



fluidity.

nonstop

IT'S ABOUT KEEPING YOUR PROCESSES RUNNING

———— *Gruppo Aturia* ————

 **AXFLOW**

Gruppo Aturia

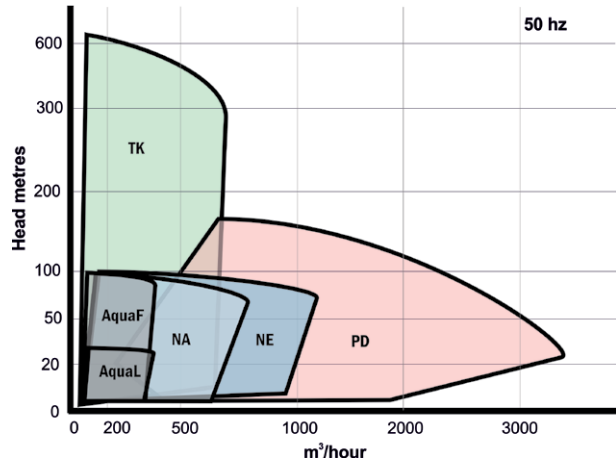
Now part of the WPIL Group, Gruppo Aturia consists of several well respected pump brands and is the oldest pump manufacturer in Italy tracing its routes back to 1889.



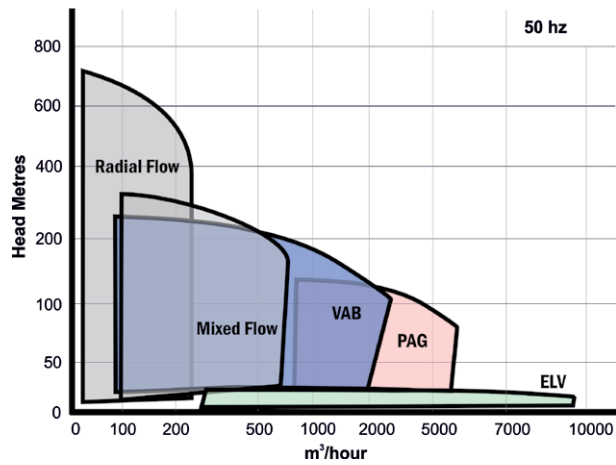
Aturia Sites
WPIL Foundry, Manchester

- Aturia are supplying all of the pumps to the Venice lagoon scheme to stop the city from sinking into the sea.
- The Aturia subsidiary Rutschli invented the canned pump.
- Aturia have on 4,500 pumps operating in nuclear power stations around the world.
- Aturia supply pumps to many of the best know pump manufacturers.

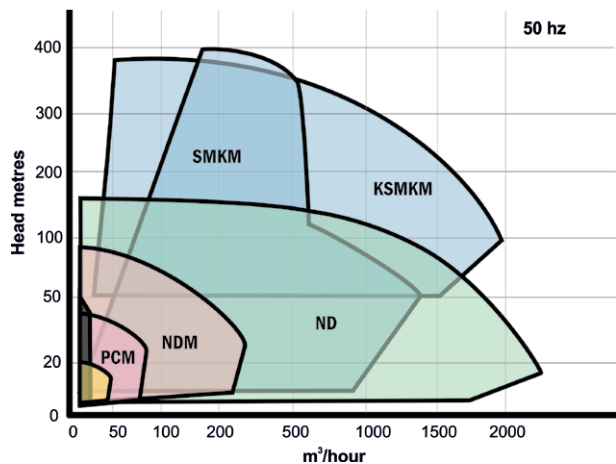
Water Pumps



Vertical Pumps



Process Pumps



Range Summary

		Material				Seal Type	ATEX	Max m	Max m ³ /hr	Max bar	Max °C	Page Nos
Water												
AquaFit	End suction DIN 24255	CI						100	250	10	130	3
AquaLine	In-Line	CI						100	500	10	130	3
NE	End suction DIN 24255	CI	SS					100	1,000	10	130	3
TK-TKR	Multistage, between bearing	CI	SS					640	800	64	130	4
VTK	Multistage	CI	SS					400	600	40	130	4
PD	Split case double suction	CI	DI	CS	CS			170	3,500	20	130	4
PDV	Split case double suction	CI	DI	CS	CS			170	3,500	20	130	4
VAB - PAG	Multistage mixed flow	CI	SS	DX	DX			200	6,000	20	60	5
ELV	Axial flow	CI	CS	DI				200	30,000	70	60	5
Submersible	Radial and mixed flow	CI	BRZ	DX				700	900	70	60	6
Process												
ND	ISO 2858/5199	SS	DX	HST	TI			140	1,700	25	200	7
ND-V		SS	DX	HST	TI			140	1,700	25	200	7
SDM	End suction	SS						24	30	25	200	9
NDM	ISO 2858/5199	SS	HST	TI				130	300	25	300	9
PTM	Turbine	PP	PVDF					50	15	10	80	12
PTM-SP	Self priming Turbine	PP	PVDF					50	15	10	80	12
PCM	End suction	PP	PVDF					40	120	10	80	11
PCM-V	End suction	PP	PVDF					40	120	10	80	11
PCM-SP	Self priming end suction	PP	PVDF					40	120	10	80	11
STM	Turbine	SS	DX	HST	TI			110	10	300	300	13
SDTM	Turbine/Centrifugal	SS	DX	HST	TI			180	12	300	300	13
SVM	Self Priming	SS	DX	HST	TI			130	2	300	300	14
API 610 - 685												
SMKM	End suction OH2 BB2	CS	SS	DX	S DX			380	1,500	50	450	8
KSMKM	End suction OH2 BB2	CS	SS	DX	S DX			400	2,000	50	450	8
SMKM-M	End suction OH2 BB2	SS	DX	S DX	TI			380	1,500	50	450	10
KSMKM-M	End suction OH2 BB2	SS	DX	S DX	TI			400	2,000	50	450	10
VS1, VS6	Multistage mixed flow	CS	SS	DX	S DX			200	6000	16	60	5
VS3	Axial flow	CI	CS	DI				200	30,000	70	60	5

