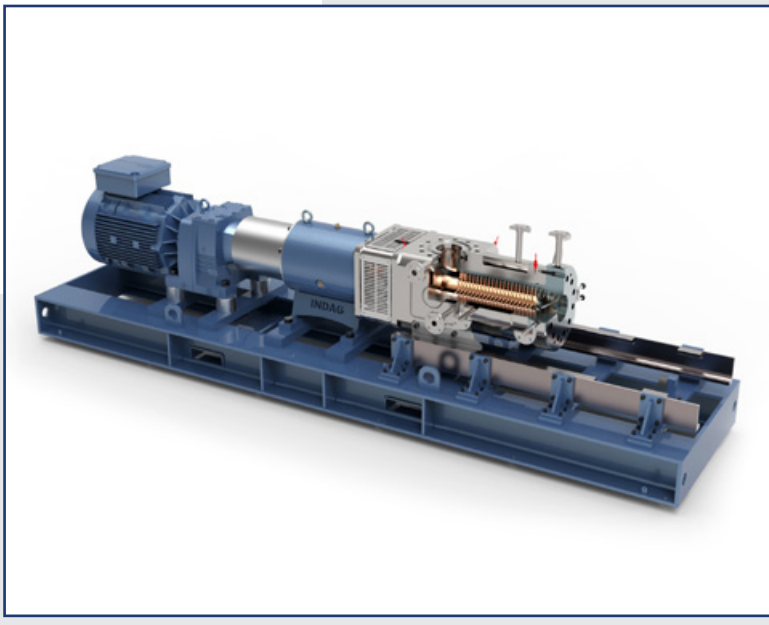
INDAG
Maschinenbau GmbH

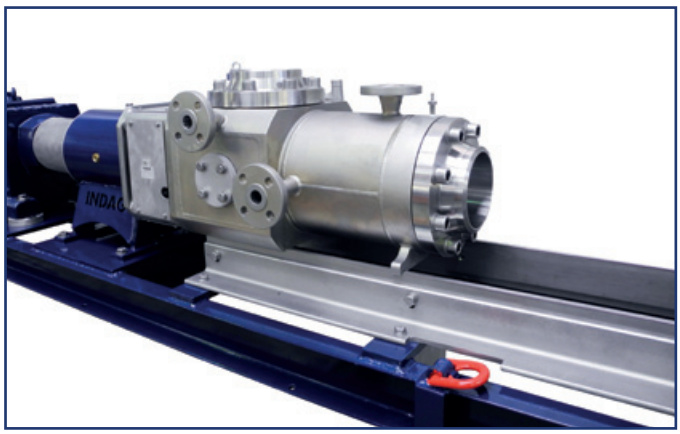
The FlowMix®-Company



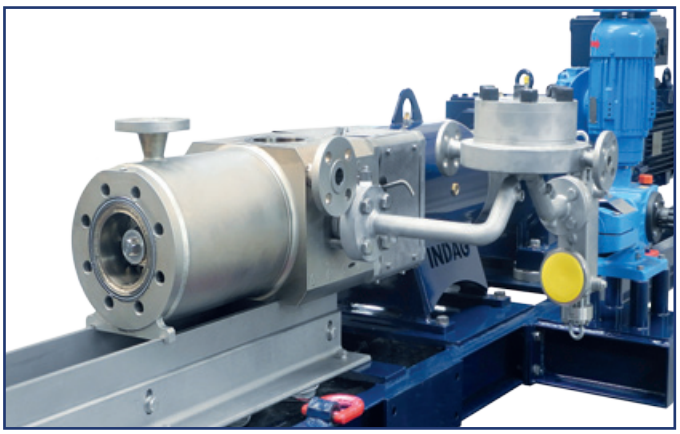


High Pressure Inline Mixer
Type DLM/S HP

Mixing under high pressure
for high viscosity products of the plastic and polymer industry



INDAG High Pressure Inline Mixer



INDAG High Pressure Inline Mixer with additional additive dosing system

Commercial advantages of DLM/S HP

- Easy way to improve product quality and to upgrade product characteristics.
- Quick return on investment.
- Realize higher prices and higher margins for upgraded and unique products.
- Increase throughput of existing production lines.

