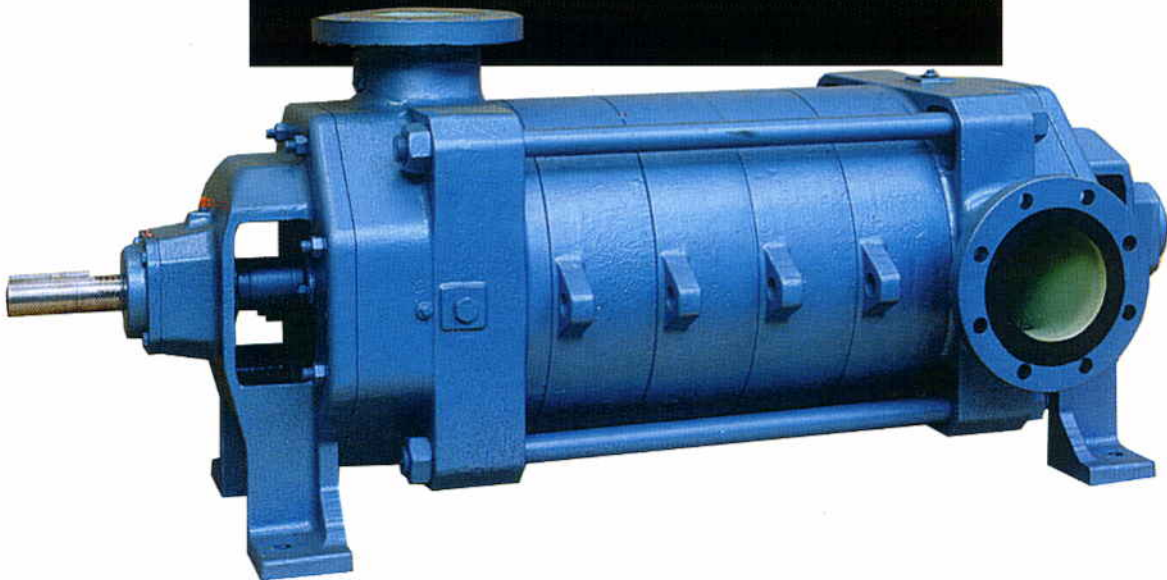
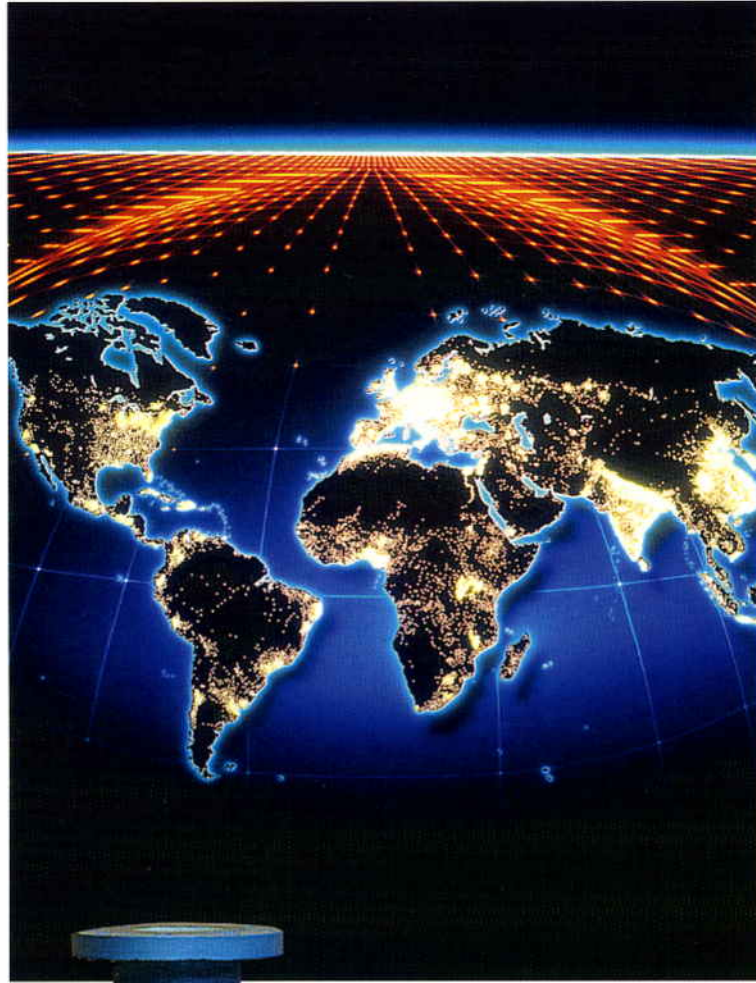


NM Multistage Pumps

25/30 bar



Ingersoll-Dresser Pumps

Multistage water pumps

NM 25/30 bar

In the design and manufacture of the new generation of NM 25/30 bar pumps, the technical expertise and experience of INGERSOLL-DRESSER PUMPS is apparent.

