



ROTARY LOBE PUMPS

FEATURES

- **Compact construction:** space saving;
- **Self-priming** up to 7-8 mt.;
- **Dry running** for short periods;
- **Reversible operation;**
- **Easy maintenance** - maintenance and cleaning in place: fast opening of the pump because of the possibility of removal of the front inspection cover without disturbing the pump housing or pipe work;
- **Pump body can be supplied with hard metal replaceable wearing plates** at front and rear; they can be replaced easily on site;
- **Possibility to handle large solids particle up to 25 - 30 mm.**

EXECUTION

- **PUMP BODY:** in grey cast iron (type PLG) with possibility of replaceable hard metal wearing plates in HARDOX (PLGP type); for oenologic execution: see special section.

- **LOBES:** covered with

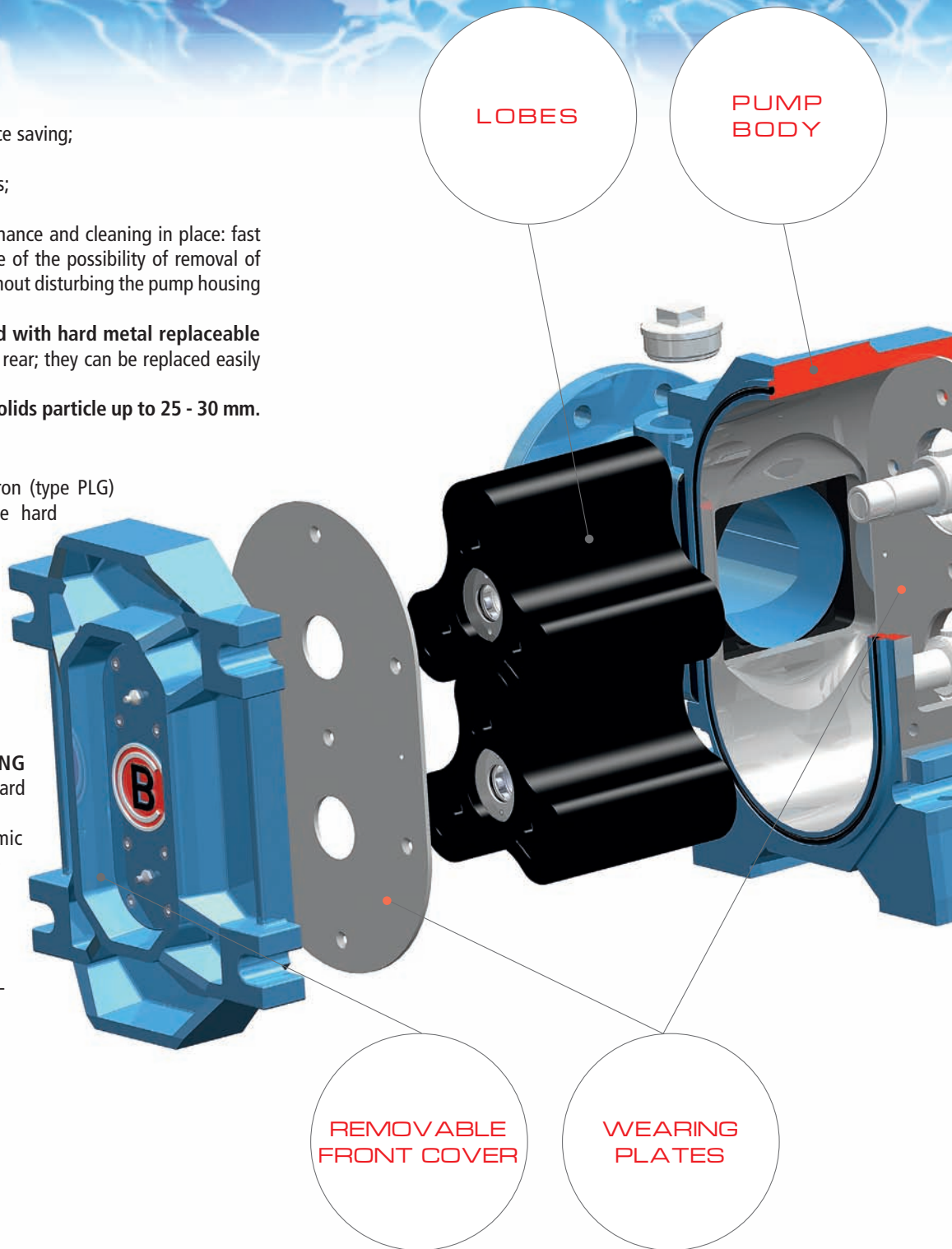
- NBR rubber
- EPDM rubber
- FPM rubber
- Other on request;

- **HARD METAL WEARING PLATES:** internal removable hard steel HARDOX plates;

- **MECHANICAL SEAL:** ceramic or tungsten carbide self-lubricated;

- **CONNECTIONS:**

- flange according to UNI/DIN
- ball joints
- oenological type "garolla" - DIN - SMS
- other on request.



OPERATION

Bellin Rotary Lobe Pumps type "PL" are of the positive displacement pumps type; the two counter-rotating rubber tri-lobes are synchronised.

The product is displaced in the direction of the volume flow into the discharge side.



