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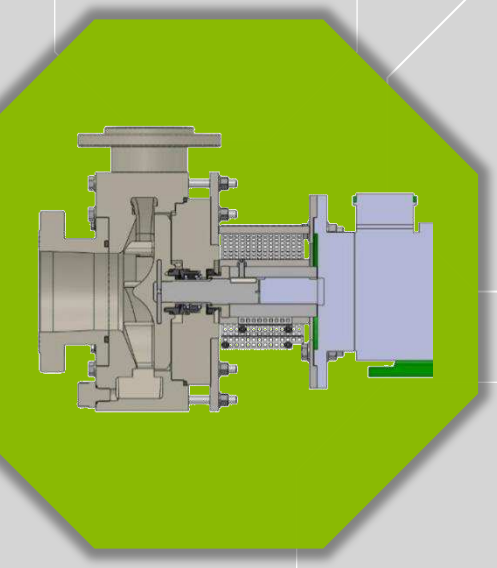
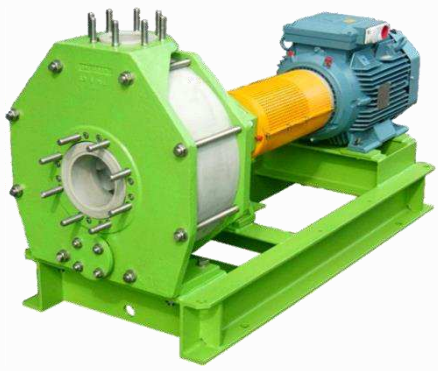
CEPIC

Anticorrosion since 1958

Anticorrosion Centrifugal Pumps





CEPIC sas, 445 rue Noyer des Bouttières, 76800 Saint Etienne du Rouvray - France
Tél: +33 2 32 82 37 82 - Fax: +33 2 32 82 37 88 - www.cepic.eu - cepic@cepic.fr

CEPIC

Anticorrosion since 1958

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CEPIC

CEPIC, specialist in anticorrosion centrifugal pumps

EXPERIENCE

Specialist since 1958 in the manufacture of anticorrosion chemical engineering equipment, CEPIC offers its customers a wide range of materials :

- ✓ **Centrifugal pumps in graphite and plastics**
- ✓ Heat exchangers in impregnated graphite
- ✓ Systems and skids (dilution of H2SO4, treatment of HCl, ejectors, vacuum units
- ✓ made-to-specification machined parts in graphite
- ✓ graphite rupture discs

EXPERTISE

Through our close collaboration with our clients, we have developed an incomparable amount of know-how.

We offer the best solutions for pumping corrosive liquids.

Our engineers are at your service to discuss your needs and propose solutions for pumps adapted to your applications and your sector of activity.

SOLIDITY

Our pumps are manufactured in Normandy, in St. Etienne du Rouvray, 120 km north-west of Paris.
Our recently-built factory has the highest-level technology for molding, impregnating, and machining, and our teams have extensive experience.
This combination of know-how and state-of-the-art technology allows us to produce sturdy pumps with particularly low carrying costs.

REACTIVITY

Our sales team is always happy to discuss the materials and constructions that will best respond to your needs.
As part of our full service offer, our new pumps include high-level after-sales service (repairs carried out on our premises and genuine spare parts.)
Our specific technical follow-up of all pumps we install guarantees fast service when it comes to supplying spare parts, even several dozen years after the initial implementation.

APPLICATIONS

CEPIC's centrifugal pumps are used on all 5 continents, in the most demanding applications:

 Waste management  Chemicals

 Iron & Steel  Surface treatments

 Fetrilizers  Pharmaceuticals

CEPIC

Materials : the liquids only come into contact with anticorrosion materials

CARBONITE® :

An impregnated artificial graphite which can be used at temperatures of up to 170°C, presenting a low dilatation coefficient, considerable geometric stability, and an excellent resistance in most corrosive environments.

PVDF (Polyvinylidene fluoride)

Essential characteristics of this material: its thermoplasticity which makes it easy to use; its remarkable thermal stability at temperatures of between -50°C and +150°C; its mechanical resistance which is far superior to ordinary thermoplastics; its very good resistance to abrasion and its excellent resistance to most corrosive agents.

PP (Polypropylene)

Frequently-employed anticorrosion material that is easy to use. Excellent mechanical resistance up to a temperature of 90°C; good resistance to acid and basic agents and some solvents.

PE (Polyethylene)

Excellent resistance to impact, even at very cold temperatures; good chemical resistance to acids and some solvents; usage temperatures from -50 to +80°C; very good resistance to abrasion.

