

Pipeliners

A cost effective way
to protect pumps reliably



Keep it
moving



The existing benefits of Effective Pump Protection with a proven concept, now even more...

- Versatile
- Reliable
- Competitive through lower cost of ownership
- Durable
- Easy to maintain

Benefits

Of the equipment

- lower running costs
- optimal cutting performance
- less power requirement
- higher performance
- fewer spare parts
- easier to maintain
- reduced downtime for routine servicing

For the process

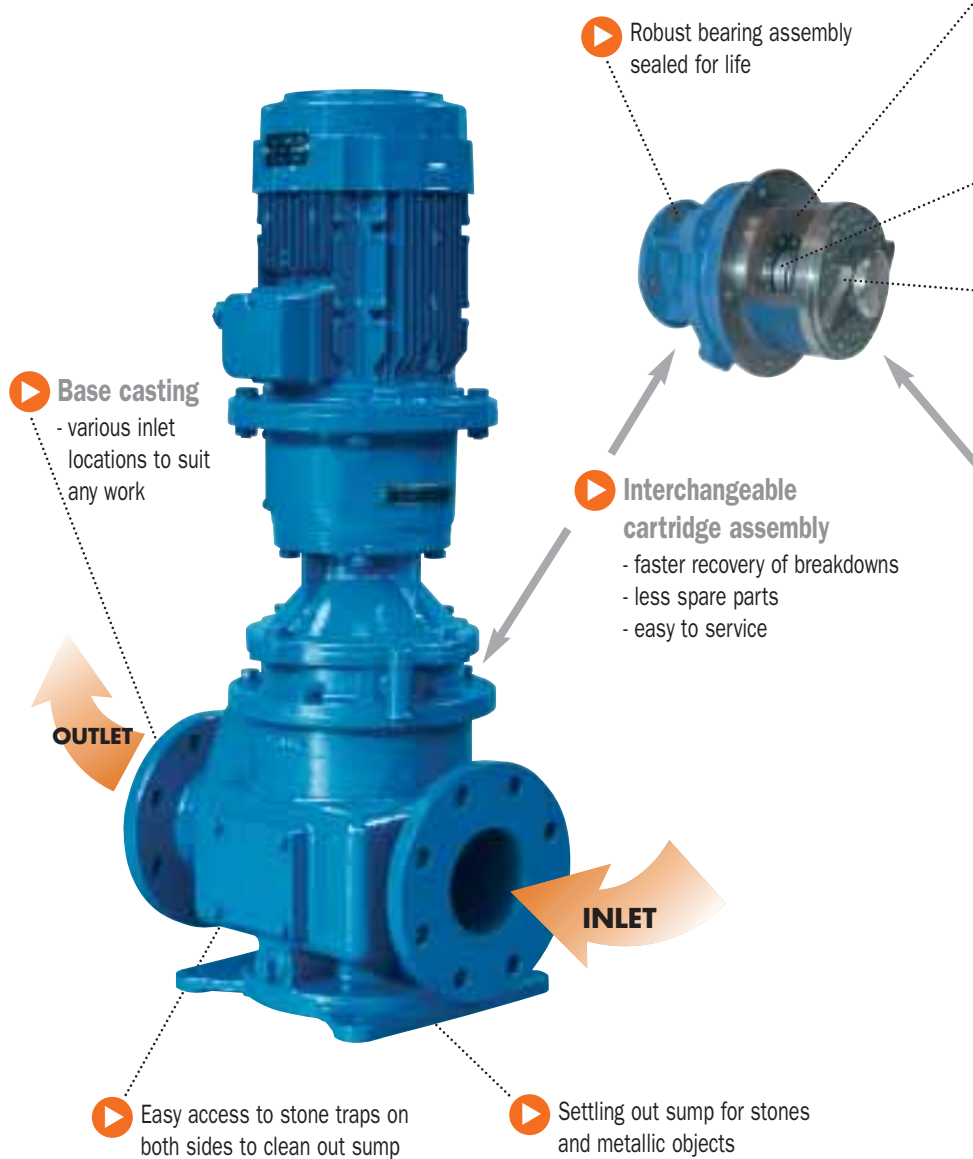
- protection of the pump reliability
- creation of a pre-conditioned medium
- replacement for in-flow grinders

Construction

- body cast iron
- headstock alloy steel
- shearplates alloy steel
- cutters tungsten carbide
- various hole size available for the shearplates