SS Stainless Steel	HC Hi Chrome Steel	PP Polypropylene	SI Silicone	HYP Hypalon
DX Duplex Stainless Steel	TI Titanium	PVDF Polyvinylidene Fluoride	TYG Tygon	NOR Norprene
HST Hastelloy	DI Ductile Iron	PTFE Polytetrafluoroethylene	SOL Solva	NBR Nitrile
CI Cast Iron			NR NR	NR Natural rubber
CS Carbon Steel				
Mechanical seal	Magnetically Driven	Canned pump	ATEX compliant	Solids handling





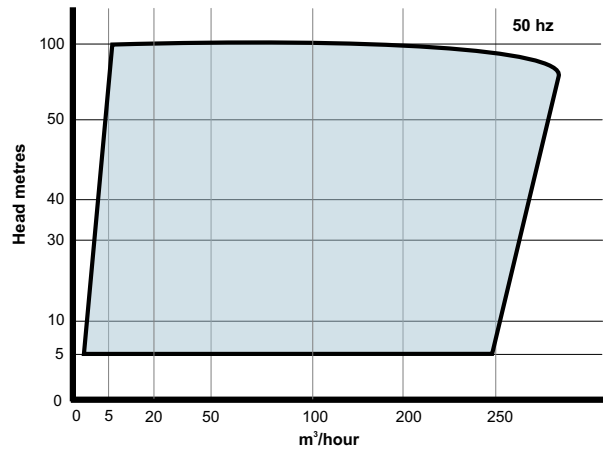
Mechanical Seal

AQUARANGE

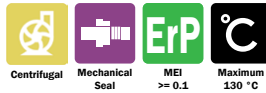
The AquaRange of mono block pumps is made up of :

- **AquaFit** close coupled horizontal single stage end-suction pumps with performances and key dimensions in accordance with DIN 24255.
- **AquaLine** in-line vertical close coupled pumps available as either a single or double construction.

Cast Iron
Bronze
St Steel



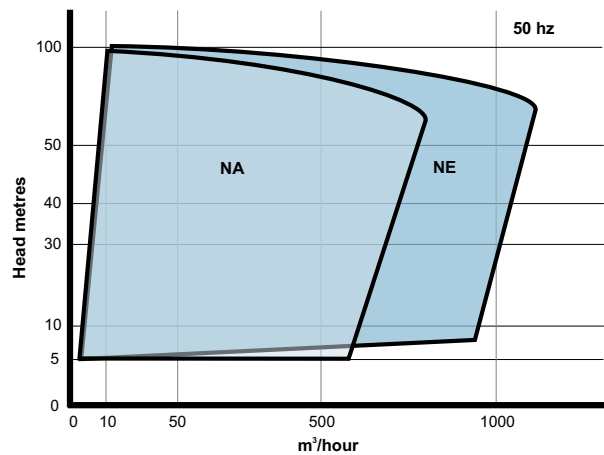
- All pumps comply with the ErP Directive.
- Dynamically balance impellers.
- Low NPSH requirements.
- High quality castings.
- Compact construction.
- Designed and manufactured to ISO 9001.
- Short delivery times.
- A choice of connection types.



NA and NE

DIN24255-EN733-UNI 7467 long pumps. The NA range being the standard construction which is complimented by the more robust and ATEX certified NE range. Many of the NA range models are stocked.

Cast Iron
Bronze
St Steel



- Oversized shaft with oil lubricated ball bearings.
- Dynamically balanced impellers.
- Many sizes ex-stock.
- High efficiency & low NPSHr.
- CI with optional SS and Bronze impellers.
- Available with a range of seals.



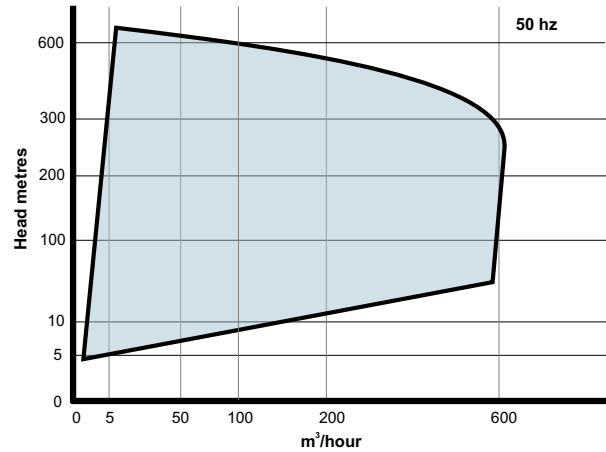
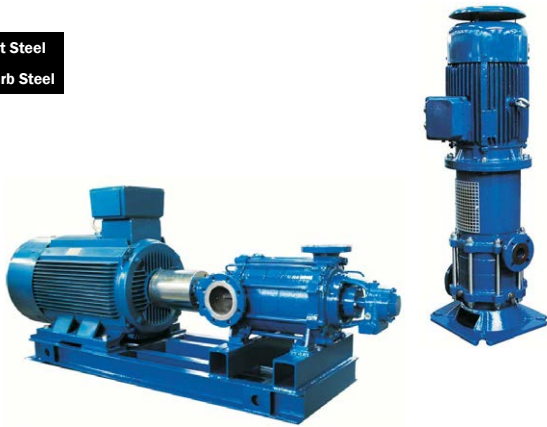


Mechanical Seal

TK | VTK | TKR

A comprehensive range of horizontal and vertical (VTK) multi-stage boiler feed pumps designed to ISO 9908 and ISO 9906 deg 2. All models can conform to the latest ErP directive requirements.