PTFE (Polytetrafluorethylene)

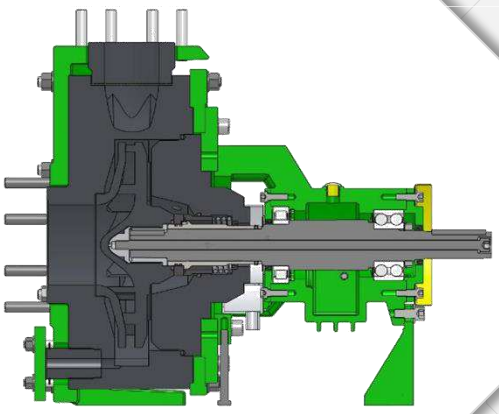
Excellent chemical inertia; can be used at a temperature range of up to 120 or 150°C (either pure or charged). Its particular usage characteristics mean that this material must be reserved for specific

GUIDE TO SELECTION

Type	Standardized Horizontal Pumps PHN	Close coupled Pumps PMC	Magnetic Drive Pumps PEM	Vertical Unfitted Pumps PV	Submersible Vertical Pumps PVI
Min/max flow (m3)	2-700	2-300	2-150	5-400	**5-200**
Max head (mcl)	130	60	60	45	**45**
Temperature range	-40 / 165°C	-30 / 80°C	-30 / 80°C	-40 / 140°C	**-30 / 80°C**
Materials	Carbonite® PVDF, PP, HDPE, PTFE	PVDF, PP, HDPE,	PVDF, PP, HDPE,	Carbonite® PVDF, PP, HDPE,	**Carbonite® PVDF, PP, HDPE,**
Resistance to abrasion	+++	++	o	++	++
Sealing	Simple /double mechanical seal	Simple /double mechanical seal	Magnetic drive	Dynamic	**Dynamic**
Solidity	+++	++	+++	++	+++
Interchangeability with market standards	+++	+++	++	o	o

+++ perfectly adapted ++ adapted o unsultable

STANDARDIZED HORIZONTAL PUMPS, TYPE PHN



Construction

Single-stage horizontal centrifugal pump, single, in conformity to EN 22858 / ISO 2858 standards Sold either with unfitted cam shaft, or fitted with couplingbaseplate and motor.

Capacity

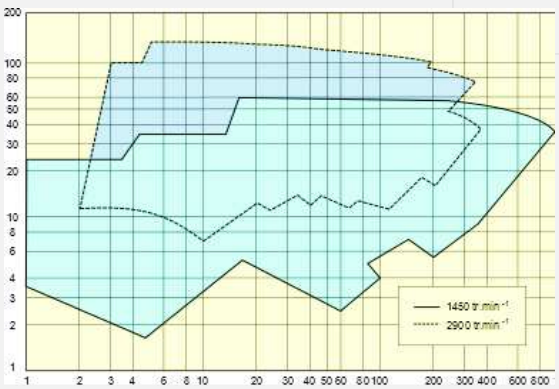
Flow (Q)	up to : **700 m³/h**
Head (HMT)	up to : **130 m**
Temperature	**-30°C** to **+165°C**
Pressure	up to : **13 bars**
Connection	**DN 32** to **DN 200**
Engine	up to : **200 kW**

Hydraulic materials

- PP
- PE-UHMW
- PE-HD
- PVDF
- PTFE
- Carbonite®

Options

- Intermittent or continuous rincing
- Specific sealing materiels
- Filling of the oil sump
- Dry run detection
- ATEX construction as per 94/9/CE
- ANIS flanges



Advantages

- ✓ Solidity
- ✓ Not sensitive to the direction of motor rotation
- ✓ Easy maintenance
- ✓ No nose impeller

Applications

MONOBLOC PUMPS, TYPE PMC

Construction

Single-stage close coupled horizontal centrifugal pump

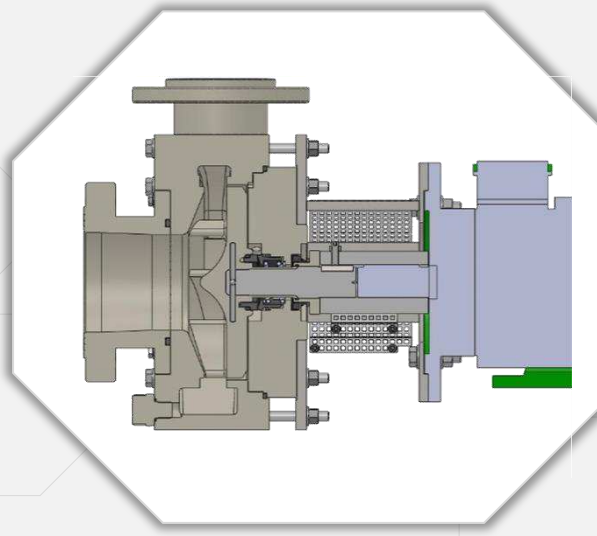
Direct coupling to the motor via a rigid sleeve