Option

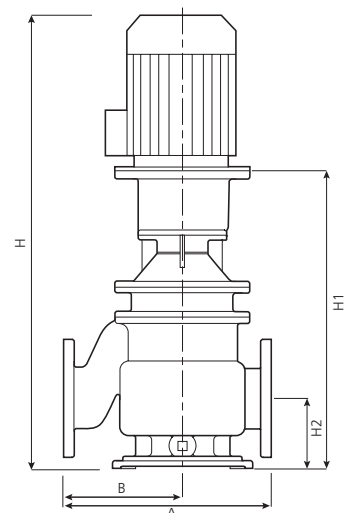
- headstock stainless steel
- shearplates stainless steel
- wetted parts stainless steel
- wetted parts austenitic cast iron (for sea water application)



Outer dimensions

Inline entry (code S)

| | 152 D 15 | 152 D 20 | 302 D 30 | 552 D 30 | 551 D 40 | 751 D 40 |
|-------------|----------|----------|----------|----------|----------|----------|
| A | 385 | 385 | 500 | 500 | 640 | 640 |
| B | 220 | 220 | 290 | 290 | 310 | 310 |
| C | 274 | 274 | - | - | 620 | 620 |
| D | 220 | 220 | 270 | 270 | 500 | 500 |
| E | 220 | 220 | 270 | 270 | 500 | 500 |
| F | 274 | 274 | 320 | 320 | 540 | 540 |
| G | 260 | 260 | 320 | 320 | 540 | 540 |
| H | 826.5 | 870.5 | 1102 | 1140 | - | 1434 |
| H1 | 554.5 | 554.5 | 730 | 730 | 800 | 800 |
| H2 | 132 | 132 | 160 | 160 | 200 | 200 |
| DN inlet | 100 | 100 | 150 | 150 | 200 | 200 |
| DN outlet | 100 | 100 | 150 | 150 | 200 | 200 |
| Weight (kg) | - | - | - | - | - | 390 |



Pump protection for all water works

▶ Precision mechanical seal running in oil bath

▶ Stainless steel sleeving fully protects shaft from medium

▶ **Spring mechanism**

- new cutter assembly
- self compensating mechanism
- double protection of the spring for longer performance
- smaller assembly

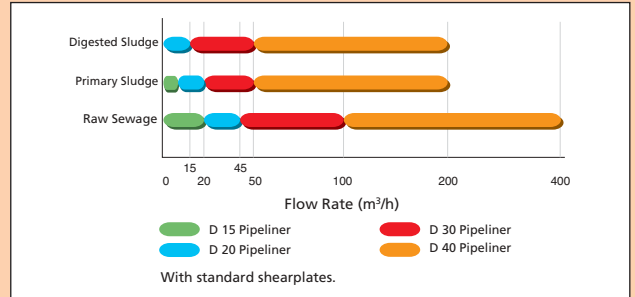
▶ **Shearplate and headstock assembly**

- replaceable on site
- more efficient cutting assembly
- designed for a smother cut



▶ Rotating headstock with tungsten carbide blades

Performance chart



Selection table

| | | D 15 | D 20 | D 30 | D 40 |
|-----------------|-----------|------|------|------|------|
| Raw Sewage | P (kW) | 1.5 | 1.5 | 3 | 5.5 |
| | rpm | 1440 | 960 | 960 | 250 |
| | Flow max. | 20 | 45 | 100 | 400 |
| Primary Sludge | P (kW) | 1.5 | 1.5 | 5.5 | 7.5 |
| | rpm | 1440 | 960 | 960 | 460 |
| | Flow max. | 10 | 20 | 50 | 200 |
| Digested Sludge | P (kW) | - | 1.5 | 5.5 | 7.5 |
| | rpm | - | 960 | 960 | 460 |
| | Flow max. | - | 15 | 50 | 200 |