Technical advantages of DLM/S HP

- Highest flexibility
- Easy and fast product changes
- Better and more homogenious mixture
- Low pressure loss
- Nearly dead space free
- No wear of rotor and stator (contact free)
- Drive power is efficiently transformed into mixing energy.
- Only designed for mixing
- Upon request INDAG also delivers additive metering pumps and additional equipment.

Function and application of DLM/S HP

INDAG High Pressure Inline Mixers are used in polymerisation and extrusion/compounding applications. Requirements on mixing technology for mixing of additives or master batches into high viscous polymer (hot melt of plastic) are: pressures up to 160 bar (2500 psig), viscosities up to 10,000 Pas and temperatures of up to 330°C (626°F).
Examples of products to mix: Polyethylen PE, Polyamide PA, Polyethylelene terephtalate PET, TPU Thermoplastic Polyuretane, PS-Polystyrene, Polybutylene teraphtalate PBT or Polycarbonate PC.
The High Pressure Inline Mixer type DLM/S HP adapts to a wide range of capacities (kg/h) and to a wide range of additive concentrations just by changing the mixer rotational speed.

Technology of DLM/S HP

Positioning
horizontal

Pressure levels
25 bar, 40 bar, 100 bar, 160 bar, higher on request

Materials
carbon steel, AISI 304, AISI 316L, Hastelloy,
acid resistant tantal coating

Seals
visco seal with stuffing box package

Connections
DIN or ANSI flange (25 bar);
INDAG high pressure flange (40-160 bar)

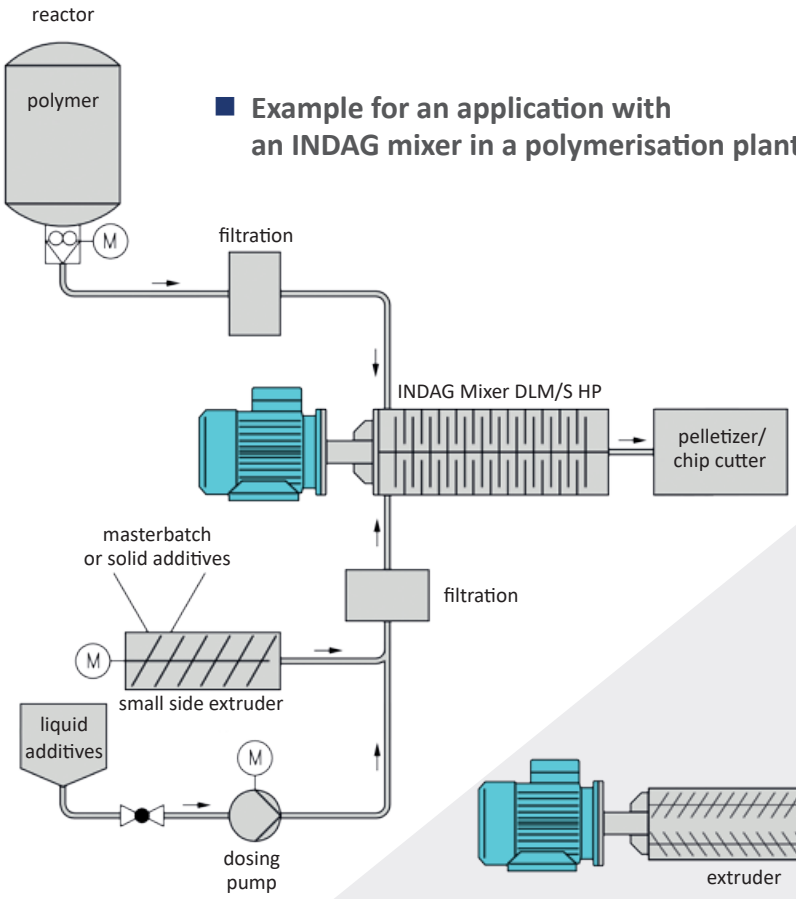
Rotational speed
180 rpm to 550 rpm

Capacities
10 kg/h to 10,000 kg/h (higher on inquiry)