St Steel
Carb Steel



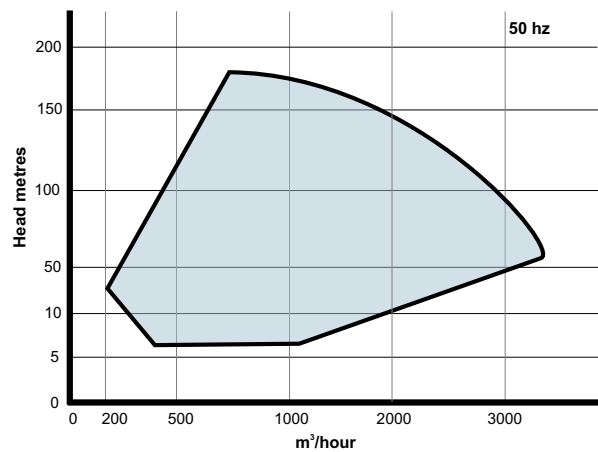
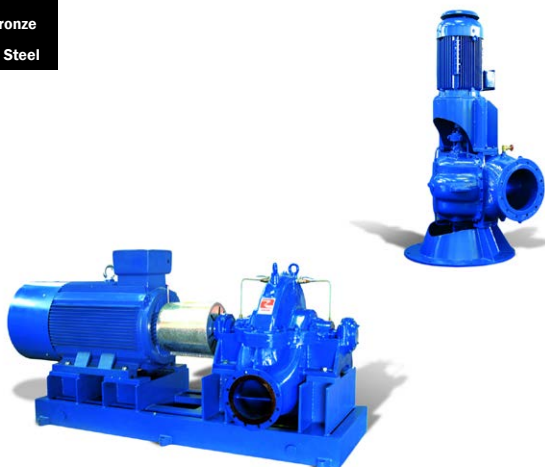
- Oversized shaft.
- Double, oil lubricated ball bearings.
- Dynamically balanced impellers.
- High efficiency & low NPSHr.
- CI with optional SS and Bronze impellers.
- Available with a range of seals.



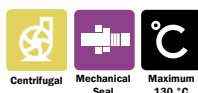
PD | PD-V

Robust split case, double suction pumps available in either horizontal or vertical configurations. The position of inlet and outlet nozzles (in the lower half case of PD horizontal pumps or in the rear half case of PDV vertical pumps) allows inspection and repair without removing the pump from its position.

Cast Iron
Bronze
St Steel



- Replaceable shaft sleeves.
- Pump body in CI optional steel or ductile iron.
- Impellers CI optional DI and SS.
- Grease or oil lubricated roller bearings.
- Gland packing or a range of mechanical seals.



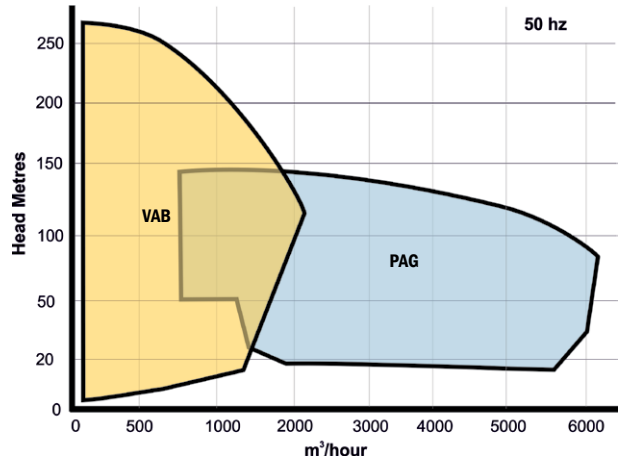


Mechanical Seal

VAB – PAG

The VAB and PAG ranges are multi-stage mixed flow pumps to API 610 VS1 and VS6 barrel pumps. They find numerous applications within the oil/gas sector including seawater lift pumps, fire pumps, cooling pumps, dock water pumps and low NPSH applications such as LPG transfer.

- St Steel
- Cast Iron
- Duplex
- Super Dup
- Bronze



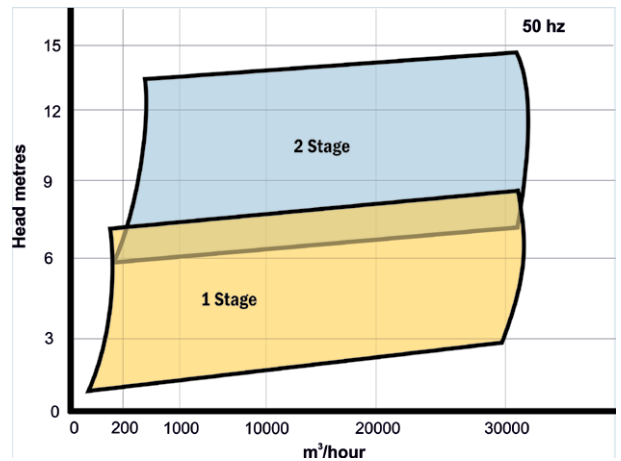
- Dynamically balanced impellers.
- CI optional SS or Bronze impellers.
- Shaft supported with multiple bearings.
- A range of different bearing lubrication methods.
- Soft packed or mechanical seals.



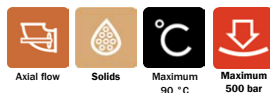
ELV

Vertical axial flow pumps to API 610 (VS3) made from thick castings and available as both single and two stage units. Single stage units can pump up to 8 m head. ELV pumps have been in service in numerous different applications around the world for many decades.

- Cast Iron
- Bronze
- St Steel



- Adjustable propeller blades.
- Grease or oil lubricated bearings.
- Alternative materials of construction on request.



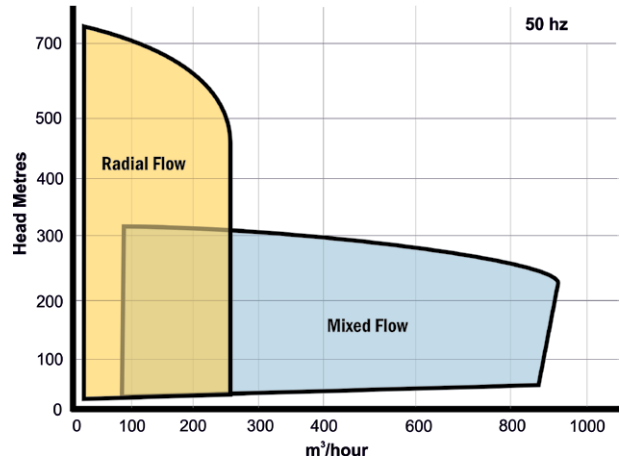
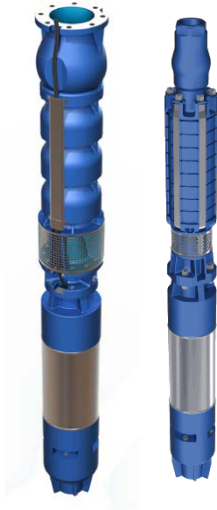


