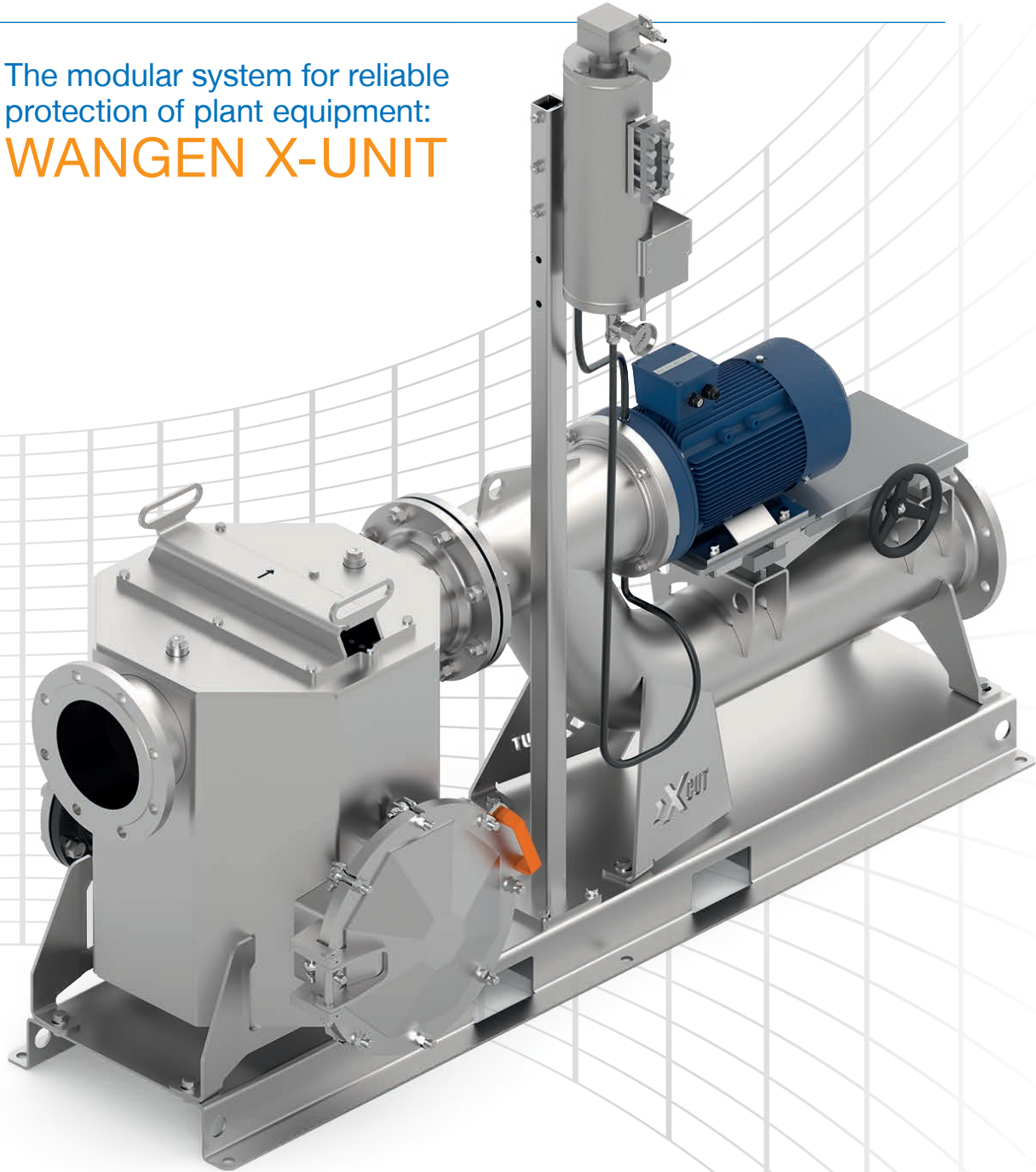




The modular system for reliable protection of plant equipment:
WANGEN X-UNIT



Protects against harmful substances and improves the efficiency of your system

Modular, process-optimised and extremely durable

WANGEN X-UNIT

Optimum substrate preparation and low wear optimise the efficiency of your system

The WANGEN X-UNIT is used wherever feed needs to be chopped and foreign matter and contaminants separated:

- Bio-gas plants
- Bio-waste utilisation
- Stable application in agricultural technology
- Liquid-manure technology vehicle construction
- Municipal waste water treatment plants

Low energy consumption coupled with maximum substrate yield

Foreign matter is removed from the medium without additional energy consumption.

