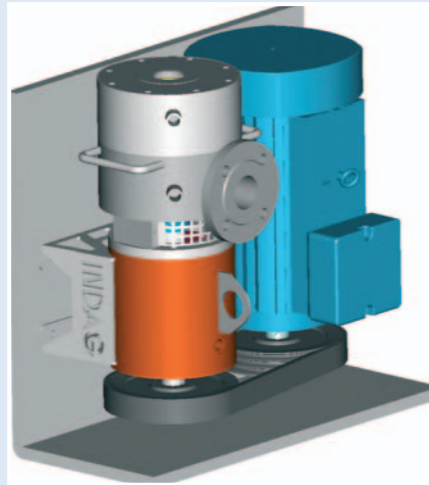


Technical details

Type		DLM/R-1	DLM/R-2	DLM/R-3	DLM/R-4	DLM/R-5	DLM/R-6
Max. capacity*	m³/h	0,1-0,5	0,5-2	2-6	6-15	15-30	30-60
Connections	DN	40	50	65	80	100	125
Connections	inch	1½"	2"	2½"	3"	4"	5"
Power*	kW	2,2-5,5	4-11	7,5-18,5	11-22	18,5-45	30-75

* depending on viscosity



Company portrait

INDAG has been producing mixers and equipment for the mixing and dosing of liquids for over 55 years.

Operations

INDAG supplies mixers and equipment to the following industries:

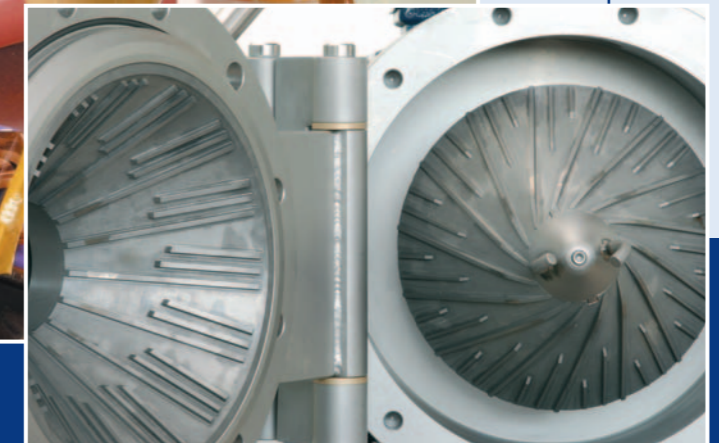
- food
- pharmaceuticals and cosmetics
- chemicals and petrochemicals
- paper manufacturing
- environmental technology

Product and service spectrum

Feeding, dosing and mixing pumps, dynamic mixers, homogenizers, refiners and foaming equipment, complete installations incl. control and regulating equipment, project engineering.