Mechanical Seal

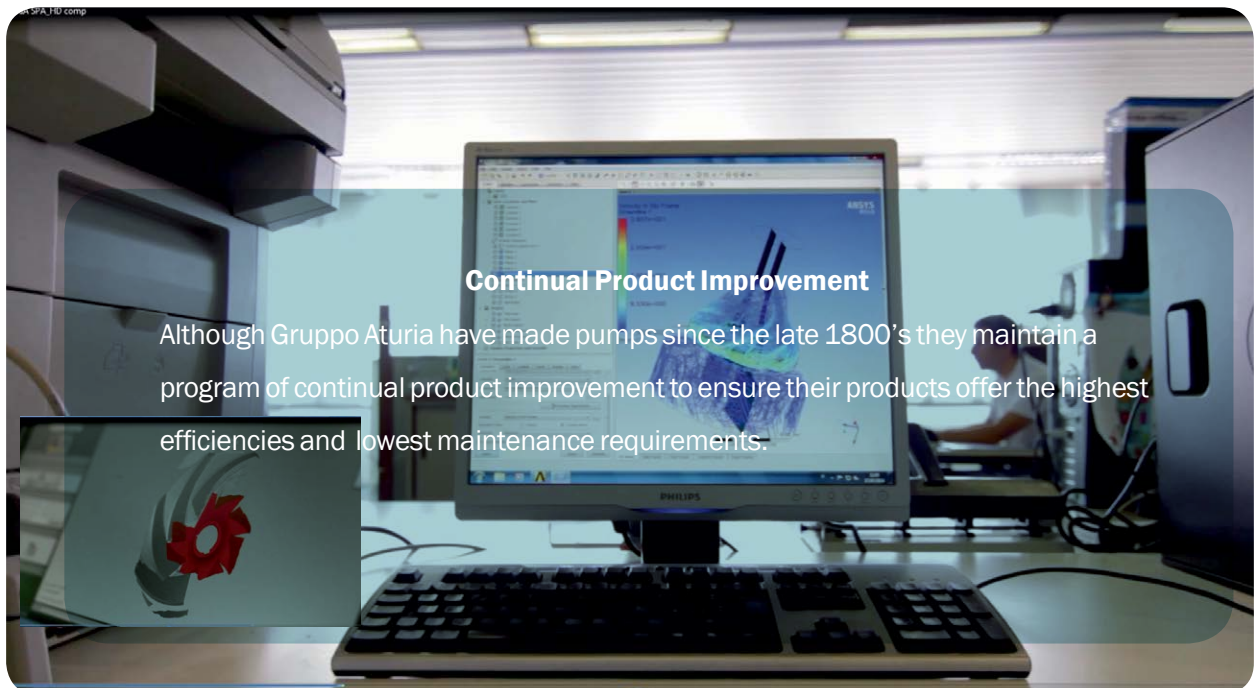
Aturia Submersible Pumps

An extremely comprehensive range of fully submersible pumps including both mixed and radial flow models. They are available in sizes from 6 to 14" and many meet the requirements of the ErP directive and have been used extensively for offshore applications.

Cast Iron
Bronze
St Steel
Dup St St



- Designed with the minimum number of wearing components.
- Impellers are dynamically balanced and splined to the shaft.
- The shafts are driven by coaxial bearing bushes and protected by sleeves.
- All the pumps are provided with NRVs.



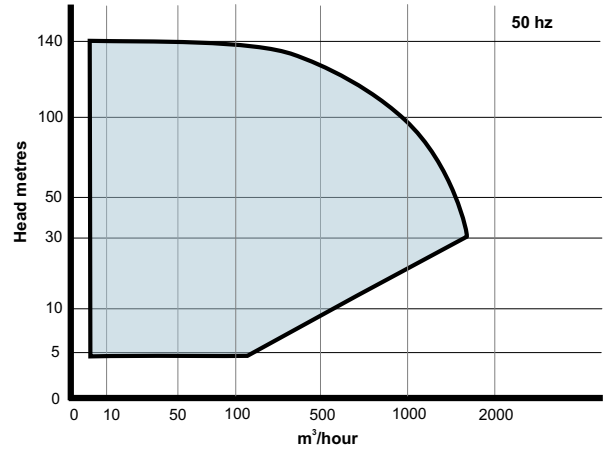


Mechanical Seal

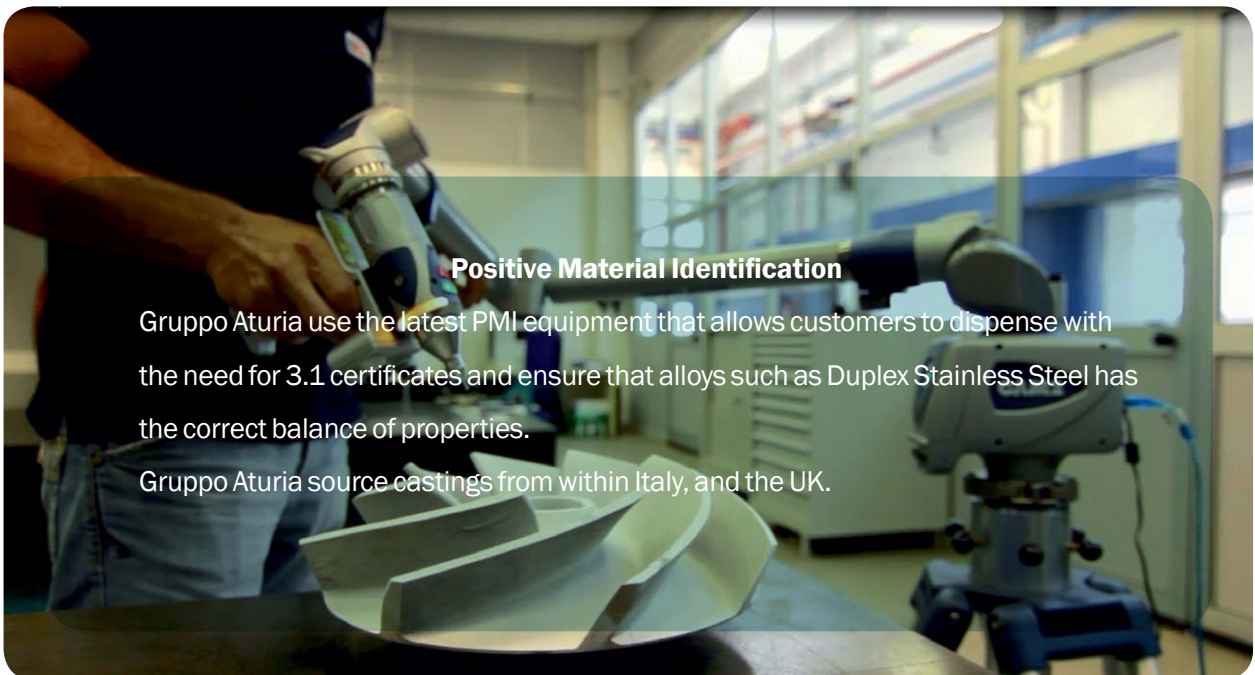
ND ND-V

High quality ISO 2858 - ISO 5199 process pumps refined over many years service life to offer an efficient and balanced pump design. Most components are stocked resulting in short lead times.