The WANGEN X-UNIT guarantees higher substrate digestion, thanks to the excellent cutting performance of the X-CUT.

Maximum service friendliness

due to easy access to the cutting and sealing unit.



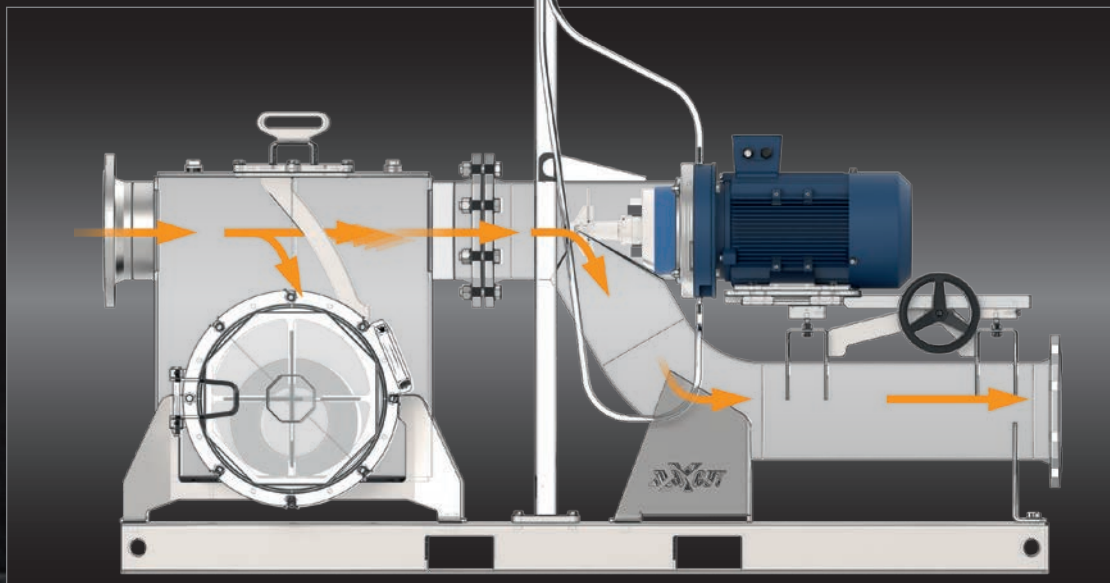
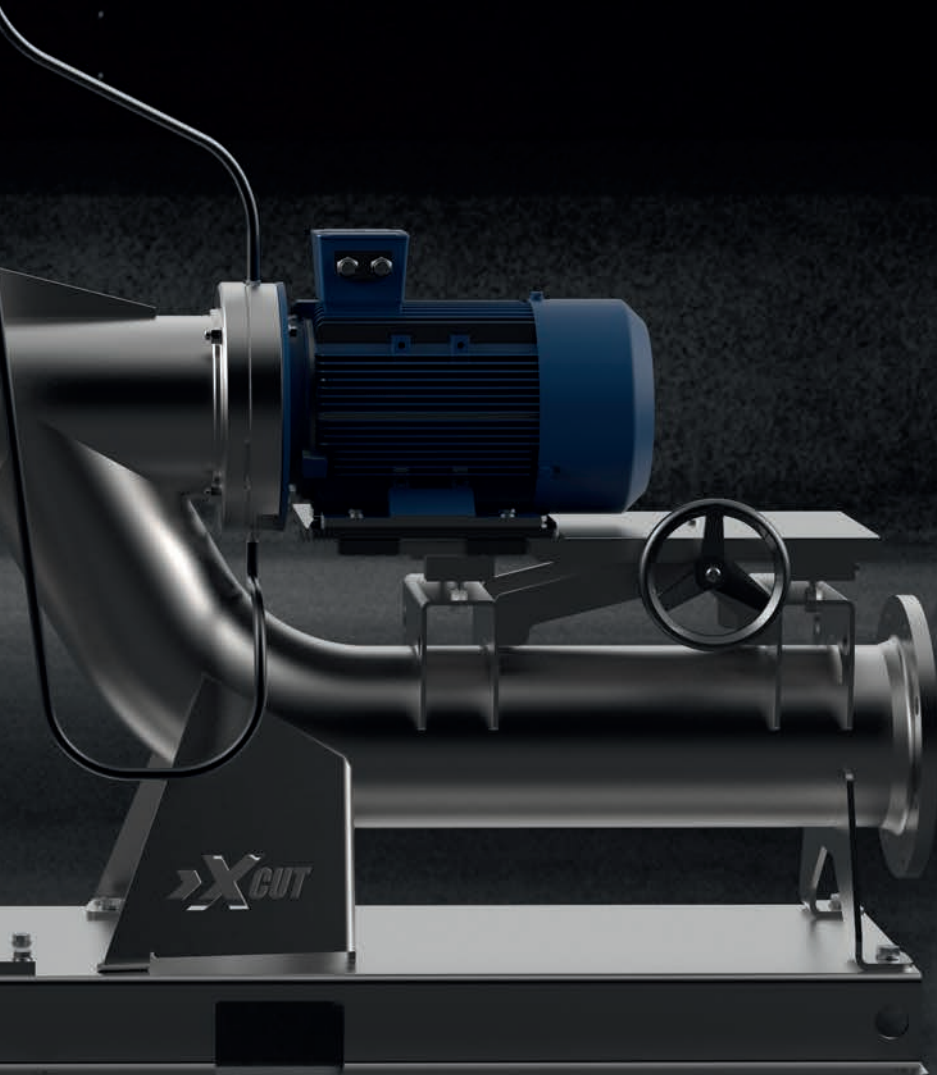


