

INNOVATION

Leistritz
PUMP TECHNOLOGY

HYPER³

World's first Triple Screw Pump for food, beverage, and pharmaceutical industries.



leistritzcorp.com/pump-technology

HYGIENIC TRIPLE SCREW PUMP. REDEFINING RELIABILITY AND EFFICIENCY.

Superior Triple Screw Pump Technology for Premium Performance

Screw pumps have long been recognized for their reliability and gentle handling of products in the food, beverage, and pharmaceutical industries. With the introduction of the new HYPER³ pump series, Leistritz is setting a new benchmark in efficiency, performance, and hygienic standards.

Drawing on 100 years of successful pump engineering, Leistritz has developed a revolutionary solution that

meets and exceeds industry hygiene standards. The HYPER³ Series not only offers low pulsation and precise dosing, even in minute quantities, but also features advanced CIP (Cleaning in Place) technology.

Moreover, our application engineers bring a wealth of expertise to enhance your production processes, ensuring that the HYPER³ Series delivers exceptional value and performance.



YOUR APPLICATIONS. UNDERSTOOD.

Example Applications with *Leistritz* HYPER³ Pumps

Precision dosing to stationary mixer for cream

Product	Dairy cream with 35% fat content
Flow rate	0.4 – 0.8 m ³ /h
Suction pressure	-0.3 bar
System pressure	4 – 6 bar
Viscosity	10 – 20 cSt
Temperature range	5 – 15°C
CIP (85°C)	2.5 m ³ /h at 2 bar

Sugary mixed drinks and ice cream mixes

Product	Ice cream
Flow rate	12 m ³ /h
Suction pressure	-0.3 bar
System pressure	3.0 – 6.0 bar
Viscosity	50 – 500 cSt
Temperature range	5°C
CIP (85°C)	22.5 m ³ /h at 1 bar

High performance dosing pump for bottling ketchup

Product	Ketchup with herbs
Flow rate	3 – 6 m ³ /h
Suction pressure	-0.5 bar
System pressure	7 – 9 bar
Viscosity	500 – 1,000 cSt
Temperature range	20 – 30°C
CIP (85°C)	21 m ³ /h at 2 bar

Dosing of triple tomato pulp concentrate

Product	Tomato triple concentrate
Flow rate	3.0 m ³ /h
Suction pressure	-0.7 bar
System pressure	4.0 – 5.0 bar
Viscosity	10,000 – 20,000 cSt
Temperature range	10°C
CIP (85°C)	15 m ³ /h at 1 bar

The *Leistritz* HYPER Pump Series distinguishes itself with unmatched versatility, expertly managing a wide range of viscosities, flows, and pressures. It delivers precise dosing while ensuring optimal protection for even the most delicate, shear-sensitive materials. This powerful combination of capabilities sets the HYPER Series apart, making it a leader in the industry.

HYPER³: ALL-IN-ONE SOLUTION FOR YOUR HYGIENIC PRODUCTION.

The Leistritz HYPER³ Pump Series is a plug-and-play solution offering high performance and superior product protection. Available as an all-in-one stainless steel unit with an integrated motor drive, it stands out with its compact, hygienic design that allows for easy cleaning both inside and out. This pump meets the highest standards of hygiene, efficiency, and reliability.

Benefits for your production line

- High volumetric performance
- Smooth, easy-to-clean surfaces
- Improved bearing reliability
- Completely product-flushed mechanical seal without dead spaces
- Product protection
- Optimised CIP operation
- Low pulsation flow
- Optional: hygienic all-in-one unit in stainless steel and integrated motor drive

Materials

- Wetted metal parts 1,4404/Ra < 0.8 µm
- Optional surface roughness Ra < 0.2 µm
- Wear resistance hardening 1,200 HV

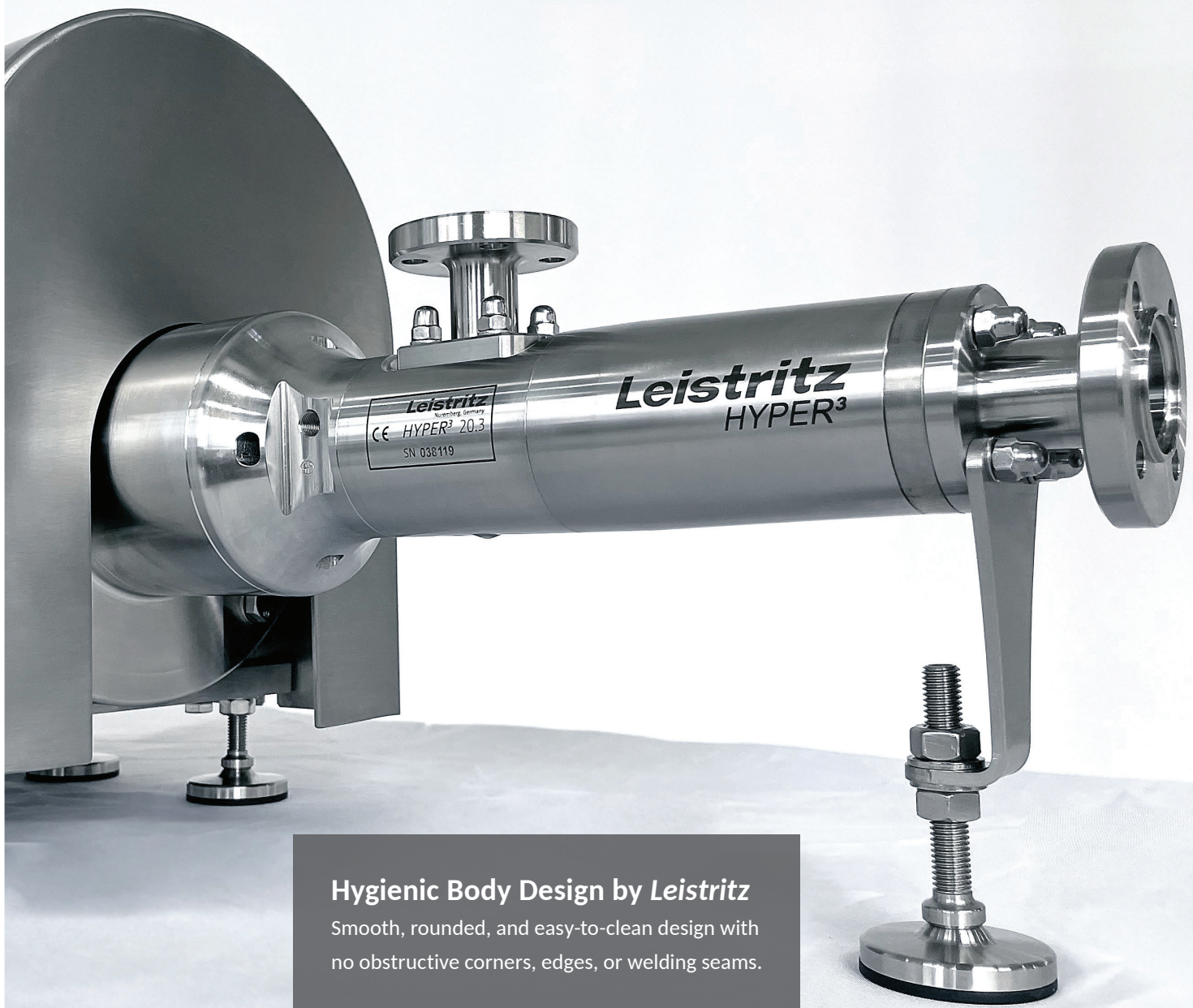
Well thought out equipment

- Quick and easy height adjustment thanks to adjustable machine feet
- Horizontal and vertical installation
- Easy installation of pumps with drive unit, bellhousing ensures optimum coupling alignment
- Stainless steel motor cover available



Efficiency up to 96%

Premium performance and efficiency,
low energy consumption.



Hygienic Body Design by Leistritz

Smooth, rounded, and easy-to-clean design with
no obstructive corners, edges, or welding seams.

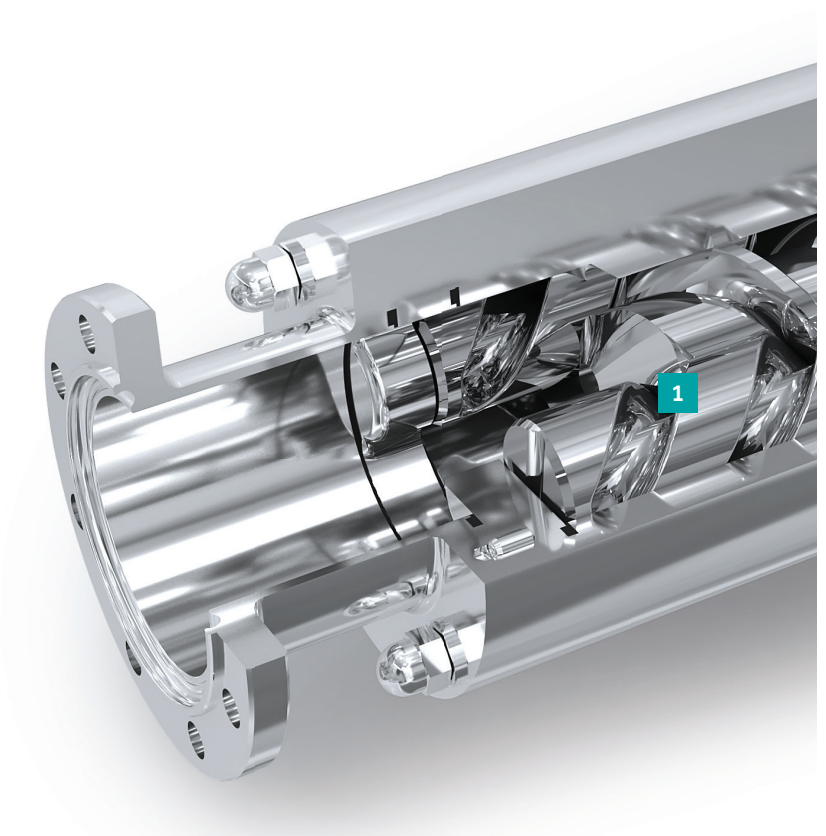
HYPER³: POWERFUL. PRECISION DOSING.

The *Leistritz* HYPER³ sets a new standard in pumping innovation, combining exceptional performance with a compact design. Utilizing triple screw pump technology and a proven hydrodynamic flotation principle, this pump ensures top-tier product protection and precision dosing, making it the best-in-class solution for demanding applications.

Benefits for your production line

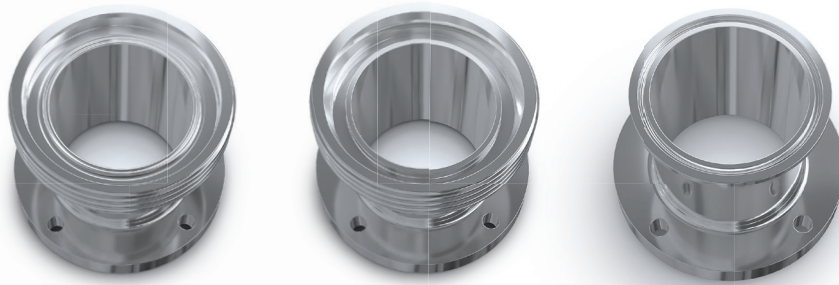
- Highest efficiency in Screw Pumps
- Precision in dosing even smallest quantities
- Compact design and low weight
- Optimised CIP operation
- Minimum pulsation
- Improved, easy cleaning inside and out thanks to *Leistritz* Hygienic Body Design
- No synchronization needed
- Absolutely oil-free operation

Optimized for hygienic production
Leistritz HYPER pump solutions are designed for residue-free cleaning.

Technical Data: HYPER³

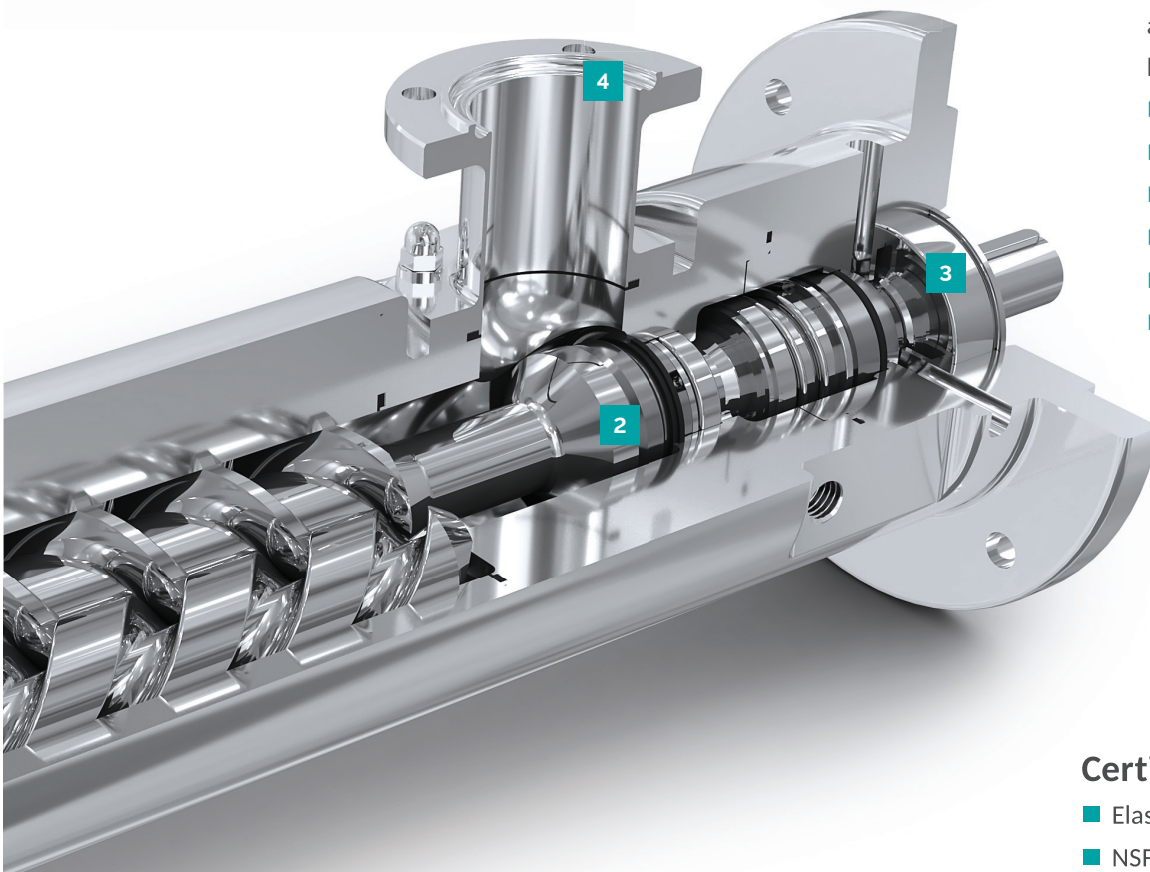
Pump type	20	30	50
Flow rate (m ³ /h)	0.02 - 2.6	0.1 - 8.8	0.2 - 22.7
Differential pressure (bar) up to	16	25	25
Speed (rpm) up to	3,000		
Particle size (Ø/mm) up to	5	7	10
Viscosity (cSt)	0.5 - 1,000,000		



4 Unparalleled versatility

The modular design of the basic pump allows for easy attachment and exchange of both standard hygienic and custom flanges:

- DIN 11864-2
- DIN 11864-1
- DIN 11851
- DIN 32676 (Tri-Clamp)
- SMS 1145
- All customer specific flanges



1 Dosing precision

High dosing precision, even for the smallest quantities, achieved through tight tolerances.

2 Mechanical seals

Plug-and-play installation with a single-acting hygienic mechanical seal that eliminates dead spaces, with an option for an additional standardized DIN K mechanical seal.

3 Oil-free operation

Ensures the highest level of cleanliness for both the product and the system.

Certificates

- Elastomers FDA certified
- NSF H1 registered lubricants
- Machinery directives:
 - Regulation No. 1935/2004
 - Regulation No. 2023/2006
 - Regulation No. 10/2011r

You Never Pump Alone.

Global Services for the Food & Beverage and Pharmaceuticals Industry.

Leistritz Service is streamlined to meet the demands of your food & beverages and pharmaceuticals production sites all over the world. We are at your side to safeguard the reliable, trouble-free operation of your production lines at all times.

We have your operations in view using digital technology – supported by a global network of qualified partners close by. "You never Pump alone" is our daily business – practised in the literal sense of the term.

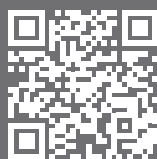


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