- St Steel
- Duplex
- Hastelloy
- Titanium
- Monel



- Dynamically balanced impellers.
- Oil lubricated ball bearings.
- Back pull out design.
- Labyrinth seals on bearing supports to negate external contamination.
- Single, double and flushed seals.
- Optional Refrigerated seal chamber.
- SS with DX or Hastelloy options.



Positive Material Identification

Gruppo Aturia use the latest PMI equipment that allows customers to dispense with the need for 3.1 certificates and ensure that alloys such as Duplex Stainless Steel has the correct balance of properties.

Gruppo Aturia source castings from within Italy, and the UK.

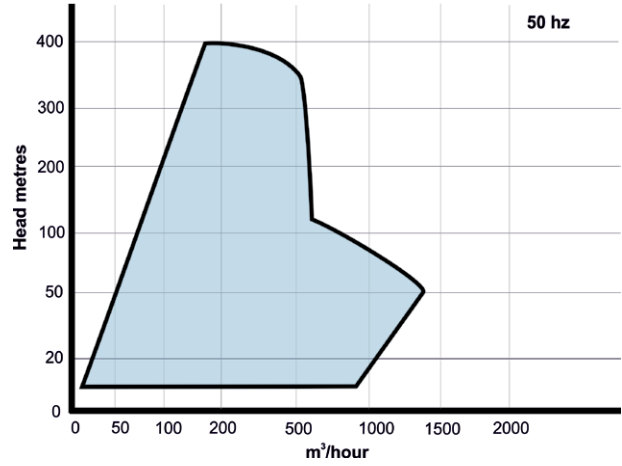


Mechanical Seal

SMKM

A range of single stage overhung process pumps to API 610 (OH2). Thrust is balanced by means of holes and wear rings in the back side of the impeller, residual thrust is absorbed by a double angular contact ball bearing selected for safe operation up to 100,000 hours. Also available as mag drive API 685.

- C Steel
- St Steel
- Duplex
- S Duplex
- CA6NM



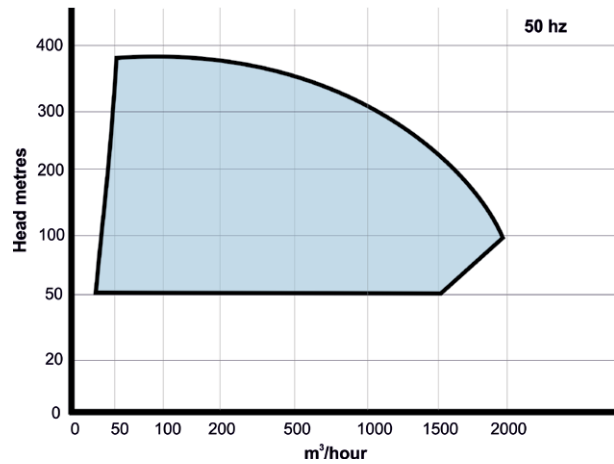
- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.
- All types of API seal catered for.



KSMKM

A range of split case between bearing process pumps to API 610 (BB2). KSMKM pumps can be constructed as two stage units. Also available as mag drive API 685.

- C Steel
- St Steel
- Duplex
- S Duplex
- CA6NM



- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.



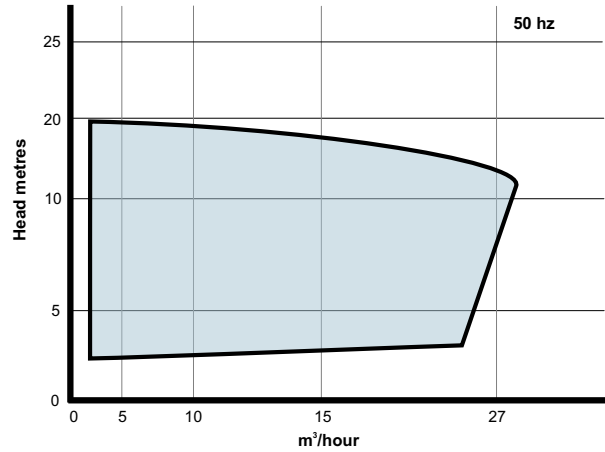


Magnetically Driven

SDM

Compact, sturdy and simple centrifugal transfer pumps made from 316 stainless steel designed to handle a wide range of acids, solvents, alkalis and refrigerants. Fitted with Samarium Cobalt magnets, SDM pumps can be configured to handle liquids up to 200°C.

- St Steel
- PTFE
- Carbon
- EPDM
- Viton
- FEP



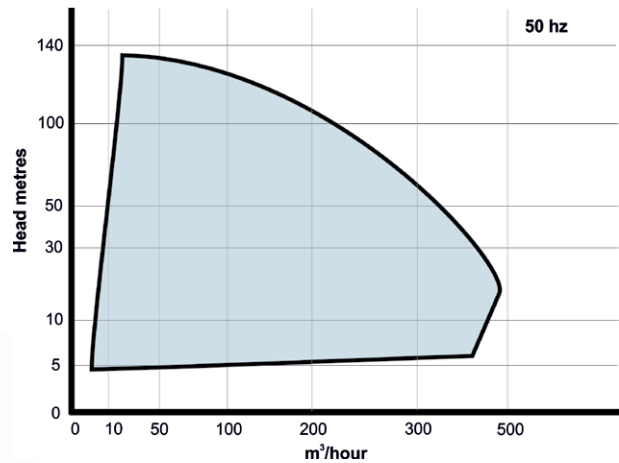
- No mechanical seals to leak or service.
- BSP, NPT, PN or ANSI connections.
- Can be mounted vertically.
- Vacuum welded internal magnets available.
- Can be constructed to suit off shore applications.