Illustration of the directions of flow of the medium through the X-UNIT



The debris removal module

WANGEN X-TRACT

Robust module to separate foreign matter from the feed.

Especially in bio-gas plants and in agricultural technology, stones, wood, metal parts or other foreign bodies are taken out of the pumped medium, in order to ensure a troublefree and wear reduced operation of the system.

Large settling tank

with a large opening for the removal of foreign matter. The opening flap can be operated on both sides by turning the X-TRACT and rake.

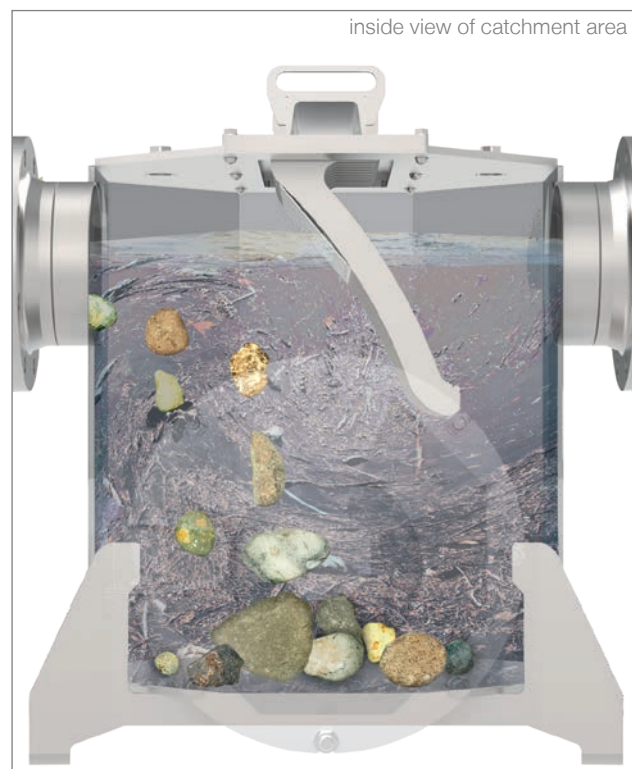
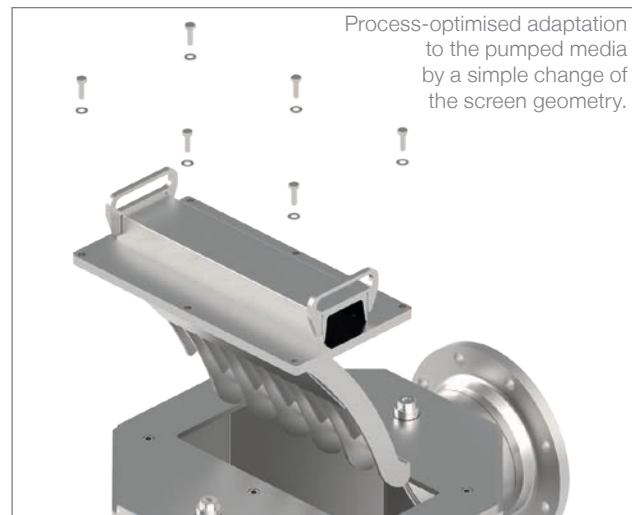
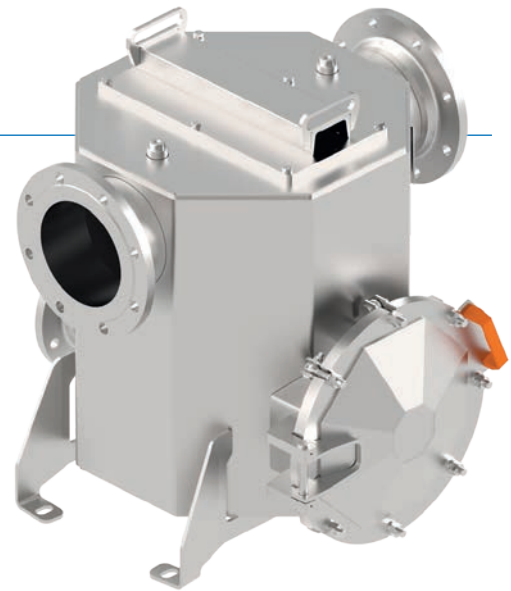
Easy integration into existing systems

through standard flange and compact, space-efficient construction design. The modular structure enables installation in case of confined space conditions through separate installation.

Further plus points:

- Very rugged implementation.
- No moving parts are needed to separate foreign matter.
- Flow-optimised catch container.
- Foreign body removal through wheelbarrow possible with mounting stand.
- Additional rinse connections available.

Foreign matter and contaminants, such as stones, are directed towards the base of the container by the geometry of the rake. Self-cleaning rake by the in-flowing medium. The X-TRACT thus avoids malfunctions and the ensuing downtime of the entire system.



X-TRACT design components:

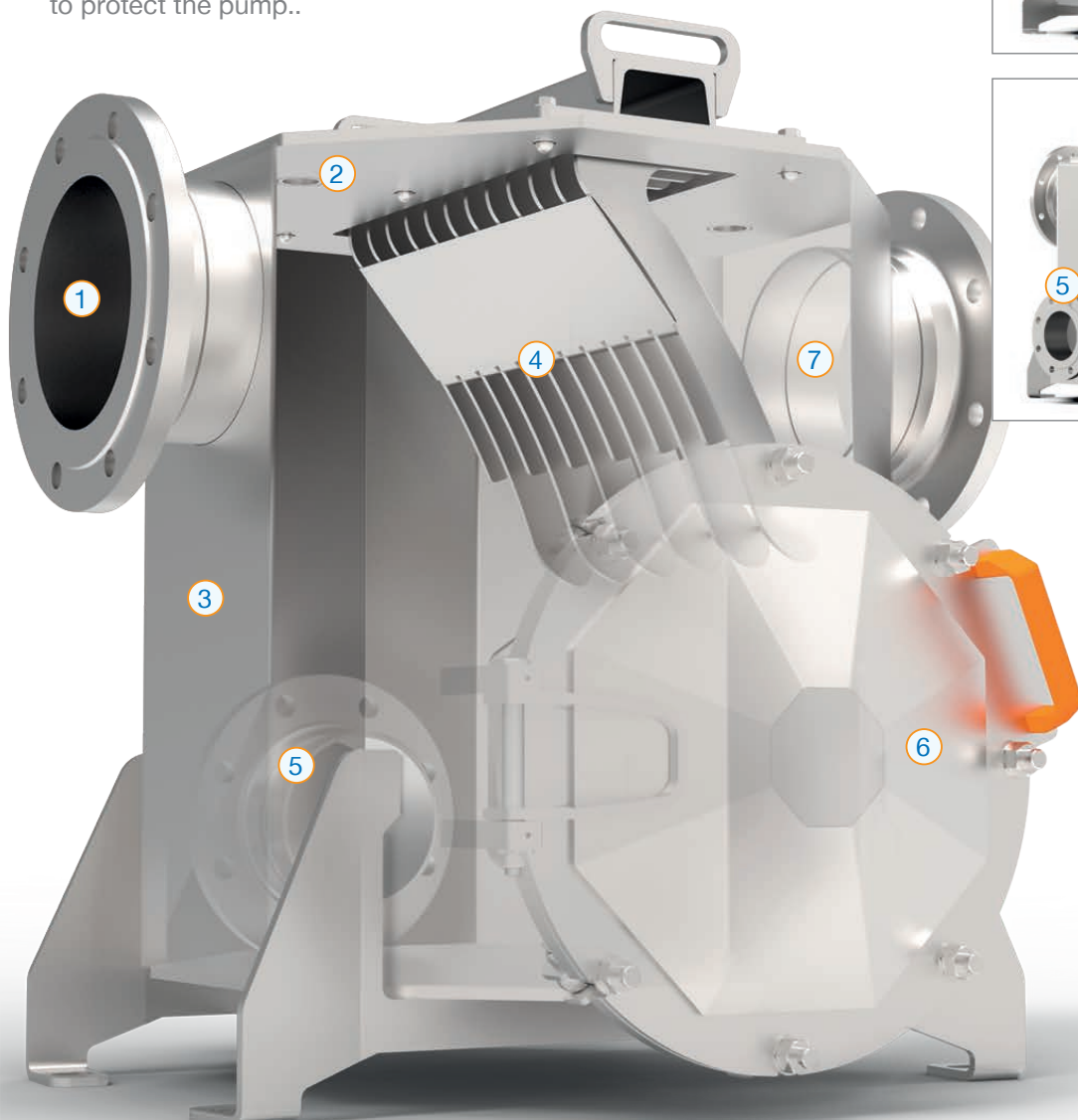
- ① Media inlet: Pipe connections DN200 / PN10
- ② Connection for sensor to provide optimal monitoring and control
- ③ Debris catchment area
- ④ Various screen for the removal of debris and heavy objects
- ⑤ Flange DN150 / PN10 for the emptying / flushing the catchment area (see image of the rear)
- ⑥ Large opening for the removal of settled foreign bodies (optionally on the right or left).
- ⑦ Discharge: pipe connections DN200 / PN10.

Material: Galvanised milled steel (further materials on request).

Maximum capacity: 1,250 m³/h / 347 l/sec.*

Stable pressure up to 6 bar.

We recommend installing the unit on the suction side to protect the pump..



* data applies for water as media.

The high-performance chopper **WANGEN X-CUT**

Module with rotating cutting tool to chop contaminants. Speeds of up to **3,000 rpm** provide for excellent substrate digestion rates.