INDAG
Maschinenbau GmbH

The FlowMix®-Company

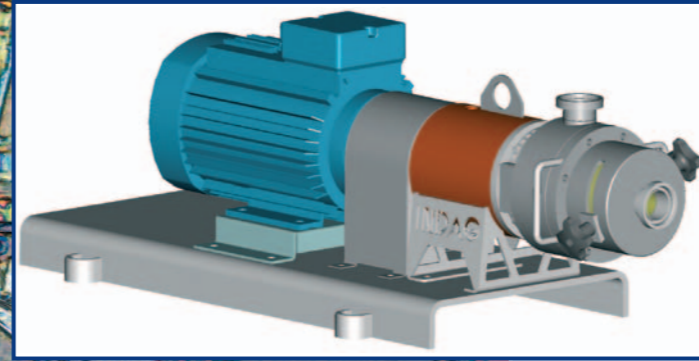
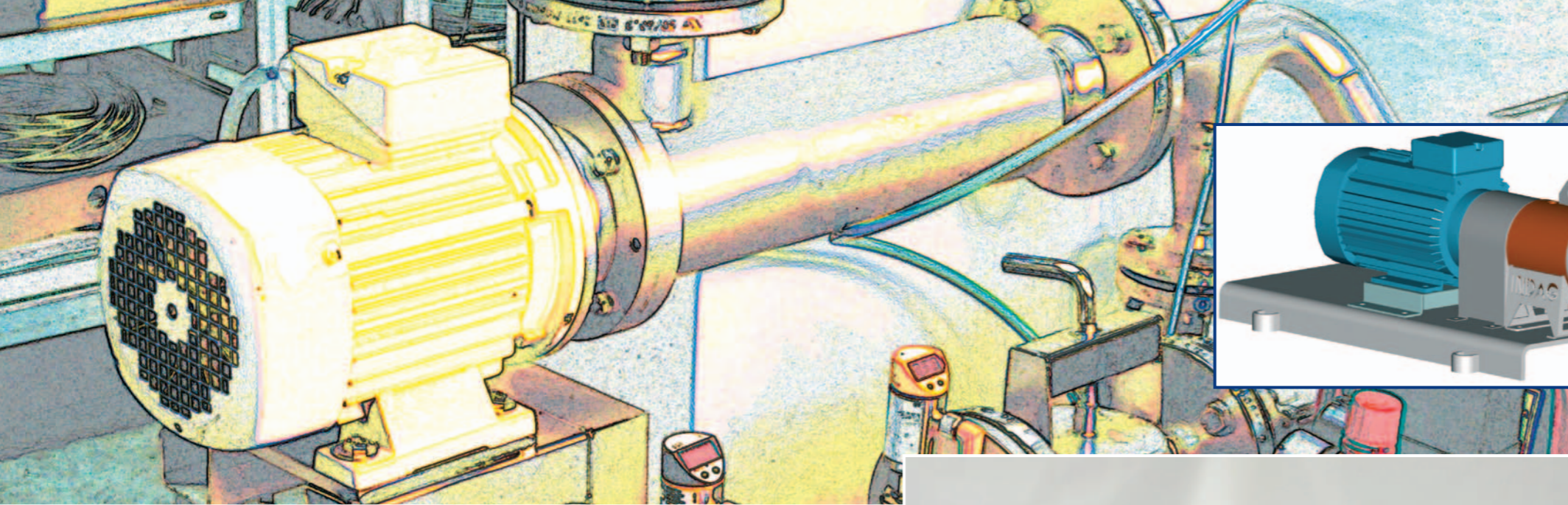


INDAG
Maschinenbau GmbH

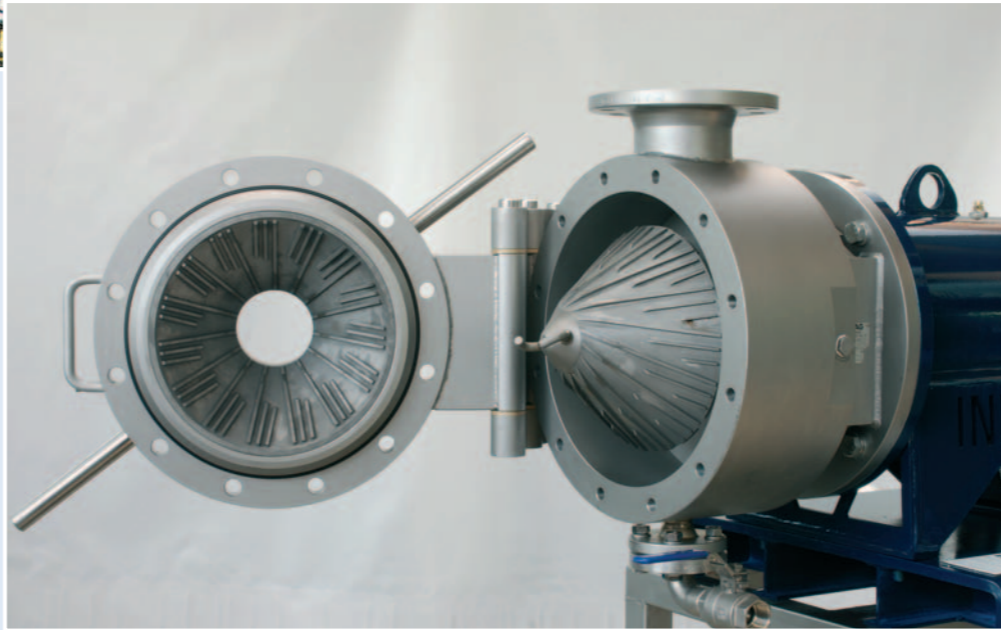
Ivenfleth 13
D-25376 Borsfleth
Germany

Phone: +49 04124/9876-0
Fax: +49 04124/9876-54
E-Mail: info@indag.de
Internet: www.indag.de

Refiner type **DLM/R**



INDAG-Refiner type DLM/R-3



INDAG-Refiner type DLM/R-6

INDAG Refiners (type DLM/R) are used for refining, milling, shredding of solids in fluids. As well as cutting of fibers. Biomass is treated to increase total surface. Larger surface reduces reaction and process time. Geometry of cutting elements in rotor and stator are adapted to different tasks. Cutting elements are of hardened materials to reduce wear. Gap between rotor and stator is variable. INDAG Refiners are designed for small capacities up to very large capacities.

