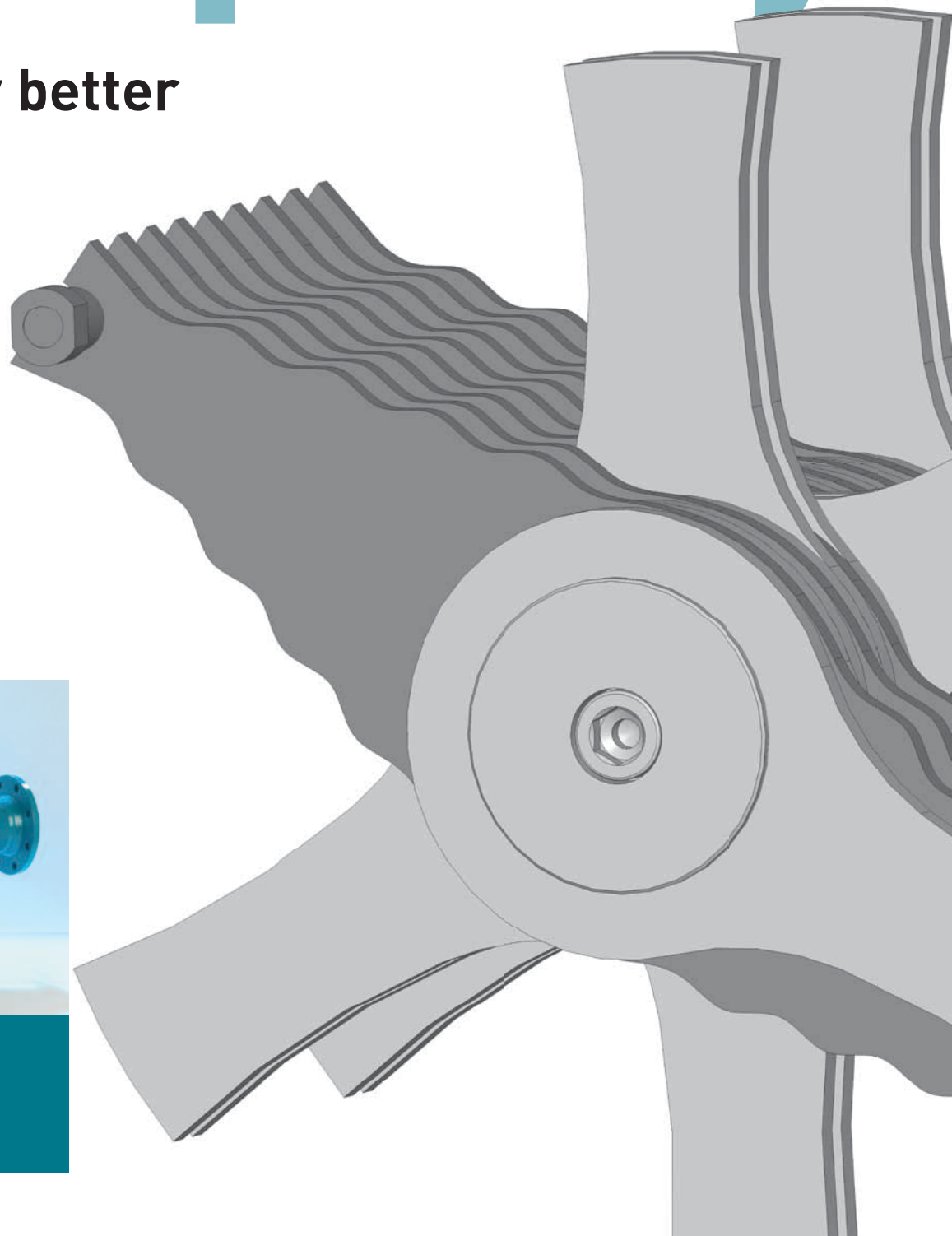


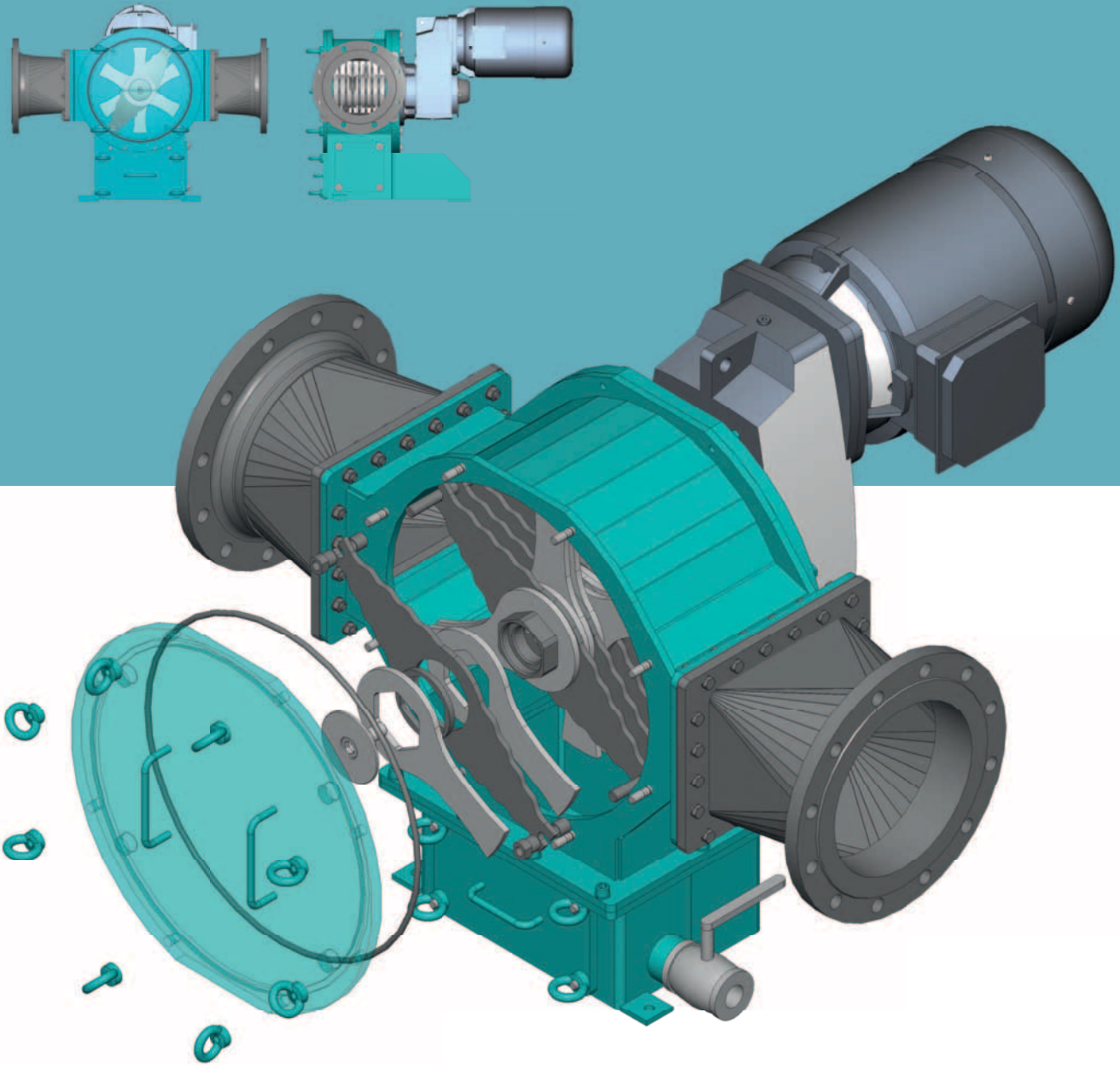
Simplicity

is simply better



Rotorrake

Construction and Principle Rotorrake



The Rotorrake is a robust chopping unit using inline design. Knives and counter knives are pushed on to the carrier shaft alternatively. The counter knives are fixed stationary inside the casing. The rotating shaft is directly driven via the drive and bearing assembly. The Rotorrake with its rough macerating effect allows for high throughput capacities. Solids