Ultra-resistant heavy-duty seal

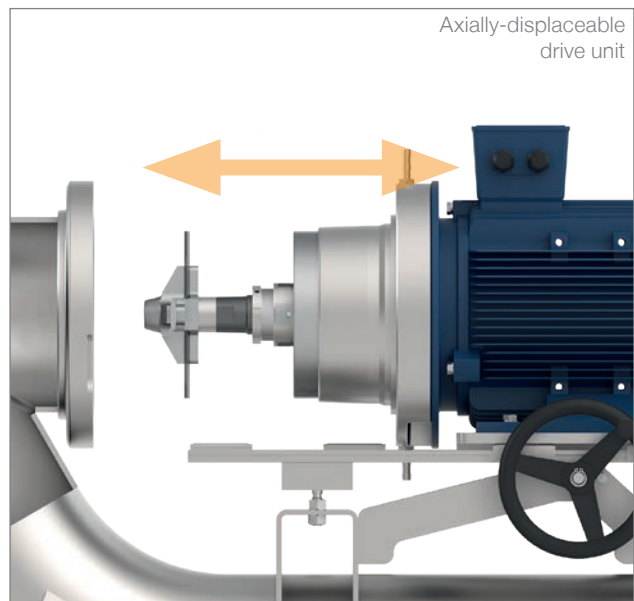
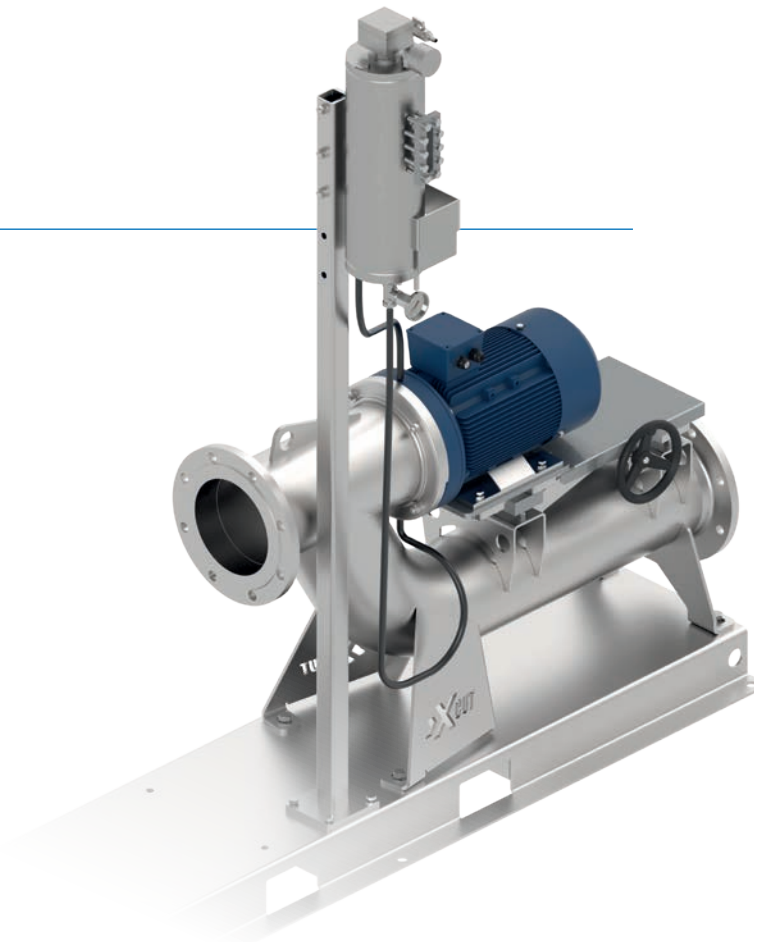
thanks to a seal with cooling and lubrication function, specifically developed for this purpose, for extremely high speeds and pressures (up to 6 bar medium pressure).