The following features are incorporated in the hydraulic and mechanical design of this pump range :

- improved hydraulics,
- improved safety,
- improved reliability.

The objective was to improve upon current standards to achieve better design, performance and manufacturing targets, thus giving customers the best service.

Many options were analysed bringing together Marketing, Engineering and Manufacturing in a concurrent engineering project assisted by Computer Aided Draughting and Design.

Casting development was evaluated using the latest foundry processes and techniques, ensuring high performance and reliability.

The NM range complies with the latest international standards and specifications used in Europe.



The modular concept gives maximum interchangeability of components with subsequent low inventory costs.

This range consists of 5 sizes and 10 hydraulics respectively identified by : **E** for low flow, **L** for high flow.

The following arrangements are available :

- NM**
- horizontal, 2 bearings,
 - defined by the discharge diameter,
 - adjustable side suction and discharge nozzles.

- FP**
- horizontal, 1 bearing,
 - defined by the suction diameter,
 - axial suction and adjustable side discharge nozzles.

- NMD, NMAD**
- vertically mounted,
 - defined by the discharge diameter,
 - with semi-elastic coupling and thrust bearing housing (NMD),
 - with rigid coupling (NMAD),
 - adjustable side suction and discharge nozzles.

OPERATING LIMITS

	NM	122	152	202	252	352
Maximum working pressure (bar)	suction side	10	10	10	16	16
	discharge side	25	30	35	40	40
FP	152	202				
	discharge side	25	25			
NMD/NMAD	122	152	202			
	discharge side	25	30	35		
Test pressure	1,5 maximum working pressure					
Maximum liquid temperature	gland packing 105 °C mechanical seal 80 °C					