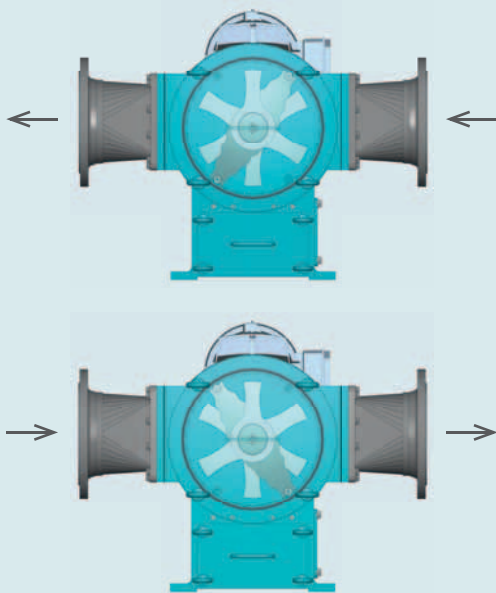
laden fluid is fed through the Rotorrake. Separation of hard particles is achieved by knife rotation against fixed counter knives. Stones and debris drop into the debris collector. Reduce-able solids are chopped by further knife rotation against the fixed knives. Both Knives and counter knives are reversible and can be used from either side.

Rotorrake – designed for simple and effective operation.