Ultimate ease of servicing

thanks to rapid replacement of the cutting blade and sealing unit. Multiple use of the cutting blades for a long service life

Further plus points:

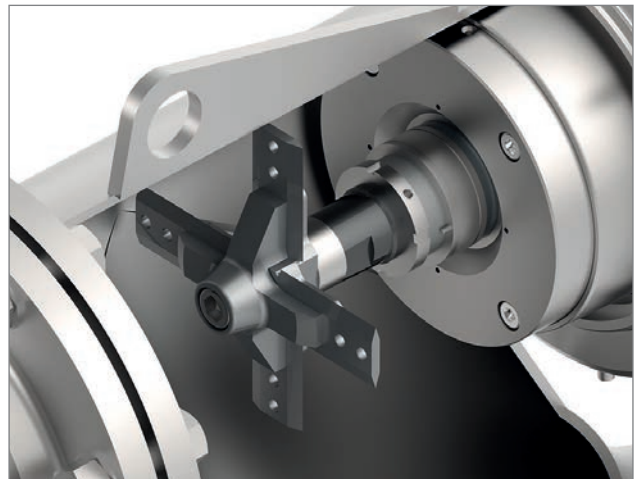
- Easily modified to adapt perfectly to the feed.
- Avoidance of clogging or similar blockages in the system.
- Optimum function in extension with the WANGEN X-TRACT.
- Long service lives and low life cycle costs, thanks to the use of high-quality materials.
- No external lifting device necessary for installation and dismantling of the wear parts by a moveable drive unit.