Capacity

Flow (Q)	up to : **300 m³/h**
Head (HMT)	up to : **60 m**
Temperature	**-30°C** to **+80°C**
Pressure	up to : **6 bars**
Connection	**DN 32** to **DN 125**
Engine	up to : **15 kW**

Hydraulic materials

- PE-HD
- PVDF
- PP
- PE-UHMW

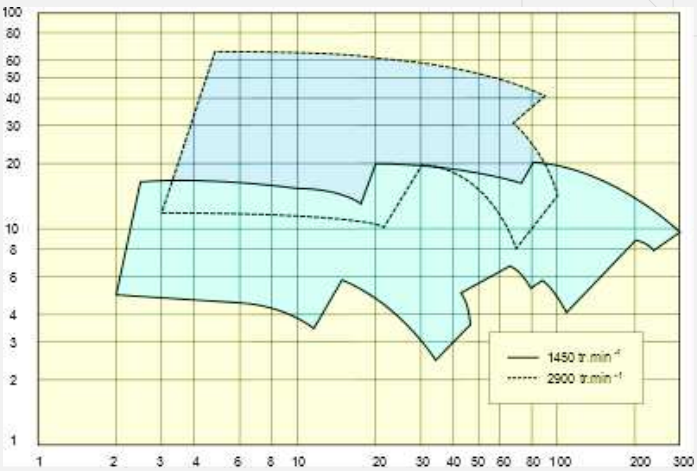


Sealing

Reverse simple mechanical seal SiC – SiC
or SiC – Carbon

Impeller

Semi-closed type impellor



Options

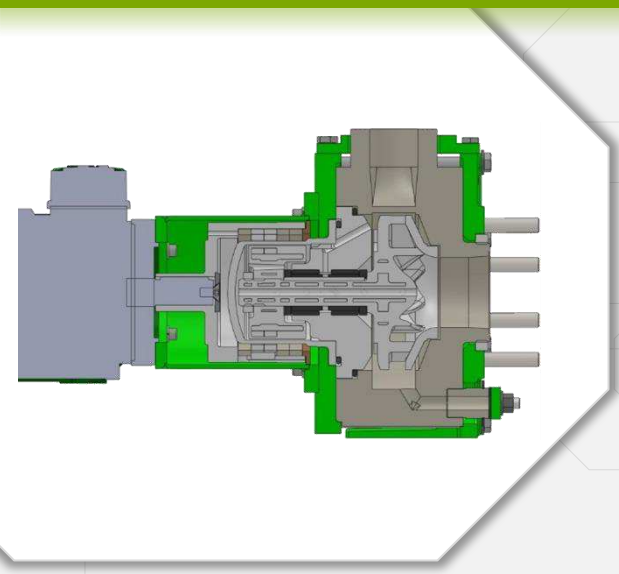
- Intermittent or continuous rinsing
- Dry run detection
- ATEX construction as per 94/9/CE
- Threaded, splined, Union connectors

Advantages

- ✓ Economical construction
- ✓ Not sensitive to motor rotation direction
- ✓ Easy maintenance
- ✓ No nose impeller

Applications

MAGNETIC DRIVEN PUMPS, TYPE PEM



Construction

Single-stage horizontal magnetic driven centrifugal pump. Close coupled design or standardized design. Samarium cobalt magnets.

Capacity

Flow (Q)	up to : **300 m³/h**
Head (HMT)	up to : **60 m**
Temperature	**-30°C** to **+80°C**
Pressure	up to : **6 bars**
Connection	**DN 32** to **DN 125**
Engine	up to : **15 kW**

Hydraulic materials

- PP
- PE-UHMW
- PE-HD
- PVDF

Buschings materials

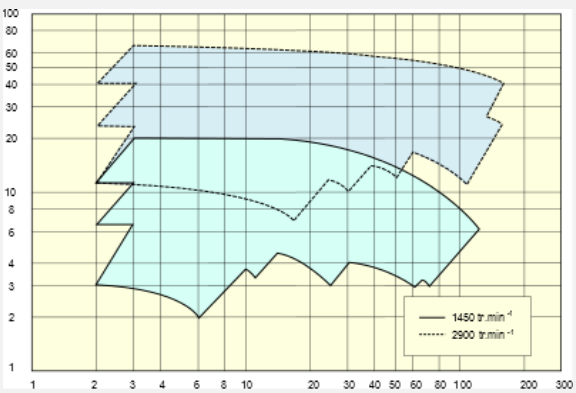
- ✓ SiC/SiC
- ✓ SiC/Carbon

Sealing canister materials

- ✓ PVDF
- ✓ Carbon-fiber reinforced PDVF

Impeller

Closed type impeller



Options

Standardized version sold either as bare shaft pump, or fitted with coupling, baseplate and motor. ATEX construction as per 94/9/CE

