

OYSTER HYGIENIC LUMPBREAKER



The Oyster™ Hygienic In-line Lumpbreaker is the ideal solution for breaking up lumps that can form in bulk powders and other solid products during storage or transport. In the Pharmaceutical and Food industries especially, the presence of these agglomerations in the product will seriously disrupt subsequent handling and processing operations if they are not dealt with effectively.

The Oyster™ Hygienic Lumpbreaker is suitable for installation in discharge and tipping stations and also in loading pipes, to clear lumps prior to pneumatic transfer etc.

The Lumpbreaker enables:

- improved material flow for high productivity
- superior product quality owing to greater consistency in processing
- reduced risk of damage or obstruction in downstream processes

The lump-breaking action is achieved without heating. The final particle size will depend on the nature of the product

KEY FEATURES

- Clean design to eliminate dead space
- Easy to strip down for cleaning as required
- Suitable for CIP/WIP processes – fluid tight from inside to outside
- Extremely robust construction – screen is machined from solid together with the main body shell which ensure a very solid chassis capable of resisting mechanical stress
- Rotor runs in ball bearings to reduce attrition and energy consumption
- Rotor design is suitable for forward and reverse operation – for example to help clear blockages
- St/st 316 mirror polished product contact surfaces
- In-line connection by Tri-clamp to host system
- Custom connections can be supplied on request

The Lumpbreaker can be offered either with direct motor mount or with separate driveshaft and elastic coupling to give maximum flexibility regarding integration to the host system.



Application:

Break / Crush

OYSTER HYGIENIC LUMPBREAKER

The Oyster™ Hygienic In-line Lumpbreaker is offered with a range of different connection types, including:

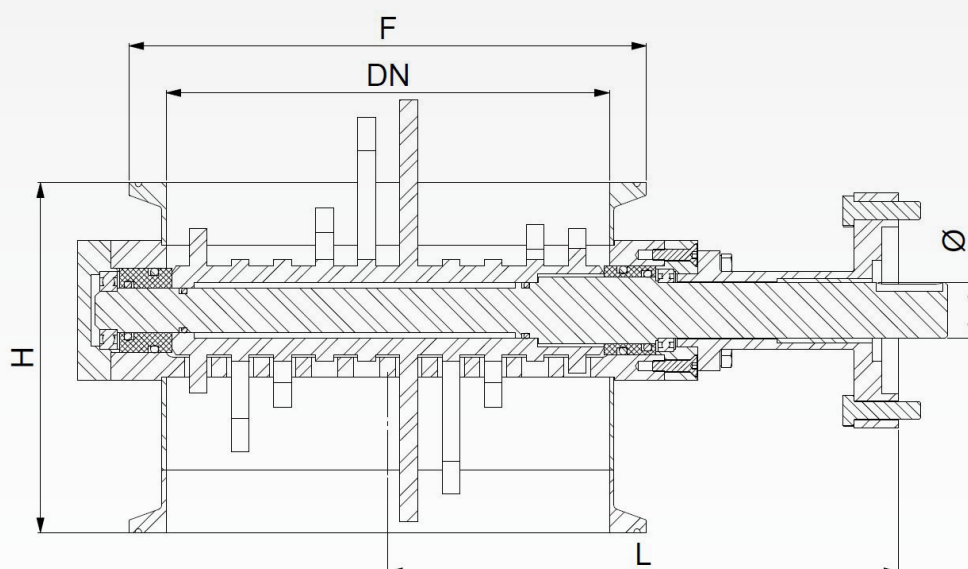
- Tri-clamp (ASME/BPE, BS4825-3, DIN 32676)
- Weld-ends
- Oyster™ bayonet Docking system
- BFM flange
- Wafer with locating lugs for assembly between flanges



KEY DIMENSIONS:

(Dimensions in mm)

Nominal size	DN200	DN250	DN300
F*	8"	10"	12"
L	230.5	255.5	280.5
H	157.5	182.5	217.5
SHAFT Ø	25	25	25
Weight - Kg	15	18	25
Other dimensions on request			



OPERATING CONDITIONS

Design pressure

Inside/outside	0.5 bar (7.3 psi)
----------------	-------------------

Design temperature

(With motor)	20°/+80°C (-10°/176° F)
--------------	-------------------------

The use of TC connections means the Lumpbreaker is ideally suited to the requirements of the Pharma and Food industries.