Substrate before:
coarse medium
interspersed with
contaminants



Substrate after:
finely chopped,
porridge-like medium
containing no
contaminants



3

X-CUT design components:

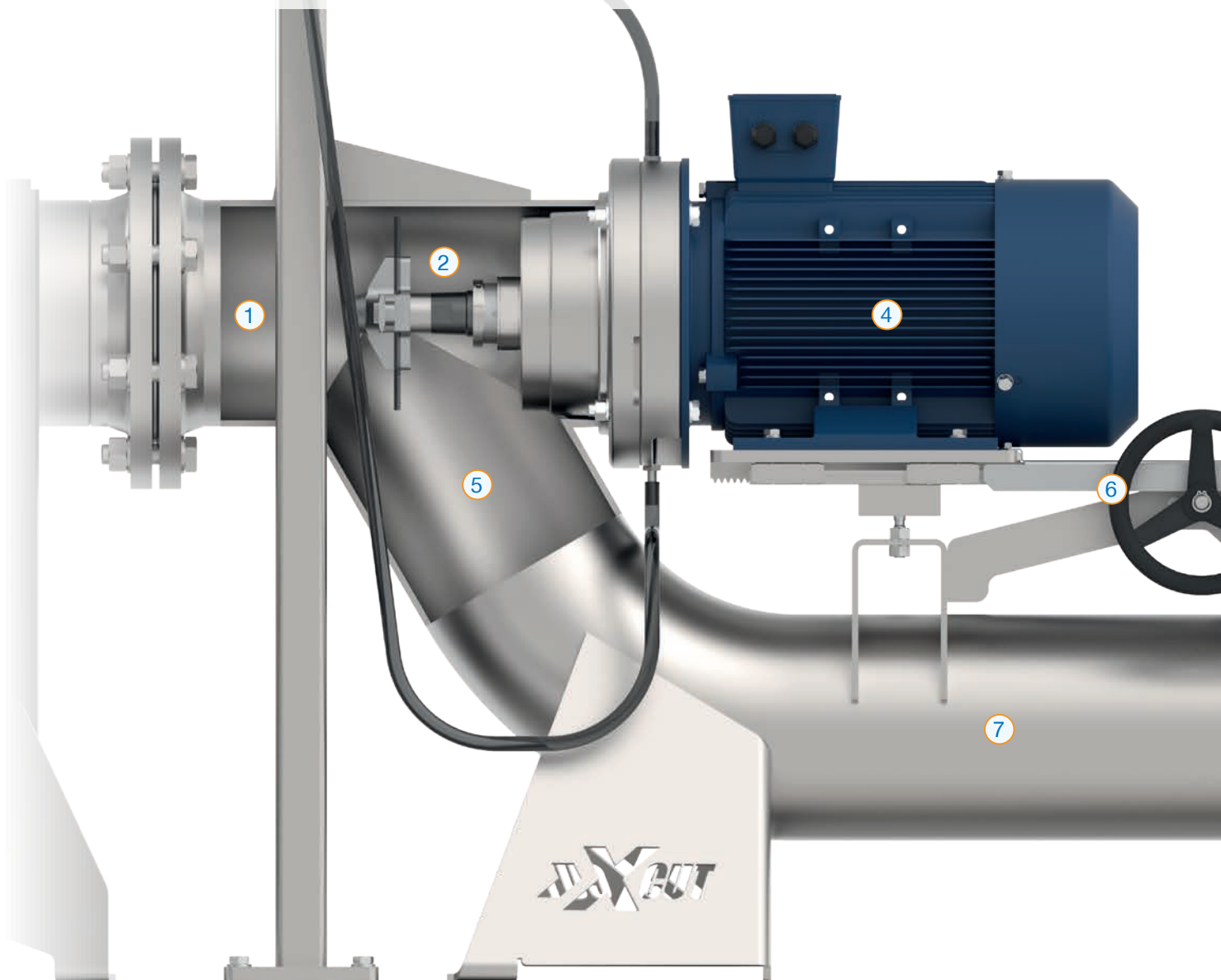
- 1 Media inlet
- 2 Cutting unit. Chromium carbide wear protection coating of the pipe in this area.
- 3 Thermosiphon to build up pressure and cool the lubricant for heavy-duty sealing.
- 4 Drive unit on a carriage.
- 5 DN 200 pipework.
- 6 Hand wheel for the carriage for the axial movement of the drive unit.
- 7 Media outlet.

