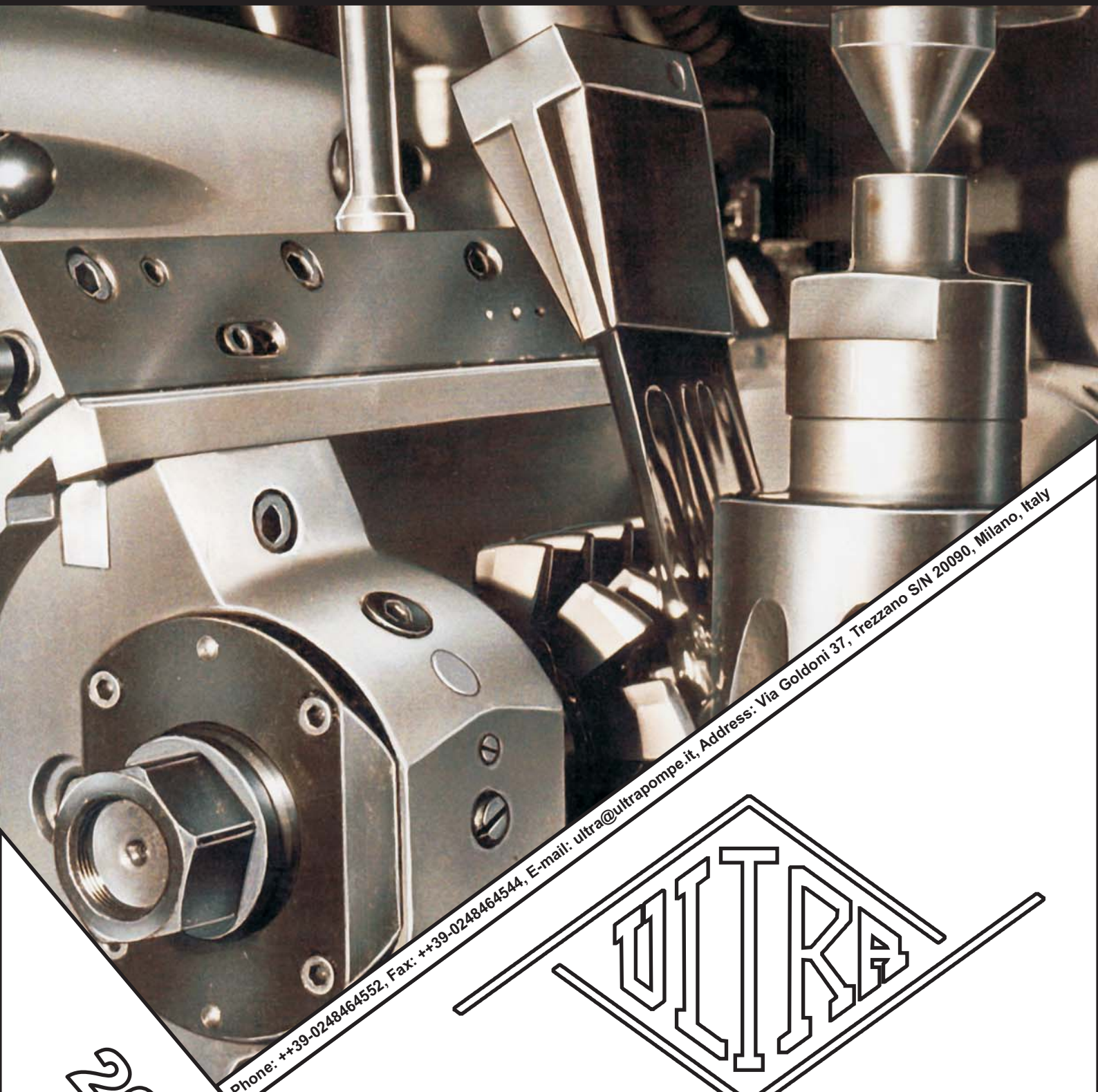


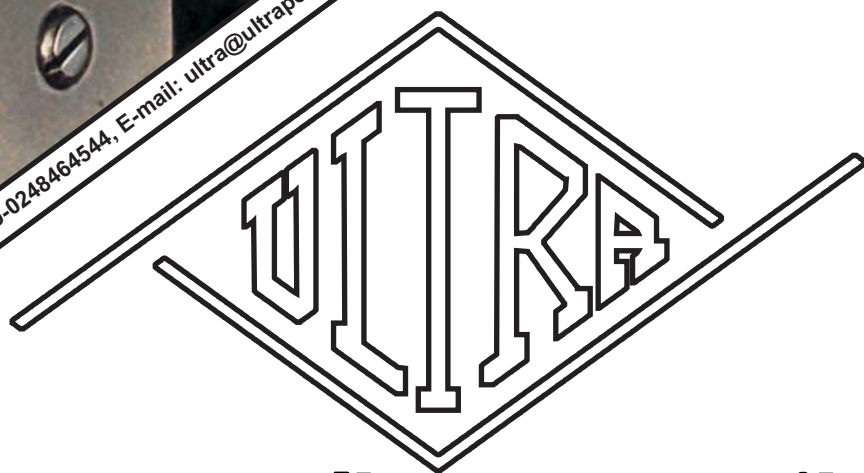
ULTRA POMPE S.r.l.

PUMPS FOR LUBRICATION, METERING AND THRUST



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2007



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COMPANY HISTORY

ULTRA POMPE, founded in **1957**, was one of the first Italian firms that completely design, produce and test external gear pumps in its own workshops. Ultra's success is based on satisfying customers' requirement thorough efficient manufacturing and by providing quality products and competitive pricing.

Gear Pumps

ULTRA

ULTRA POMPE S.r.l.

Pumps Manufacturer
Since 1957

REPUTATION

The very good reputation that our pumps have gained on the market is mainly due to the following reasons:

Technology at work: Continually updating out technology and products designs allows ULTRA POMPE to provide the right gear pump or system for a variety of processes and liquid, semi-fluid or emulsions.

Updated production line: Compact enough to quickly provide innovative custom designs, but large enough to manufacture high volumes in a short time, ULTRA POMPE invest every year in new