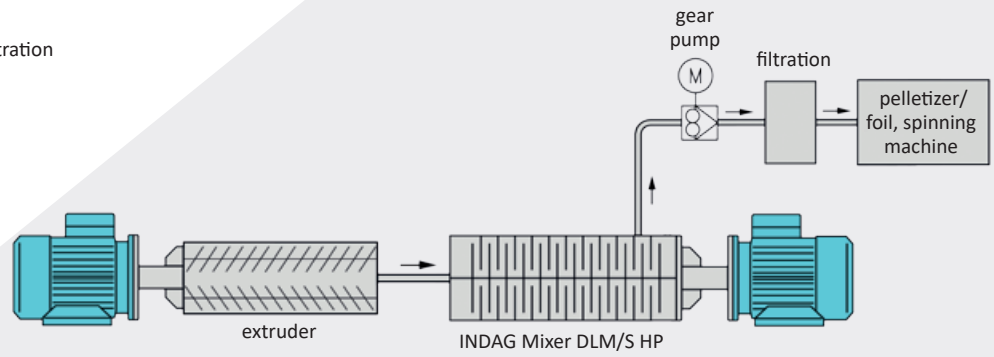
Temperatures
up to 330°C

Viscosities
up to 70,000,000 mPas

Example for an application with an INDAG mixer in a polymerisation plant



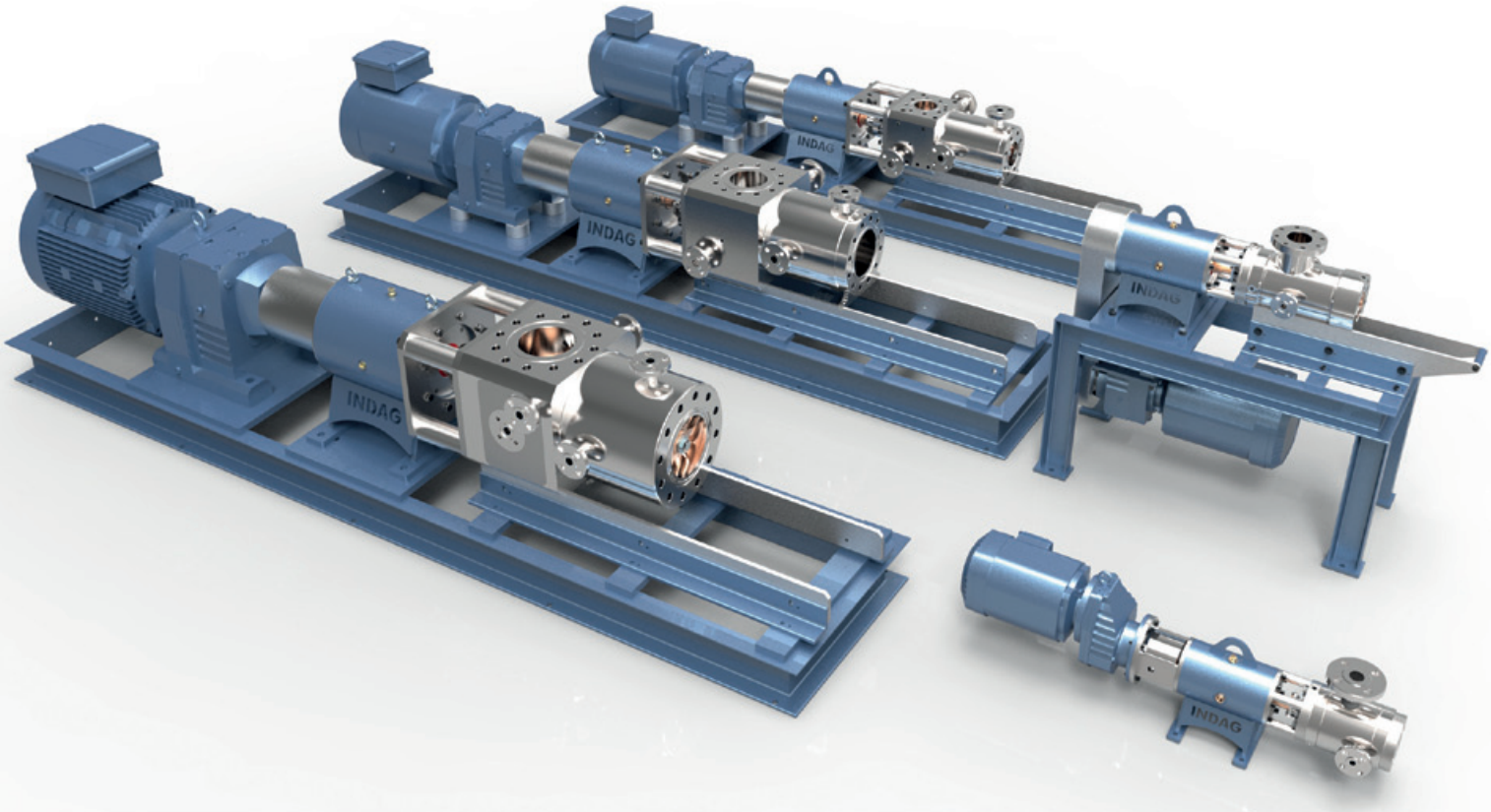
Example for an application with an INDAG mixer in an extrusion/compounding line



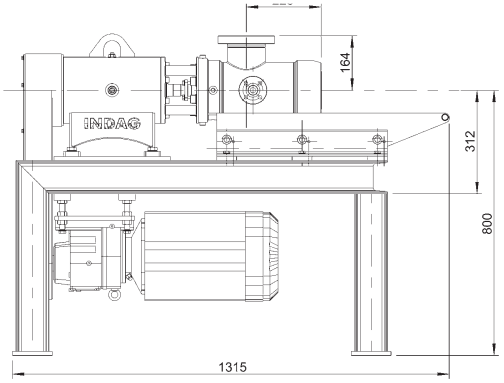
Mixer sizes and capacities of DLM/S HP

Type DLM/S HP	unit	0	1	2	3	4
capacity*	t/h	0,01-0,1	0,5	1,5	4	10
connection	DN	50	80	100	150	200
optional	Inch	2”	3”	4”	6”	8”
power	kW	2,2-4	5,5-11	15-22	20-30	37-55
rotational speed	1/min	400-600	200-450	150-350	120-300	100-250

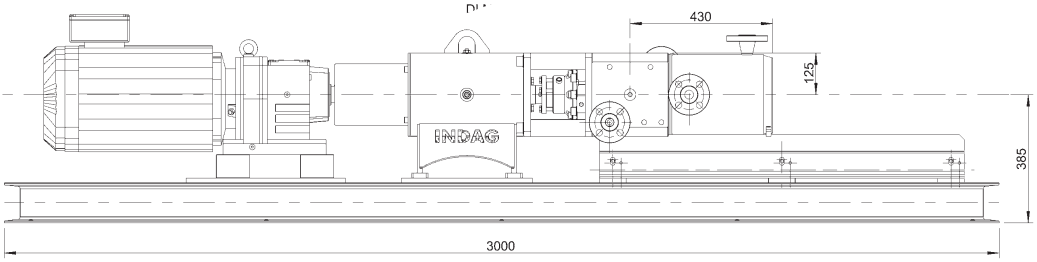
*Capacity depends on product. Higher capacities on inquiry.



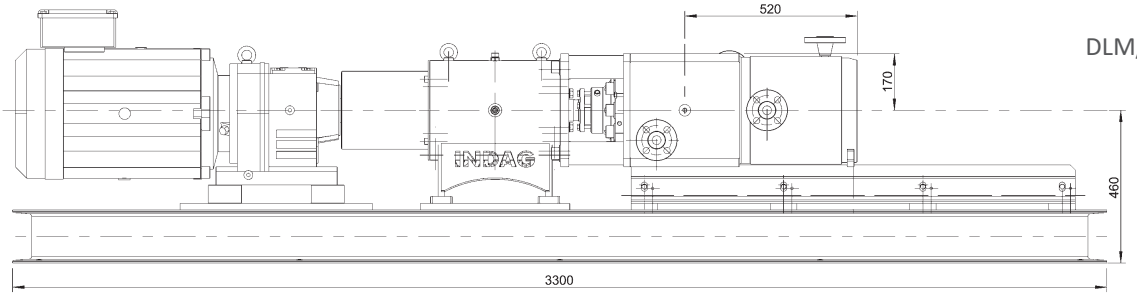
Dimension drawings DLM/S HP



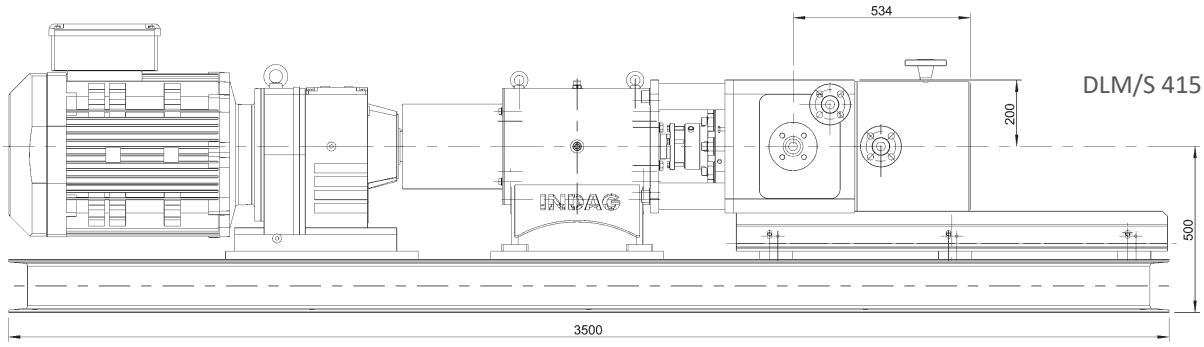
DLM/S 110 HO ST LB HP100



DLM/S 212 HO ST LB HP100



DLM/S 315 HO ST LB HP100



DLM/S 415 HO ST LB HP100

Company profile

For more than 65 years, INDAG has been developing, designing and manufacturing dynamic inline mixers in Borsfleth near Hamburg.
INDAG mixers are designed to meet the highest quality and efficiency standards.

Product range and services

Our product range covers: Dynamic inline mixers for gentle, intensive, or high shear mixing. Possible applications are: Mixing, emulgating, dispersing and foaming.
Our services include: Commissioning, maintenance, and repair of INDAG mixers, spare parts service and customer support based on many years of experience.

INDAG
Maschinenbau GmbH

Ivenfleth 13
25376 Borsfleth / GERMANY
Phone: +49 4124 9876-0
Fax: +49 4124 9876-54
E-Mail: info@indag.de
www.indag.com

NORTH AMERICAN PROCESS, INC.
d/b/a INFINI-MIX Process Solutions
811 East Maple Avenue
Mora, MN 55051
(855) PROCESS (776-2377)
Sales@naprocess.com
www.WeMixStuff.com