- INDAG-Refiners – special features:**
- Solid design
 - Designed for full access to all areas to ensure CIP cleaning
 - Modular construction
 - Simple replacement of single effect mechanical seal by double effect seal using cartridge seals.

Technical features

Capacities
 10 liter/hr to 60.000 liter/hr
 3 gallon/hr to
 16.000 gallon/hr
 Higher capacities on inquiry

Pressure levels
 Up to 120 bar = 1.740 PSI
 Higher pressure rating on inquiry
 In accordance with directives on pressure vessels

Seals
 Single-action floating ring seal (mechanical seal)
 Double-action floating ring seal (mechanical seal)
 Magnetic coupling
 API
 Other seals possible

Viscosity
 From 1 mPas to 2.000.000 mPas

Positioning
 Horizontal or vertical positioning possible

Temperature
 Up to 350°C
 Higher temperatures on inquiry

Connecting point positions
 Standard position:
 Inlet axial on face side;
 Outlet radial in 12 o'clock on drive side

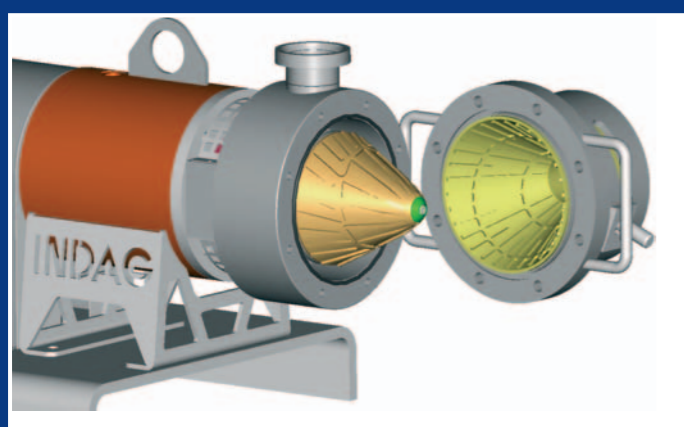
Connections
 Flange DIN or ANSI
 Dairy screw thread DIN 11851, DIN 11864
 Tri clamp to DIN 11851
 SMS
 Other connections on inquiry

Cleaning
 Hygienic version HY is especially free of inaccessible areas

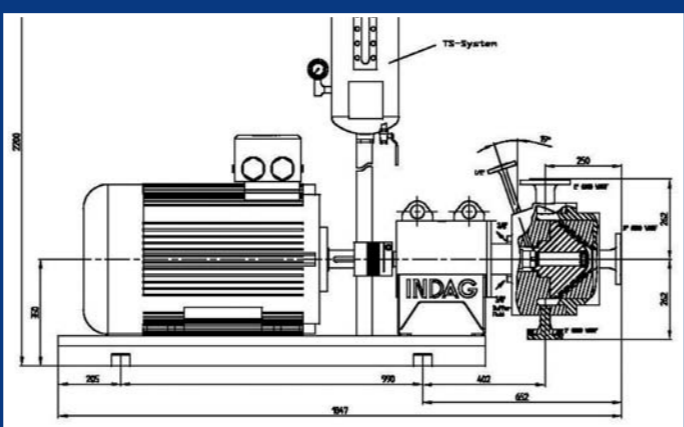
Materials
 1.4122 hardened
 1.4301 (AISI 304)
 1.4571 (AISI 316 Ti)
 1.4539; 1.4462; AISI 904 L
 Hastelloy C

Drives
 Several Voltages
 50 or 60 Hz
 IEC, DIN, ISO, VDE, EN
 API, AEIC, IES, IEEE, ICEA, NEMA, Explosion proof EEx ATEX

INDAG-Refiner type DLM/R



DLM/R-6 ST HO with own bearingblock



INDAG-Refiner type DLM/R-5

For refining, milling and shredding of solids in fluids. Cutting of fibers. Treatment of biomass.



INDAG-Refiner type DLM/R-6



Rotor and stator DLM/R-3