technology for the automatization or its production lines. At today, each machinery in our factory has at least one automatic backup in addition to one controlled manually. This allows us to avoid any production delays caused by machinery crashes and to meet promised delivery.

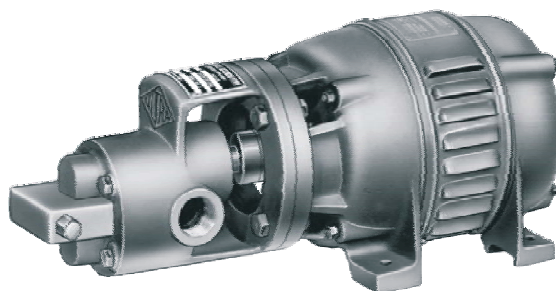
Long mechanical tradition: ULTRA POMPE has always and only manufactured gear pumps. We have devoted all our efforts, energies and resources toward developing and improving gear pumps.

Internal production: ULTRA POMPE carries on in its own premises the whole of mechanical processing, gear cutting included, thus achieving an unparalleled quality standard of the finished products.

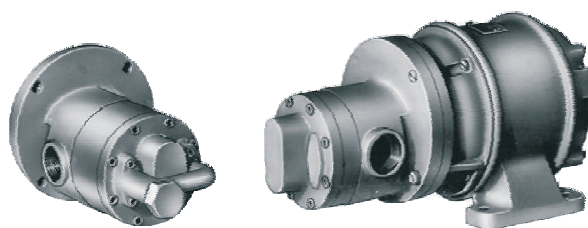
Half century of know-how: ULTRA POMPE know-how and experience has been handed down from one generation to the next. Due to this reason we have accumulated a lot of direct experience in the last fifty years.

Spare parts on stock: ULTRA POMPE maintain a large inventory of standard spare parts and unassembled pump in its own stock, allowing us to quickly provide complete pump or replacement spare parts for customer emergency.

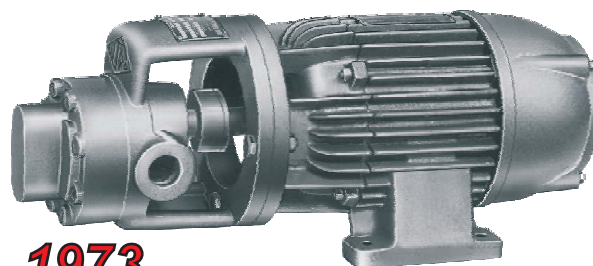
Standard fitting: Using of UNI/ISO/ANSI/DIN/MEC dimension significantly increase the possibility to substitute other pumps with our product, just making few little modifications



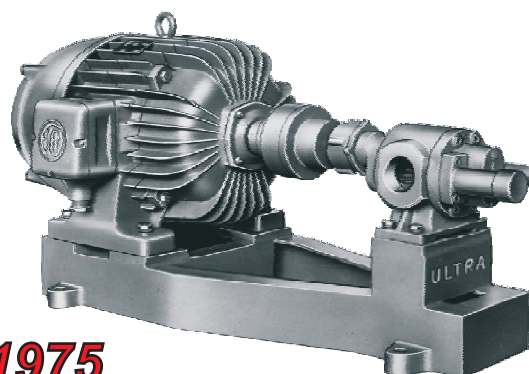
1962



1967



1973



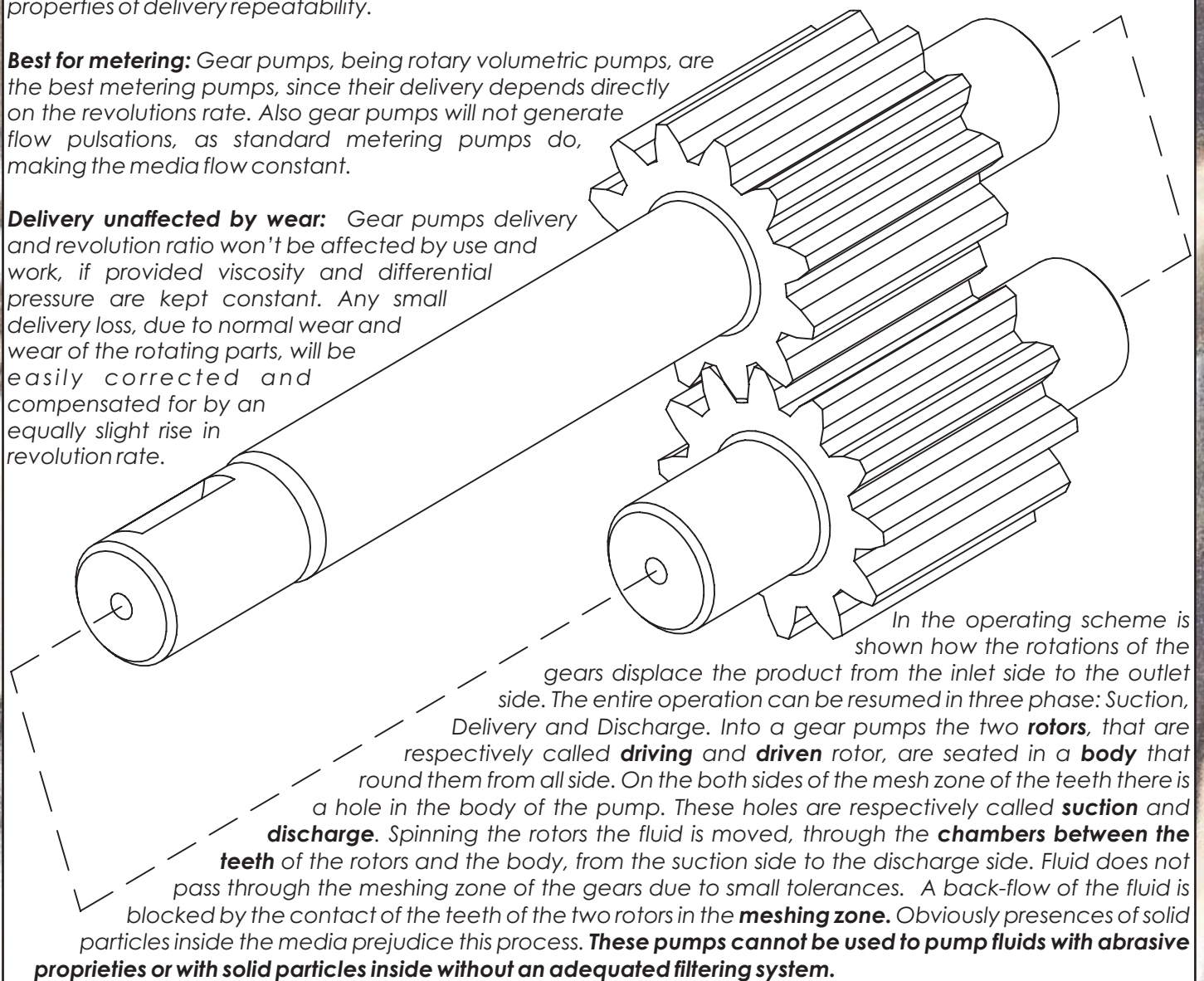
1975

GEAR PUMPS

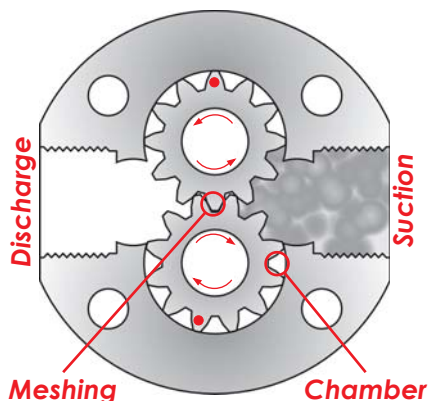
Delivery repeatability: Gear pumps need a lesser Npsh (showing a better negative suction head) and have better properties of delivery repeatability.

Best for metering: Gear pumps, being rotary volumetric pumps, are the best metering pumps, since their delivery depends directly on the revolutions rate. Also gear pumps will not generate flow pulsations, as standard metering pumps do, making the media flow constant.

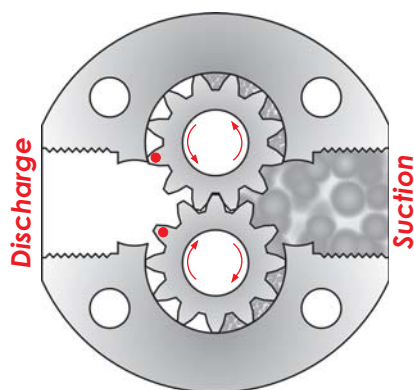
Delivery unaffected by wear: Gear pumps delivery and revolution ratio won't be affected by use and work, if provided viscosity and differential pressure are kept constant. Any small delivery loss, due to normal wear and wear of the rotating parts, will be easily corrected and compensated for by an equally slight rise in revolution rate.



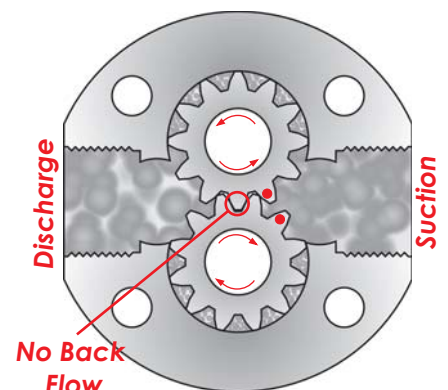
Phase 1: **SUCTION**



Phase 2: **DELIVERY**



Phase 3: **DISCHARGE**



APPLICATIONS

There is an unlimited range of applications for a gear pump, as examples:

THRUST: Oil displacement between barrels and drums. Diathermic oil recirculation on bitumen plants. Bitumen or rubber transport.

METERING: Gasoline flow on blast furnace. Addition of pigments to the main product flow. Dosing of solvent according to main product status.

LUBRICATION: Oil recirculation on heavy speed reducer or variator. Machine tools lubrication. Any oil displacement from/to tank unit.

PUMPS NAME

Pumps name: Pumps name contain all information about pump material, performance and applied options. This name will be used in all documentation related to the pump. Every pump is also marked with a matriculated number: each pump has its own number.

1	2	3	4	5	6	7	8	9	10		
G	L	-	2	1	V	-	B	OH	-		
					Size						
		Configuration			Seal Type						
Series		Included Options									

IMPORTANT NOTE

Before starting any selection, define the product viscosity, the pressure and the delivery needed and the operation temperature, than proceed to the pump selection. On our experience, an informed and trained customer can easily understand the quality of our product. In this way, following we will try to teach you most important arguments about pumps. Anyway theses "lessons" are just simplified resume of more complex subject.