NDM

High quality magnetically driven ISO 2858 pumps. NDM pumps have hydraulically and hydro-statically balanced pump chambers and Hastelloy rear housings, Samarium Cobalt magnets and Silicon Carbide bearings as standard. They are available as either a long or close coupled construction.

- St Steel
- Hastelloy
- Duplex
- Titanium
- Alloy 20



- 1.5 mm rear housings.
- Oil lubricated ball bearings.
- Incoloy or Hastelloy constructions available.
- Back pull out design with screw-on impeller.
- Available with self cleaning filters.



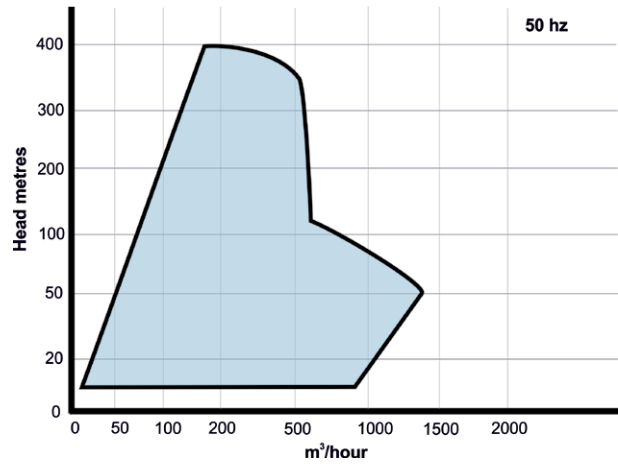


Magnetically Driven

SMKM-M

A range of single stage overhung process pumps to API 685 OH2. Thrust is balanced by means of holes and wear rings in the back side of the impeller, residual thrust is absorbed by a double angular contact ball bearing selected for safe operation up to 100,000 hours. Also available as mag drive API 685.

- St Steel
- Hastelloy
- Duplex
- Titanium
- Alloy 20



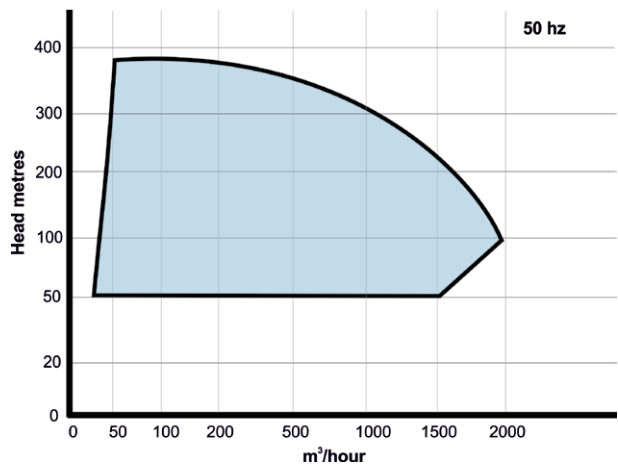
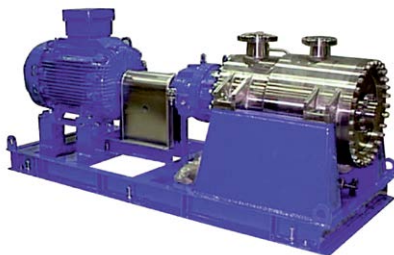
- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.
- All types of API seal catered for.



KSMKM-M

A range of single stage and two stage process pumps to API 685 BB2. Thrust is balanced by means of holes and wear rings in the back side of the impeller, residual thrust is absorbed by a double angular contact ball bearing selected for safe operation up to 100,000 hours. Also available as mag drive API 685.

- St Steel
- Hastelloy
- Duplex
- Titanium
- Alloy 20



- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.
- All types of API seal catered for.



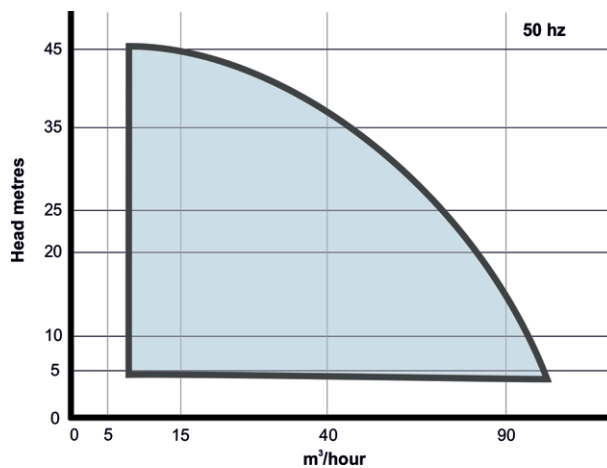


Magnetically Driven

PCM | PCM-V

Robust mag drive pumps machined from solid blocks of plastic. Being magnetically driven, PCM pumps have no drive seals to leak and their solid construction offers an alternative to lined pumps.

- PP
- PVDF
- PTFE
- Carbon
- EPDM
- Viton
- FEP



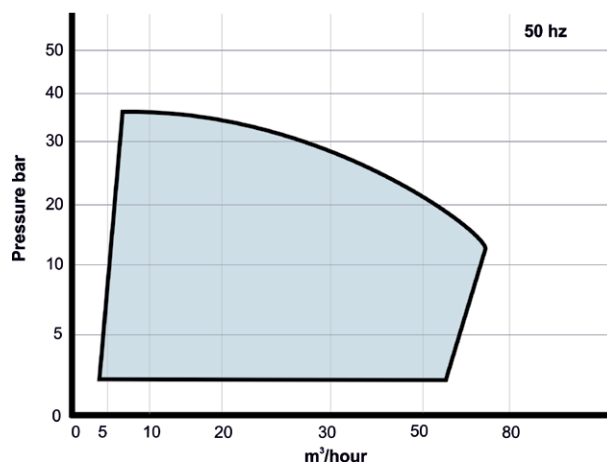
- Chemically resistant.
- PN10 or ANSI 150.
- Can be mounted vertically.
- PP - PVDF.
- Can be mounted vertically.
- Directly replace Caster MCH pumps



PCM-SP

Robust mag drive pumps machined from solid blocks of plastic. Being magnetically driven, PCM pumps have no drive seals to leak and their solid construction offers an alternative to lined pumps.

