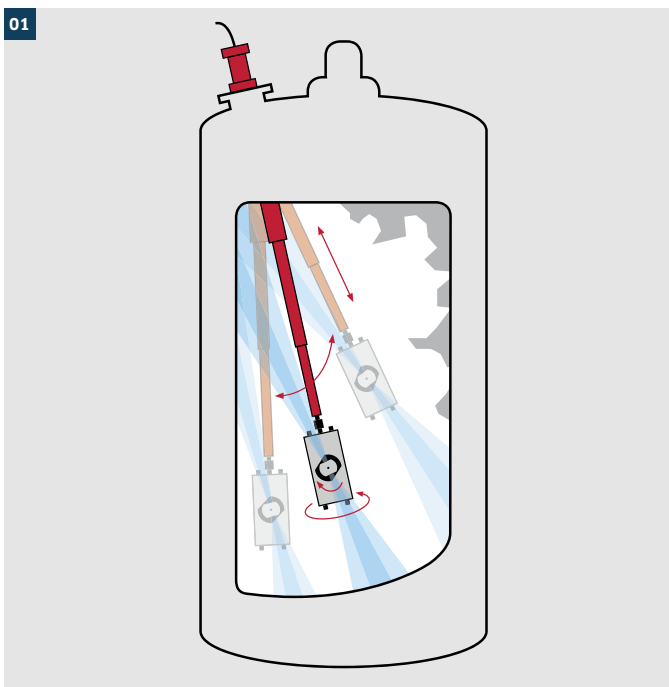
# TANK CLEANING

Internal cleaning is the main point of tank maintenance. In order to disrupt the production process as little as possible, a quick and thorough cleaning of storage tanks, reactor tanks etc. is crucial. The external cleaning of tanks occurs primarily for avoiding corrosion or for visual reasons.

The large number of varying tank designs is a challenge for internal cleaning: size, diameter, material, facing horizontally or vertically, number, position and size of the opening, build and size of the stirring unit. The prominent cleaning processes are time-consuming due to required personal protective equipment, often in addition to respiratory protection. In very large tanks, not all places can be reached by hand. The modern answer to all questions regarding internal cleaning of tanks is the WOMA® TankMaster.

Tank washing heads are high pressure water tools with a self-propelling rotor, which is driven using the reactive power of the escaping water jets. The rotor speed is dependant on the volume flow as well as the operating pressure and is regulated through a simple-to-operate magnetic brake.

Depending on the power, tank washing heads can be used without extension arms for tanks up to 6 m wide. Using extension arms, tank diameters of 12–15 m are pos-



**01** For the safe and thorough internal cleaning of tanks, the TankMaster can be placed with a positioning device.

**02** For the manual cleaning of tanks, WOMA® offers a wide portfolio of high pressure guns.

**03** WOMA® water tools are also suitable for the cleaning of tanks for transportation and tankers containing dangerous goods.

sible. In tanks with a diameter of more than 15m, the tank washing heads must be used with a positioning device or a decentralised service opening in the tank. More tank washing heads can be brought into use in tanks that are constructed in a horizontal direction or which have more openings: hanging free in the container or with help from a positioning device, which places the TankMaster onto all points in the container.

For optimal cleaning results and minimal cleaning time, a dense jetting image of the tank cleaning head and its optimal positioning in the tank – without shadow – is necessary. Due to ATEX certification of the tank washing heads and the positioning device, the TankMaster is also an efficient and economical solution for tankers transporting dangerous goods and tanks located in areas where there is a risk of explosion.

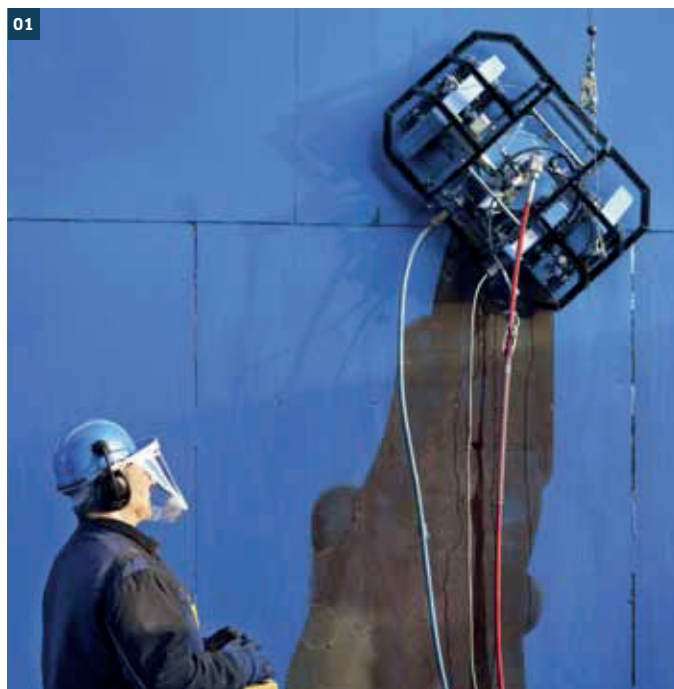
The TankMaster fulfils the requirements of users and service contractors:

- It can be lifted by one person and carried into all established container openings
- Universally usable through small dimensions and a light weight
- Robust construction for rough everyday operation

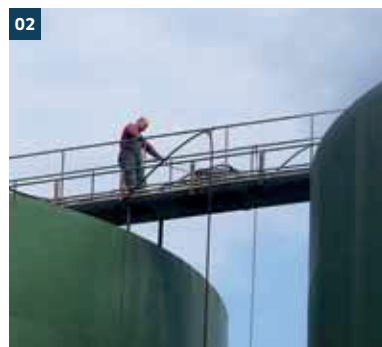
The efficient solution for external cleaning of steel tanks is the Magnet Lizard. This high pressure water tool with up to 2500 bar pressure quickly, thoroughly and reliably removes deposits of all kinds. The Magnet Lizard, with permanent magnets and chain drive, moves horizontally or vertically on the external wall – to a great height – and spares the user from time and cost intensive scaffolding to revise or dismantle.

#### Advantages at a glance

- Safe and fast cleaning for tanks of all sizes
- Robust tank washing heads with a light weight and very good jetting image
- ATEX certified products for cleaning of tanks transporting dangerous goods and those in explosion-risk areas



01



02



03

**01** The WOMA® Magnet Lizard is the optimal work tool for external cleaning and paint removal from large surfaces.

**02** WOMA® water tools cover the entire width of tank cleaning.

**03** Easy-to-reach places can be cleaned with a high pressure gun.