PERFORMANCE TABLE

PUMP TYPE	MAX CAPACITY @ 0 bar	MAX PRESSURE	MAX SPEED
	m ³ /h	bar	r.p.m.
PL-500	35	8	600
PL-1500	80	8	500
PL-2500	132	8	500
PL-3500	180	6	400
PL-4000	125	3	300
PL-7000	230	3	250

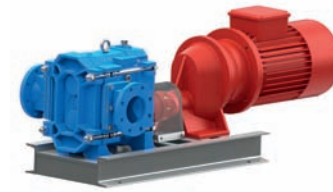
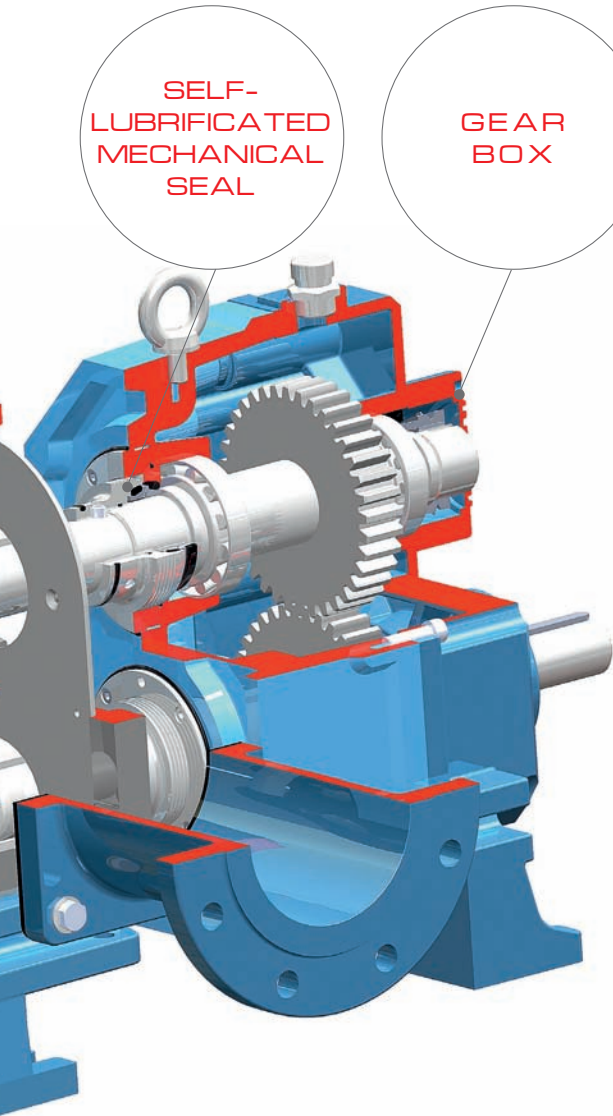
E X E C U T I O N

ROTARY LOBE PUMPS

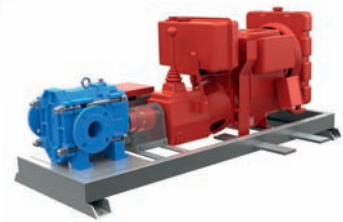
DRIVES SYSTEM

SELF-LUBRIFICATED MECHANICAL SEAL

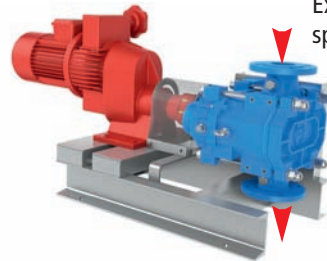
GEAR BOX



Execution with speed reducer



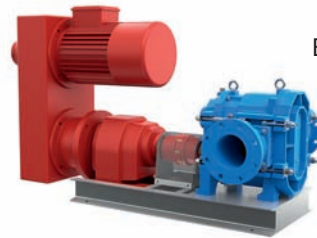
Execution with diesel engine with speed gear



Execution with mechanical variable speed drive and pump in vertical position



Execution with hydraulic motor



Execution with simpla-belt variator drive



Execution with V-belt transmission

FIELDS OF APPLICATION

CERAMIC INDUSTRY: to pump china slip, clay, fireclay, enamels, etc.

BUILDING INDUSTRY: to transfer unicellular cement, mortar of cement, cement/sand and water mixtures, bentonite, grout, lime compound, light concrete, etc.

PAPER-MAKING INDUSTRY: to pump starch paste, rag pulp, paper-mill mud, milk of lime, etc.

MINING INDUSTRY: to transfer mining water with various compositions, for flotation mud, grease, oils, etc.

SHIPYARDS: for brackish water, separation mud, separator feed, etc.

FISH PROCESSING INDUSTRY: for pumping small pieces of fish, press water and fish waste, concentrate.

AGRICULTURE: to transfer sewage pigs and cattle, various swill, chemicals and liquids product for the consolidation of land, sewage sludge, etc.

EXECUTION OENOLOGICAL: see special section.

SUGAR-REFINERIES: to transfer sugary solutions, molasses, saturation and waste mud, thickened mud and milk of lime.

WATER TREATMENT PLANTS: to feed centrifugal machines - press belts - filter presses; to meter milk of lime and flocculants, to transfer primary mud, digested mud, waste water mud, waste lye, washing water, etc.

For applications on **WASTE DISPOSAL TANKERS - TANK TRUCK** recovery oils.

USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES ACCORDING TO ATEX DIRECTIVE 94/9/EC petrochemical, offshore platforms, distilleries, paint manufacturing, dyeing fabrics, etc.



RECOVERY OILS PLANT



INSTALLATION ON TANK TRUCK



WATER TREATMENT PLANTS



DRIVES SYSTEM - APPLICATIONS