- PP
- PVDF
- PTFE
- Carbon
- EPDM
- Viton
- FEP



- Chemically resistant.
- PN10 or ANSI 150.
- PP - PVDF.
- Available as a vertical column pump.
- Directly replace Caster MCH pumps



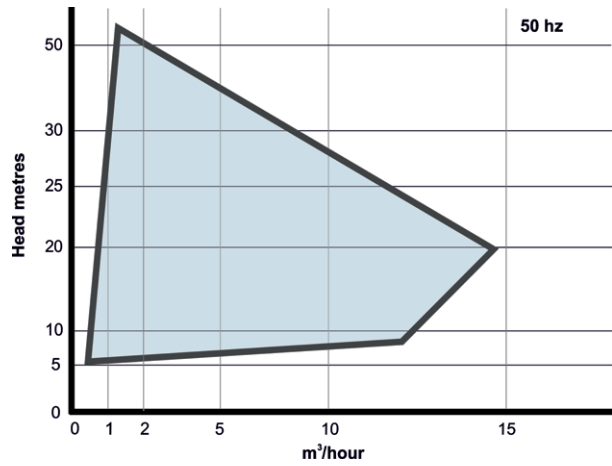


Magnetically Driven

PTM

Magnetically driven regenerative turbine pumps for low flow - high head duties. PTM pumps offer an extremely cost effective alternative to multi-stage pumps and are available with self priming chambers. Being magnetically driven the liquid is contained within a seal-less chamber that cannot leak.

- PP
- PVDF
- PTFE
- Carbon
- EPDM
- Viton
- FEP



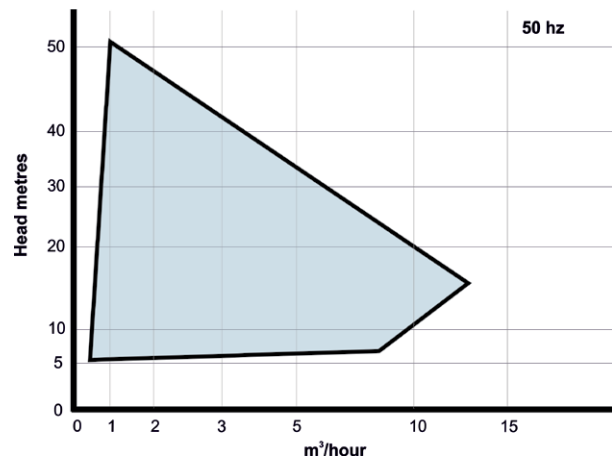
- No mechanical seals to leak or service.
- Chemically resistant.
- Threaded or flanged.
- Can be mounted vertically.
- Will pump 20% entrained gases.
- PP - PVDF.
- Directly replace castor MT pumps.



PTM-SP

Magnetically driven regenerative turbine pumps for low flow - high head duties. PTM pumps offer an extremely cost effective alternative to multi-stage pumps and are available with self priming chambers. Being magnetically driven the liquid is contained within a seal-less chamber that cannot leak.

- PP
- PVDF
- PTFE
- Carbon
- EPDM
- Viton
- FEP



- No mechanical seals to leak or service.
- Chemically resistant.
- Threaded or flanged.
- Can be mounted vertically.
- Will pump 20% entrained gases.
- PP - PVDF.



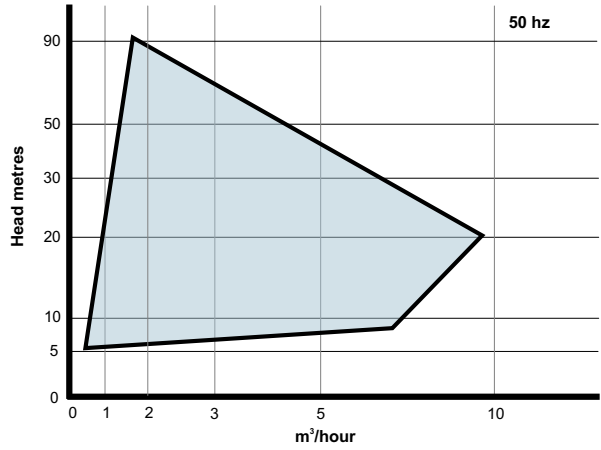


Magnetically Driven

STM

High specification regenerative turbine pumps for high heads/low flow applications. Because STM pumps are machined from solid metal, they offer an extremely wide range of design options and construction materials. Comply to API 685.

- St Steel
- Hastelloy
- Dup St St
- Titanium
- PTFE
- Carbon
- EPDM
- Viton
- FEP



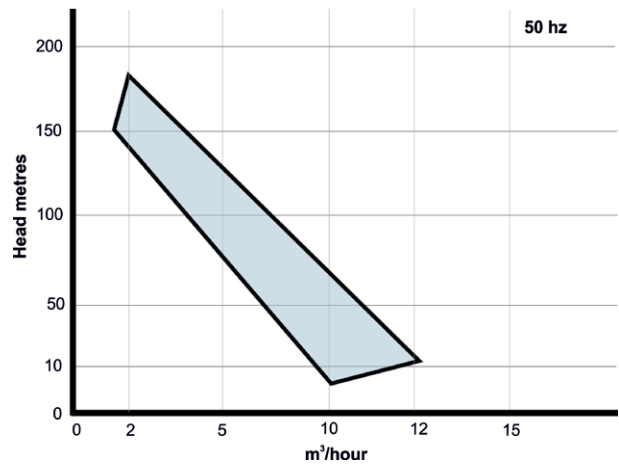
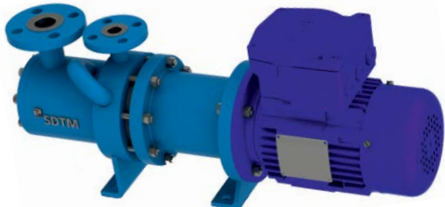
- No mechanical seals to leak or service.
- High system pressure capability up to 200 bar.
- Will pump up to 20% entrained gasses.
- Can be vertically mounted.
- Polished internal surfaces available.
- Threaded, Tri-Clamp, PN or ANSI flanges.
- Can be mounted vertically.
- Directly replace Caster MTA pumps.



SDTM

SDTM magnetic drive process pumps have been especially designed for liquefied gases such as NH₃, CO₂, LPG and butane. They particularly suit refrigeration applications due to their ability to cope with thin liquids and the containment provided by the magnetic coupling. Comply to API 685.