OYSTER HYGIENIC LUMPBREAKER

OPTIONS

Drive Electric gear motor-reducer

Atex II 2GD c IIB T4/T135°C

Other options

The gap between the rotor blades and the screen can be customised as the product and process conditions require it.

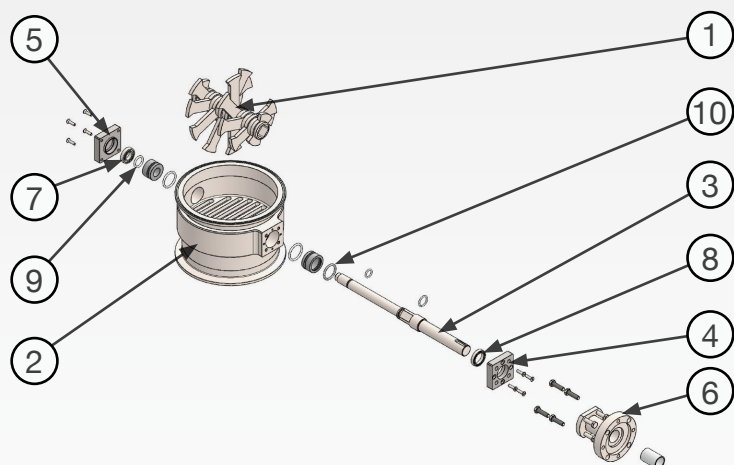
All materials are FDA compliant.

Surface finish:

- Inside: $Ra < 0.4 \mu m$
- Outside: $Ra < 1.2 \mu m$
- Optional: Electropolish, passivation



For use in classified hazardous zones the valve can be supplied in conformity with the requirements of Directive 2014/34/CE and marked accordingly.



PARTS LIST AND MATERIALS

Ref	DESCRIPTION	MATERIAL
1	Rotor	SS 316L, C-22
2	Housing + Screen	SS 316L, C-22
3	Spindle	SS 316L, C-22
4	Front cover	SS 304
5	Rear cover	SS 304
6	Motor support	SS 304
7	Ball bearing	A2
8	Ball bearing	A2
9	Dynamic o-ring	EPDM
10	Dynamic o-ring	EPDM

The choice of materials depends on the process conditions and presence of solvents, acids etc.
Further information can be supplied on request.

OTHER PRODUCTS

Besides the Oyster™ Hygienic Lumpbreaker, ValvEngineering offers a complete range of hygienic valves and dosing valves for powders, and sampling systems for both solids and liquids. All of our products include outstanding design features and superior manufacturing quality which make them ideally suited to the demanding requirements of the pharmaceutical, Food & Beverage and Chemical Industries.

On this page is a brief introduction to our key products. Please do not hesitate to contact us for further information about the products or to discuss specific applications



Oyster Compact Series

The Oyster™ Compact series features the patent Clamshell clamp system, widely acknowledged as the most compact, hygienic and user-friendly valve on the market.



Oyster Composite Valve

The ideal choice for the discharge and volumetric dosing of powders, particularly in pack-off system. The ingenious design of the valve ensures optimal filling rates and dosing accuracy. It can be easily customised to suit individual customer requirements.



Oyster Feeder Valve

Metal/Metal construction makes the valve suitable for continuous operation by motor for large discharge volumes. Shaped valve body ensures control of product flow.



Oyster Samplemaster

The Oyster™ Samplemaster includes both intrusive and non-intrusive sampling valves for powders and granules. They are offered in both manual and automatic versions, with a vast range of mounting options and configurations.



Oyster Reactor Sampling System

The Oyster Reactor Sampling System is a safe and reliable sampling device able to meet the most demanding requirements of the pharmaceutical and chemical industry.

ValvEngineering Srl

Via di Coselli 23/25 – 55012 Capannori - LUCCA - Italy

• TEL +39 0583 378587 • FAX+39 0583 1553006

• P.IVA IT02090150463

WEB: www.valvengineering.com MAIL: info@valvengineering.com

DISTRIBUTED BY: