

PUMP TECHNOLOGY

L4NC

The new compact screw pump design for the oil & gas industry!

- With focus on tank farm applications such as transfer, stripping, loading and unloading pumps. Further applications: Up- and midstream, shipbuilding and other offshore technology, chemical and petrochemical industry
- Developed for low capital expenditure (CAPEX) combined with highest efficiency and reliability for optimized operational expenditure (OPEX)

1 Pump Casing:

- Economic and slim design for reduced weight
- Cast steel (1.0619) with integrated liner
- ANSI & DIN flanges possible

2 Spindles:

- Single bar stock for maximum stiffness
- Case-hardened steel (1.7139), nitrided for max. hardness
- Side by side arrangement for excellent lubrication capabilities of spindle, bearings and seals
- Smooth running with reduced bearing load

3 Timing gears:

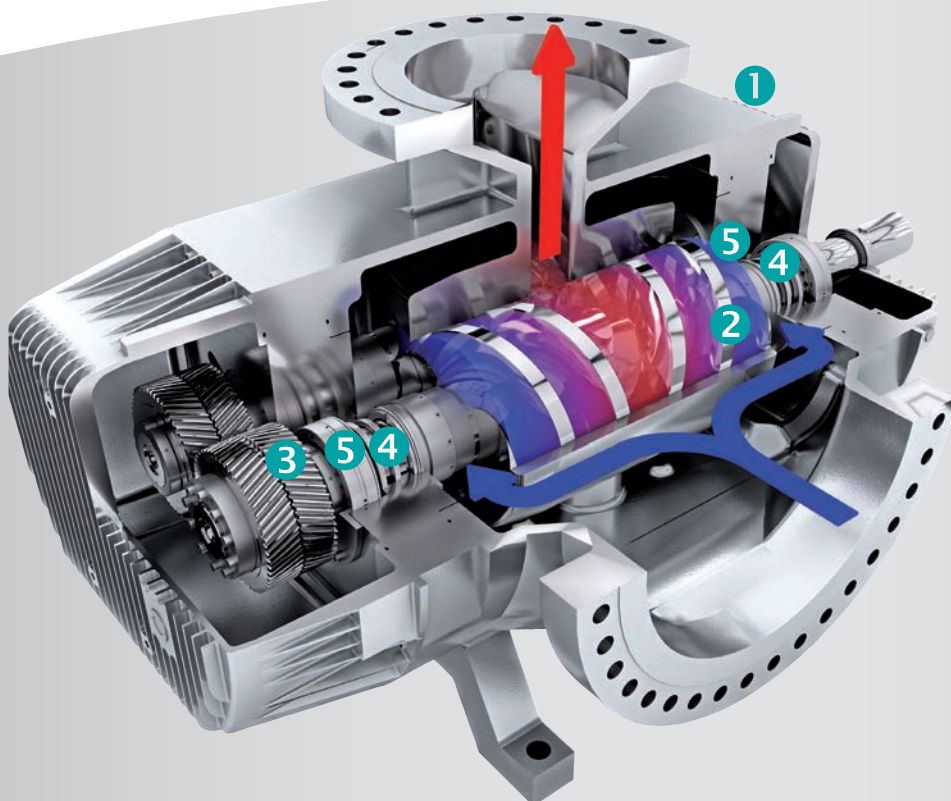
- External double helical gear for efficient power transmission

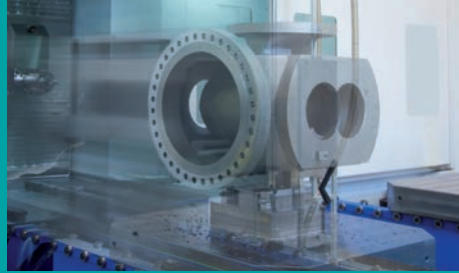
4 Mechanical seal:

- Single acting seals
- Component or cartridge design (API conform) possible
- API Plan 02 or 11 with or without oil/steam quench