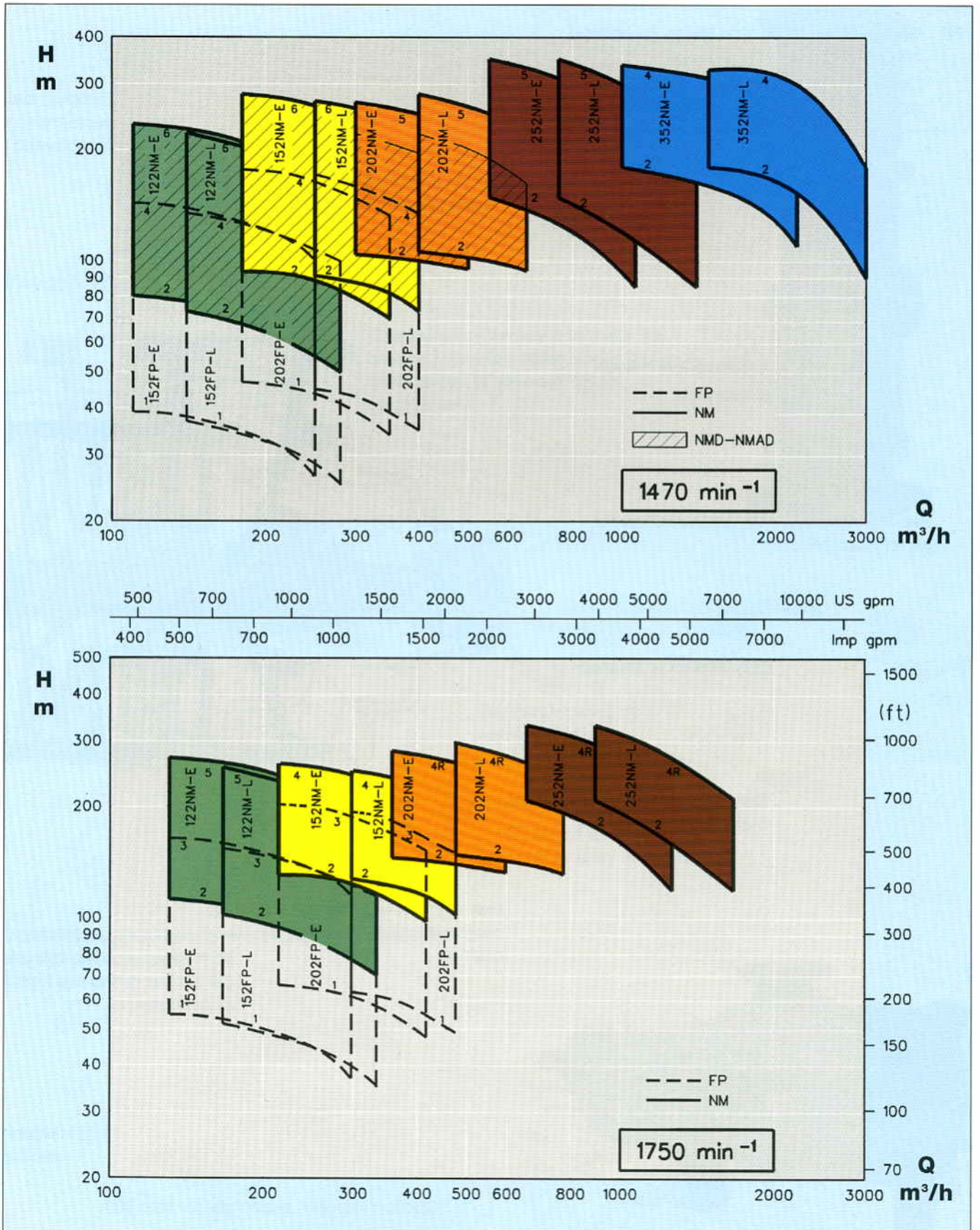
5 sizes

	122	152	202	252	352
NM					
FP	152	202			
NMD/NMAD	122	152	202		

MATERIALS

DESCRIPTION	STANDARD	OPTIONS
Suction casing	Cast iron	
Discharge casing	Cast iron	
Stage casing	Cast iron	
Diffuser	Cast iron	
Wear ring		13 % Chromium stainless steel
Impeller	122 to 252	Cast iron
	352	Bronze
Shaft	NM	13 % Chromium steel
	FP	Steel
Shaft sleeve	13 % Chromium stainless steel	
Shaft seal	Gland packing Graphite + PTFE	Mechanical seal Graphite/stainless steel

Coverage charts



Design features

FP Wide open axial suction giving an optimal NPSH value.
One single sealing system to make maintenance easier.

Optional suction and discharge positions to make installation of manometric plugs.

Hydraulic design to achieve low NPSH.

Sealing achieved by O-

Oversized, grease-lubricated radial ball bearings.

Bearing equipped with grease valves for perfect lubrication.

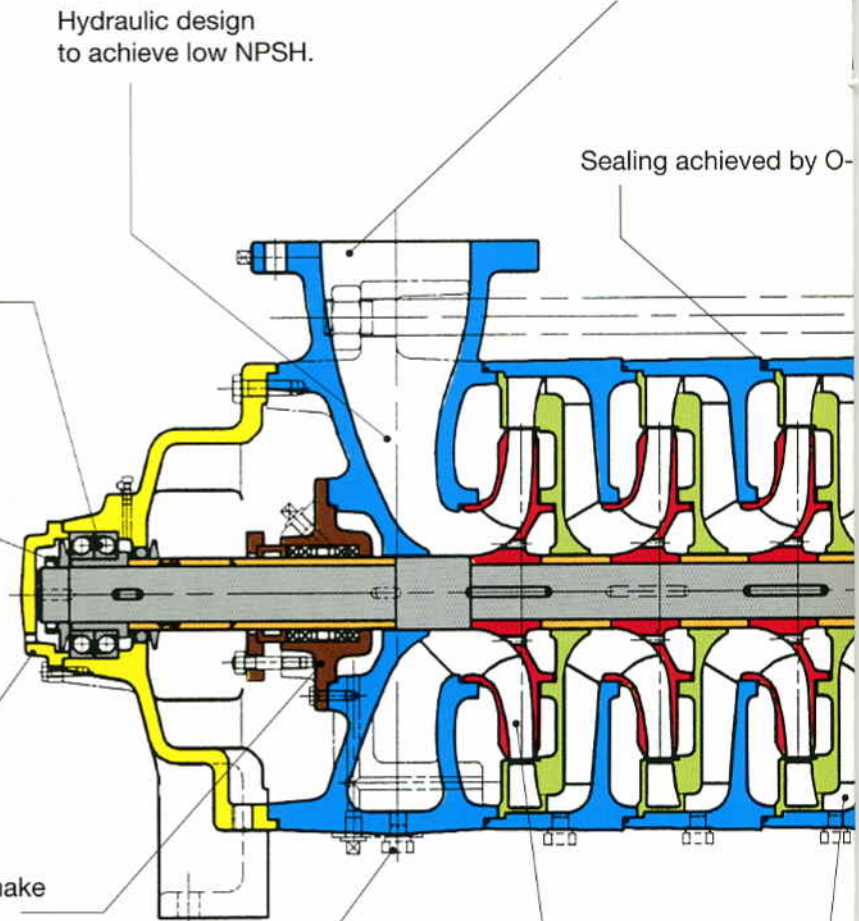
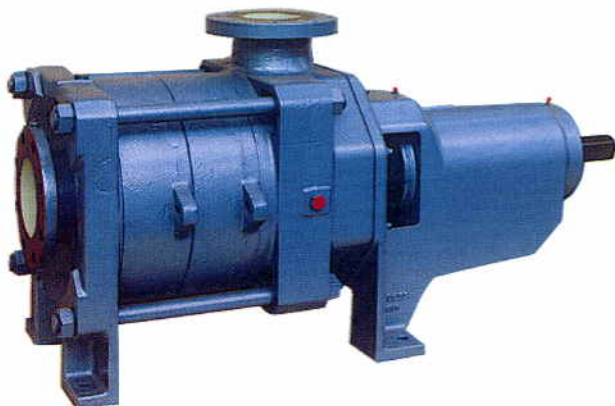
Easy access to bearings.