Material: Galvanised milled steel (further materials on request).

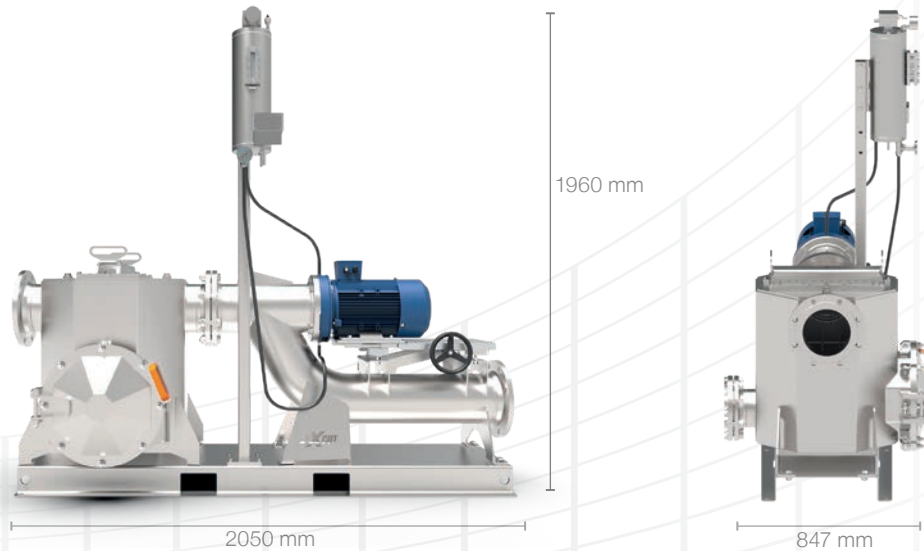
Maximum capacity: 1250 m³/h / 347 l/sec.*

Pressure stability up to 6 bar.

We recommend installing the unit on the suction side to protect the pump.



* data applies for water as media



WANGEN PUMPEN is certified to:

ISO 9001 (Quality management)

ISO 14001 (Environmental management)

ISO 45001 (Occupational safety and health protection)

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