Advantages

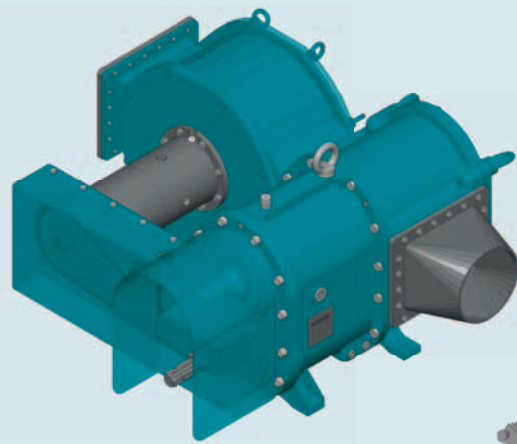
- Throughput up to 800 m³/m (3,500 usgpm), depending on the model
- Rotorrake – compact, space-saving, single shaft design
- Variable flow direction – Adjustment by modification of stationary knives fitting
- Rotating shaft in oil filled bearing carrier
- Equipped with our standard Börger mechanical seal - 1.000 times approved
- Quench chamber between fluid and drive gear guarantees safety
- Knives and counter knives can be used multiple times just by turning them

Reversible Direction of Flow



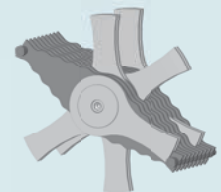
The Rotorrake is designed modular and can be used for various solids-reducing duties with reversible operating.

Combined Unit Rotorrake and Rotary Lobe Pump

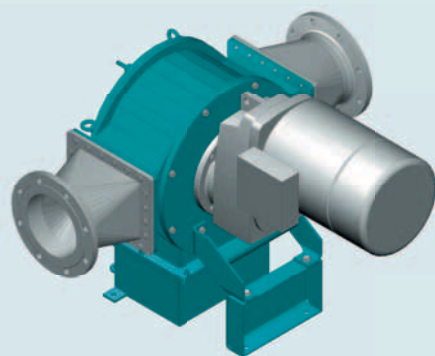


Driven via
chain drive

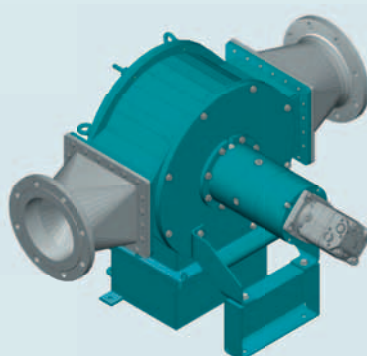
- short direct passage
- robust rotating knives
- crescent shaped counter knives
- machine with own bearing system and mechanical seal
- MIP design: Simply open the quick release cover and one single screw allows access to service parts.



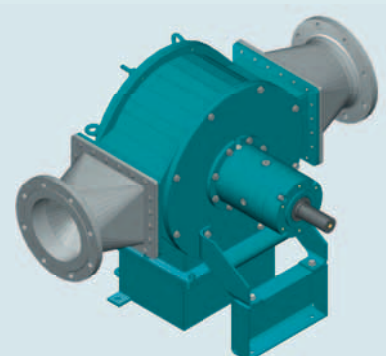
Drive varieties



with parallel
geared electric motor



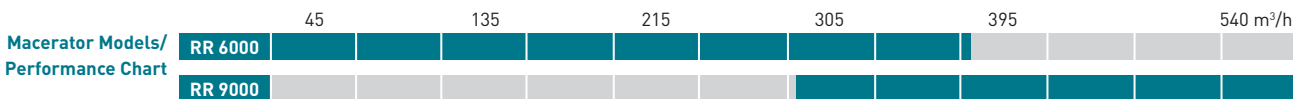
with
hydraulic motor



with bearing carrier
and bare shaft

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The Rotorrake is used in a dual-stage Biogas plant in the connecting pipe between the main digester and the secondary digester. It is installed just before the Börger Rotary Lobe Pump. In this plant several silages (Corn, Sorghum, Grass, Rye) and dried chicken manure are used. The flow rate is app. 12 m³/h.

TECHNICAL SPECIFICATION

Rotorrake	6000
Flow Rate	12 m³/h 55 usgpm
Power	7,5 kW 10 HP



The Rotorrake is installed in the suction pipe of a pump for digester circulation. In the circulation process occasionally pigtails are built, which frequently block the used centrifugal type pumps. The necessary manually cleaning is extensive and less pleasant. As from installation of the Börger Rotorrake there were no blockages any more. Another centrifugal pump – without Rotorrake – used in parallel, still suffers blockages frequently. The throughput is app. 100 to 200 m³/h.

TECHNICAL SPECIFICATION

Rotorrake	6000
Flow Rate	< 200 m³/h < 880 usgpm
Power	9,2 kW 10 HP



A wastewater pump station is equipped with a Börger Rotorrake for macerating very coarse solids such as rags and plastics. The end user is impressed and convinced of the brutal grinding power of the Rotorrake. Blockage problems in this pump station are a thing of the past with the effective size reduction of solids provided by the Rotorrake.

TECHNICAL SPECIFICATION

Rotorrake	6000
Flow Rate	50 m³/h 220 usgpm
Power	7,5 kW 10 HP