Removable stuffing box to make maintenance easier.

Hexagonal filling and drain plugs with gasket on each casing.

Impeller having machined shrouds and optimum hydraulic designs to guarantee high level of performance.

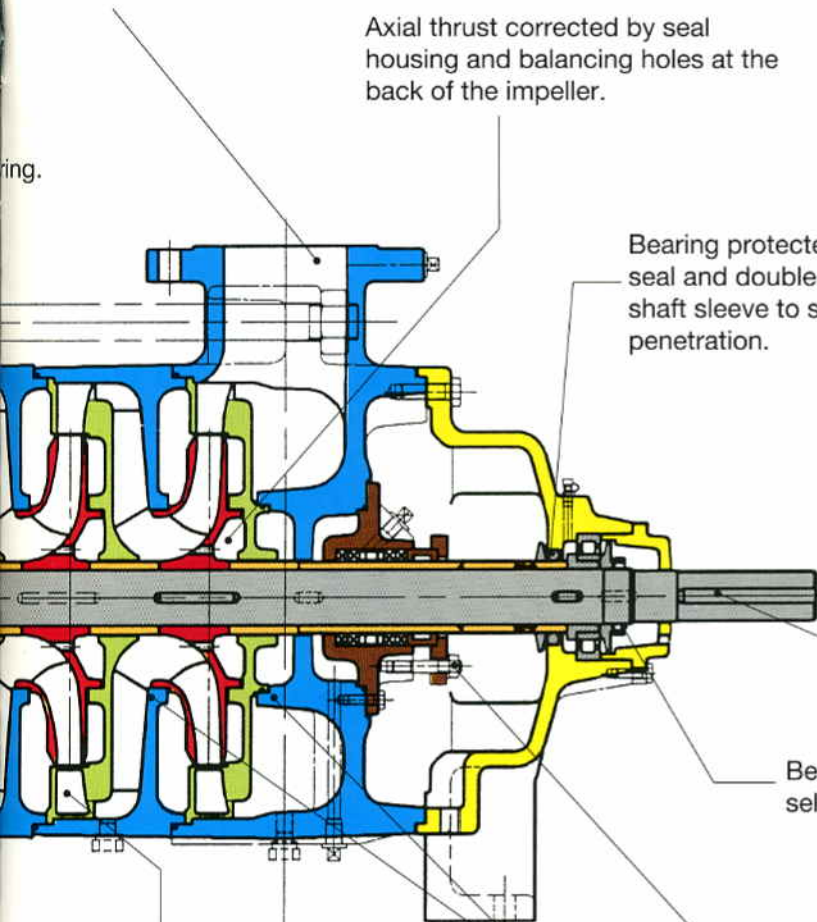
Machined internal surfaces for the best efficiency.



* Suction impeller, especially for size 352.

charge nozzle
ation easier, with

ring.



Axial thrust corrected by seal housing and balancing holes at the back of the impeller.

Bearing protected by a thrower, lip seal and double sealing under the shaft sleeve to stop any liquid penetration.

Oversized and protected shaft ensuring high reliability.

Bearing located by a self-locking nut.

Stainless steel studs and nuts for easy adjustment.

Shrouded diffuser positively located within the stages.

Allowance to fit wear rings.

surface to maintain



NMD
NMAD

Vertically mounted to reduce space required at ground level.

Motor-pump self-alignment.

One single sealing system to simplify maintenance.

Bearing bush lubricated by liquid.