- St Steel
- Hastelloy
- Dup St St
- Titanium
- PTFE
- Carbon
- EPDM
- Viton
- FEP



- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.



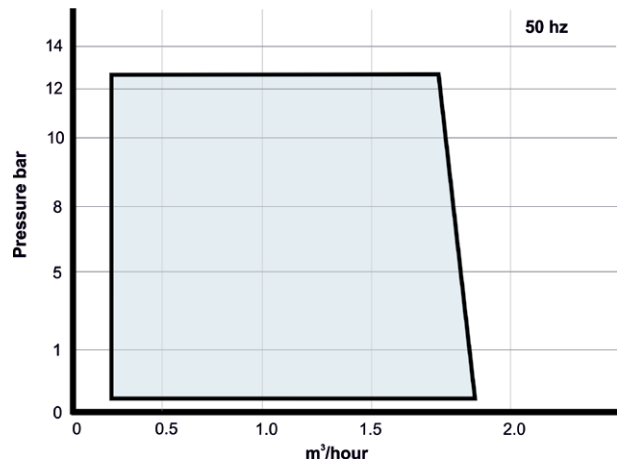


Magnetically Driven

SVM

Robust, high specification mag drive rotary vane pumps designed with a flow path which produces no pulsation. SVM pumps can be configured to a range of different applications and will pump fluids up to 300 °C.

- St Steel
- Carbon
- SiC
- EPDM
- Viton



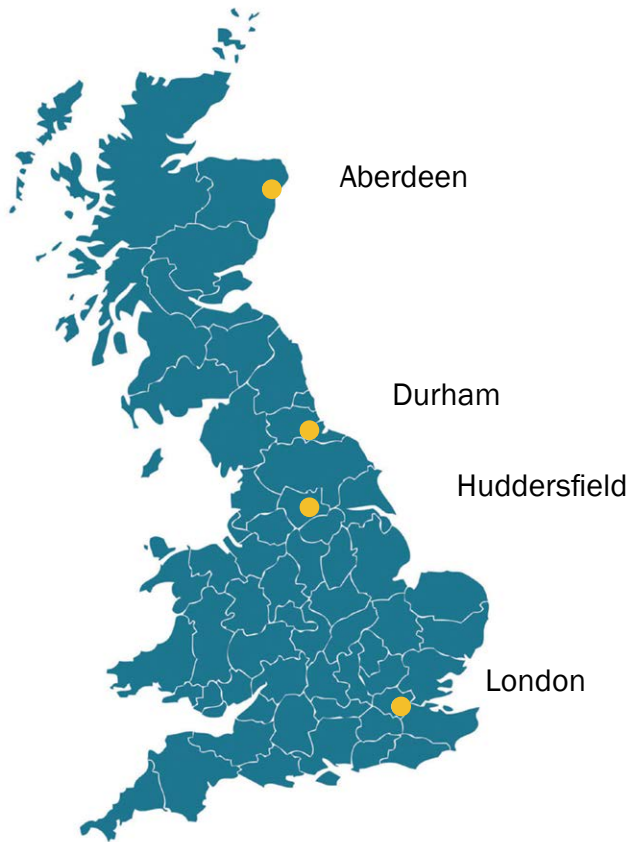
- High heads - low flows.
- Viscous or thin liquids.
- Available with metallized graphite.
- Dry running capability.
- Threaded, PN, Tri-Clamp or ANSI flanges.
- SS plus options of Duplex and Hastelloy.
- Directly replace caster



Gruppo Aturia absorbed the entire workforce of Caster Pumps several years which allows them to supply direct replacements for the majority of original caster models.

Caster		Aturia	
MPA 114	SS 316	SVM	1 x 100
MPA 214	SS 316	SVM	1 x 200
MPA 314	SS 316	SVM	1 x 300
MPA 414	SS 316	SVM	1 x 400
MPA 614	SS 316	SVM	1,5 x 550
MPA 814	SS 316	SVM	1,5 x 750
MPA 1014	SS 316	SVM	2 x 1000
MPA 1514	SS 316	SVM	2 x 1500
MPA 2014	SS 316	SVM	2 x 2000
MTA 25	SS 316	STM	1,5 x 6
MTA 37	SS 316	STM	2 x 7
MTA 49	SS 316	STM	2,5 x 8
MTA 78	SS 316	STM	2,5 x 8,5
MTA 1011	SS 316	STM	2,5 x 9
M 6.1	SS 316	SDM	2 x 8
M 10.1	SS 316	SDM	2,5 x 10
M 15.1	SS 316	SDM	3 x 12
M 30	SS 316	SDM	4 x 14

Caster		Aturia	
MCH 40/32	PP	PCM	3 x 12 PP
MCH 40/32	PVDF	PCM	3 x 12 PV
MCH 50/40	PP	PCM	4 x 13 PP
MCH 50/40	PVDF	PCM	4 x 13 PV
MCH 65/50	PP	PCM	5 x 16 PP
MCH 65/50	PVDF	PCM	5 x 16 PV
MCH 80/65	PP	PCM	6,5 x 17 PP
MCH 80/65	PVDF	PCM	6,5 x 17 PV
MCH 100/80	PP	PCM	8 x 18 PP
MCH 100/80	PVDF	PCM	8 x 18 PV
MT 3003	PP	PTM	2 x 5 PP
MT 3003	PVDF	PTM	2 x 5 PV
MT 5002	PP	PTM	2,5 x 6 PP
MT 5002	PVDF	PTM	2,5 x 6 PV
MT 5003	PP	PTM	2,5 x 6,5 PP
MT 5003	PVDF	PTM	2,5 x 6,5 PV
MT 7002	PP	PTM	2,5 x 7 PP
MT 7002	PVDF	PTM	2,5 x 7 PV
MT 7003	PP	PTM	2,5 x 7,5 PP
MT 7003	PVDF	PTM	2,5 x 7,5 PV
MT 9000	PP	PTM	2,5 x 8 PP
MT 9000	PVDF	PTM	2,5 x 8 PV
MT 12000	PP	PTM	3 x 9 PP
MT 12000	PVDF	PTM	3 x 9 PV
MT 16000	PP	PTM	3 x 10 PP
MT 16000	PVDF	PTM	3 x 10 PV



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