

The unique Multicrusher with MIP!



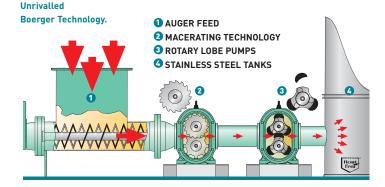
## Boerger reduces solid size with Macerating Technology

## One base machine - different devices

The Multicrusher is an effective, widely applicable macerating unit based on the proven design of the Boerger Rotary Lobe Pump. Therefore many parts are interchangeable between the two devices. The characteristics of the Multicrusher can be described as a Brutal Crushing Machine with "Pull-In Function". Instead of rotating lobes there are blade and cutter configurations installed in the Multicrusher. Two central screws hold the rotating blade and cutter configuration in place. The relative rotation speed of the two shafts ensures an optimized macerating effect and prevents stringy material from wrapping around the blades and cutters. The Quick Release Cover allows easy and direct access to all fluid wetted parts.

The Boerger MIP-Design is a unique advantage to minimize downtime and maintenance: MIP (Maintenance In Place) allows the quick and convenient replacement of all fluid wetted parts without removal of pipes, drives or other components of the pump unit by your own staff. Quick - Uncomplicated -Inexpensive.

The Boerger Multicrusher is the perfect fluid handling solution for customized applications. In standard applications a fluid / solids mixture flows through the Multicrusher. A downstream pump ensures a reliable fluid transfer. The Multicrusher can also be installed on the discharge side of various pump devices, since the Multcrusher is equipped with lobe pump seals. Heavy, viscous fluids enter through a hopper into a side mounted Multicrusher. Customized Augers (single or twin shaft, available with Pre-Macerating Effect) feed solids like food and slaughterhouse waste into the Multicrusher.



Worldwide Unique and exclusive from Boerger: Unrivalled MIP-Design reduces life cycle cost and downtime.









A wide variety of blade and cutter configurations ensure many achievable particle sizes.



**Mixtures of heavy viscous waste oil,** water and solid waste need to be discharged out of a lined lagoon. A hydraulically driven combination of Multicrusher and Rotary Lobe Pump in submersible set up takes care of the job.



In Waste Water Treatment Plants, rags and stringy materials are often a problem for pumps, valves, instruments and controls and other downstream equipment. The Multicrusher with "Pull-In Function" macerates and reduces these troublemakers to unproblematic sizes.



**Raw Sewage** often is loaded with rags and textile products. The Boerger Multicrusher takes care of these foreign objects to prevent blockage downstream. The pictured unit is compact and allows Ease of Maintenance through the Quick Release Cover.



**Food Waste** often is used for animal feed or as substrate in anaerobic digesters. The Multicrusher increases surface area and therefore has a positive effect on retention times in the digestion process. Particle size is determined by the blade and cutter design and can be modified by rotation speed variation. In this case the Multicrusher is side mounted with a hopper on the suction side for easier food waste penetration into the macerator.



**In plastic recycling** there is a simultaneous demand of washing and macerating. The Multicrusher / Rotary Lobe Pump package ensures reliable particle size reduction and reliable plastic / water transfer.



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**Solid Fruit and Vegetable Waste** needs to be macerated and transformed into a pumpable solution. A customized Twin Shaft Auger with Pre-Macerating Effect feeds the material to the Multicrusher (not pictured) for further solids reduction. A Rotary Lobe Pump (not pictured) transfers the fluid (app. 15-20 % DS) to a storage tank.



**Slaughterhouse Waste** needs to be macerated and transferred. A customized package includes a receiving hopper, a side mounted Multicrusher with increased suction opening and a Rotary Lobe Pump. The system is extremely compact, but still easy to maintain with Boerger MIP-Design.



**Cruise Ships** are equipped with compact wastewater treatment systems. Screening or other open processes are not favored because of odor problems. The combination of Multicrusher and Rotary Lobe Pump enables a compact solids reduction / transfer package in an enclosed process without odor issues.