VISCOSITY

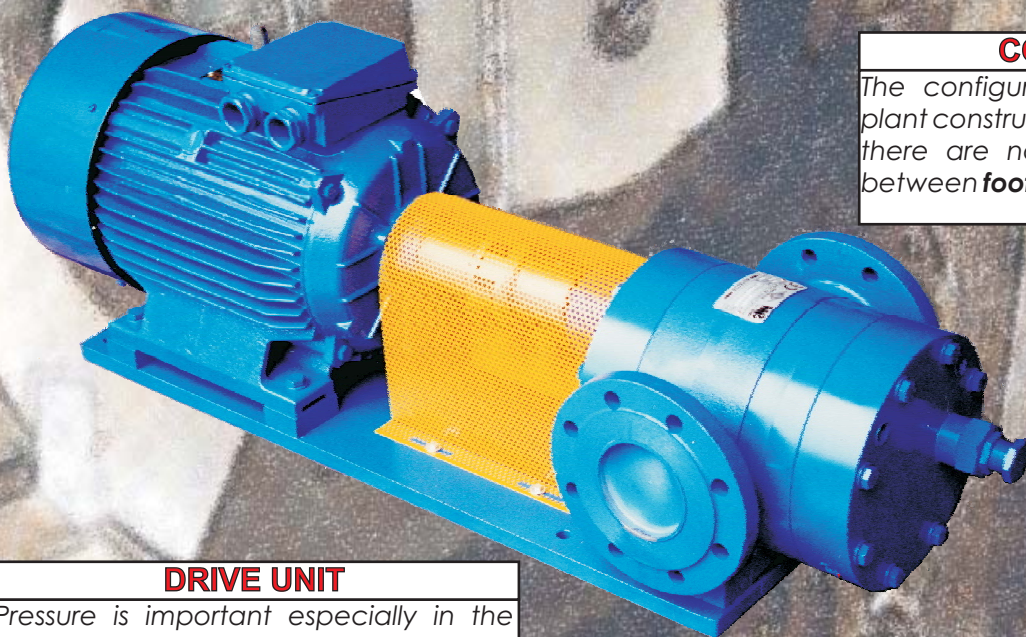
The selection of the pump dimension is mainly limited by the viscosity range of the pumped product. The entire selection operation can be easily resumed in this law: **the higher the viscosities the less the speed rotation**. Naturally this is not the only parameter that must be considered in the pump selection, but can help us focalise what is needed, because give us a rotation speed limit. Temperature influences on the viscosity in inverse ratio, so the same liquid represents different viscosities depending on the temperature of the environment: **the higher the temperature the less its viscosity**.

PRESSURE

The delivery capacity of a gear pump depends also to the work pressure. The entire selection operation can be resumed in a short law: **the higher the pressure the higher the delivery losses**. The delivery losses can be determinates using the **Curves** in this catalogue. Viscosity influences also the delivery losses percentage. Pressure must be considered also in the seals selections. Each seal has its own pressure limits, over which it can't work! As example a lip seals will work up to 10 BAR, other else a mechanical seal will work up to 30 BAR. If in doubt, please don't hesitate to contact our office.

CONFIGURATIONS

The configuration depends on cost and plant construction: this is just your choice and there are no limitations. You can choose between **foot** or **lantern** mounting.



DRIVE UNIT

Pressure is important especially in the calculation of the electric motor dimension. Since this time we have just considered the rotation speed of the electric motor, but the absorbed power level is important too in determination of its dimensions. The low for this is that: **the higher the pressure the higher it's the absorbed power of the electric motor**. Absorbed power is calculated in Kilo-Watt (KW). Viscosities levels influence also the power need by drive unit to spin gears of the pump: **the higher the viscosity the higher the absorbed power**.

MATERIALS

Now, once the pump size and work condition are fixed, we can proceed to selection of products that completely match your requirements. The pump series differ especially for **constructions materials**, so select the pumps checking its compatibility with the pumped fluid.

DELIVERY

The easiest and important point in determination of pump size: the size it self. Find the size that will deliver your product according to operating parameters. Capacity of a gear pump is calculated in **cubic centimeter per revolution**.