Advantages

- ✓ No rotor sealing
- ✓ Maximal safety in use
- ✓ Solidity

Applications

Construction

Single-stage vertical centrifugal pump,
Close coupled or with intermediate bearings housing depending on size
Dynamic sealing by discharge turbine
Semi-closed impeller

Hydraulic materials

- ✓ Impregnated graphite Carbonite®
- ✓ PP
- ✓ PE-HD &UHMW
- ✓ PVDF

Capacity

Flow (Q)	up to : **400 m³/h**
Head (HMT)	up to : **45 m**
Temperature	**-40°C** to **+140°C**
Connection	**DN 32** to **DN 150**
Engine	up to : **132 kW**

Advantages

- ✓ Simple construction
- ✓ Easy maintenance
- ✓ Totally insensitive to dry run solidity

Applications

SUBMERSIBLE VERTICAL PUMPS, TYPE PVI

Construction

Single-stage vertical centrifugal pump, submersible
Cantilever or with lower level bushings depending on size and submersion depth
Semi-closed impeller

Hydraulic materials

- ✓ Impregnated graphite Carbonite®
- ✓ PP
- ✓ PE-HD &UHMW
- ✓ PVDF

Capacity

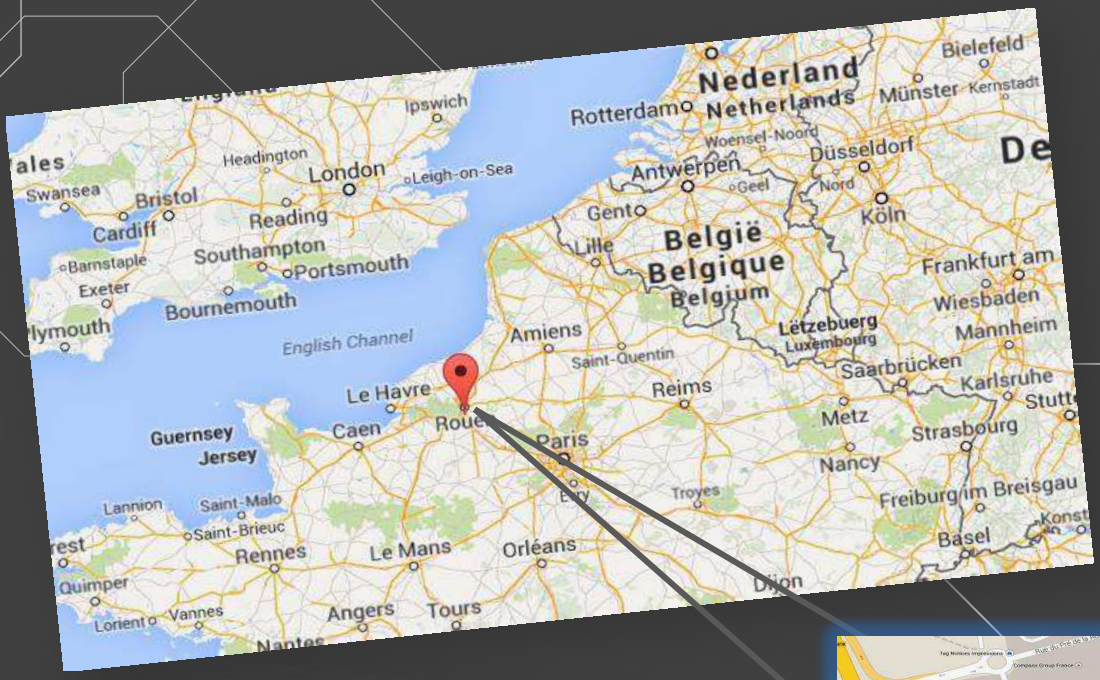
Flow (Q)	up to : **200 m³/h**
Head (HMT)	up to : **45 m**
Temperature	**-30°C** to **+80°C**
Connection	**DN 32** to **DN 125**
Engine	up to : **132 kW**
Max Submension	**up to 3 meters**

Advantages

- ✓ Metallic plate flange with anticorrosion coating
- ✓ Design can be adapted to products added

Applications

445 rue Noyer des Bouttières Saint Etienne du Rouvray



By car Paris, Highway A13, exit 22.
By train from St Lazare -> Oissel

Other CEPIC equipment available:

- Anticorrosion centrifugal pumps in Carbonite® or plastics,
- Systems and skids (dilution of H2SO4, treatment of HCl, ejectors, vacuums
- Standard or made-to-specifications stirrers and shakers
- Machined to specification graphite parts
- Carbonite® rupture discs

CEPIC

Anticorrosion since 1958

Agent/Distributor :

CEPIC sas, 445 rue Noyer des Bouttières, 76800 Saint Etienne du Rouvray - France
Tél: +33 2 32 82 37 82 - Fax: +33 2 32 82 37 88 - www.cepic.eu - cepic@cepic.fr