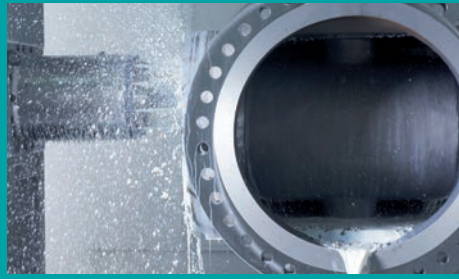
5 Bearings:

- Self-aligning roller bearings on DE and NDE side
- Oil lubricated as an API 676 demand and better lubrication of the shaft seals
- External lube oil cooler and systems for special applications possible

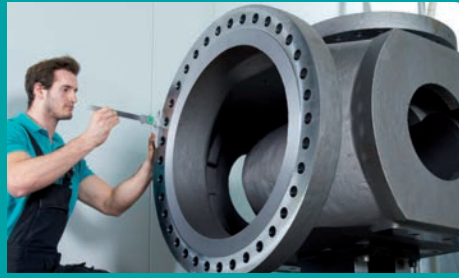




L4NC in a fully automatic milling center



L4NC milling of pump casing



Quality control for the L4NC pump casing

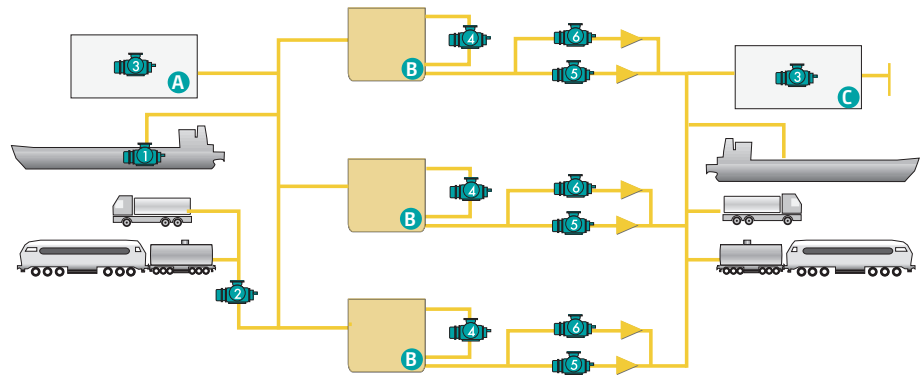


Final assembling of spindles for L4NC

OPERATING CONDITIONS

Viscosity	up to 10,000 mm ² /s
Temperature	up to 100 °C
Flow rate	up to 5,000 m ³ /h
Suction pressure	Cavitation limit up to 5 barg
Differential pressure	up to 20 barg
Casing design pressure	25 barg
Speed	up to 3,600 1/min

L4NC IN TANKFARM APPLICATIONS

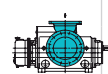
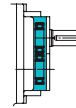
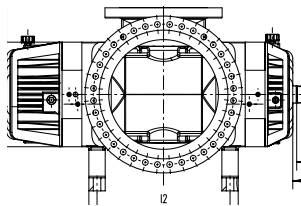


— Crude and refined product

- 1 On-Board crude oil cargo pump
- 2 Crude oil unloading pump
- 3 Booster pump
- 4 Circulation pump
- 5 Stripping pump
- 6 Loading and transfer pump
- A Oil field
- B Storage tank
- C Booster station

DESIGN CODE

Pump series				Pump size				Design code					Seal	
Leistritz	No. of Spindle-packages:	Pressure range:	Design:	OD Spindle:		Pitch:			Roller bearing:	Mounting:	Heating:	Mounting flange:	Inlet-Outlet:	Shaft sealing:
L	4	N	C						External	Foot	Without	Small B14	Side in top out	Mechanical seal
-	-	-	-	135	/	29	46	63	80	-	-	-	-	-
-	-	-	-	172	/	38	65	83	105	-	-	-	-	-
-	-	-	-	230	/	51	78	106	133	-	-	-	-	-
-	-	-	-	295	/	64	98	132	166	-	-	-	-	-
-	-	-	-	345	/	95	126	158	190	-	-	-	-	-
-	-	-	-	395	/	120	146	173	200	-	-	-	-	-
-	-	-	-	450	/	130	154	177	200	-	-	-	-	-



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