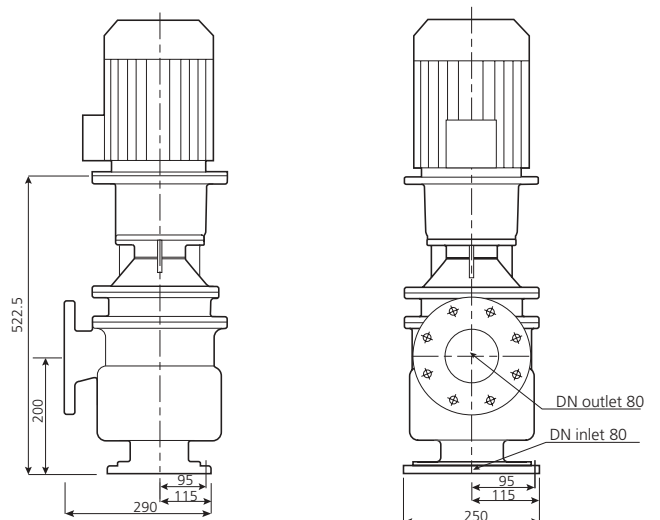
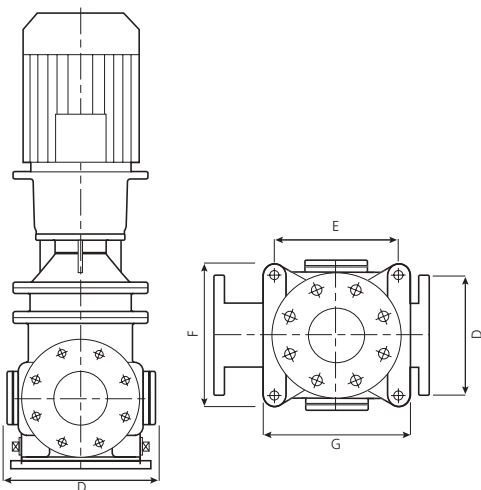
Flow in m³/h

Base selection

| | | Operation | Code | D 15 | D 20 | D 30 | D 40 |
|-------------------|------------------------|-----------|------|------|------|------|------|
| Standard base | In line entry → □ → | S | ✓ | ✓ | ✓ | ✓ | |
| | Bottom entry ↑ □ → | SB | ✓ | ✓ | ✓ | | |
| Bottom entry base | Bottom entry ↑ □ → | B | ✓ | ✓ | | | |

✓ Available

Bottom entry for D 15 and D 20 (code B)



Applications

Designed to fit with new water plants
or as a retro-fit for old pipeliners:

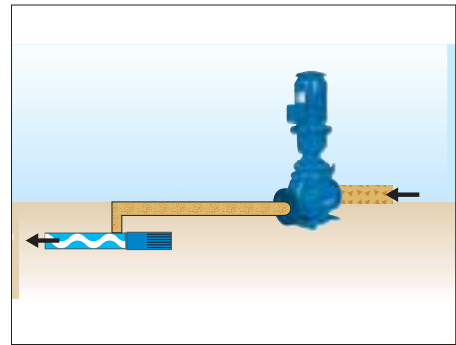
- pump protection from fibres and long particules
- improvement of preconditioning in the primary treatment
- replacement for in-flow grinders
- specially designed for sludge applications
 - primary sludge
 - biological sludge
 - digested sludge

Suitable for other applications

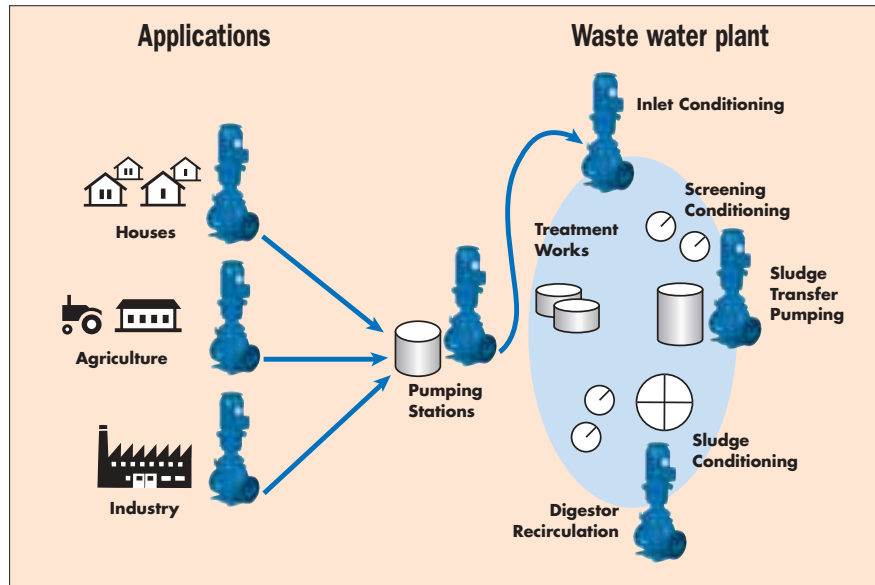
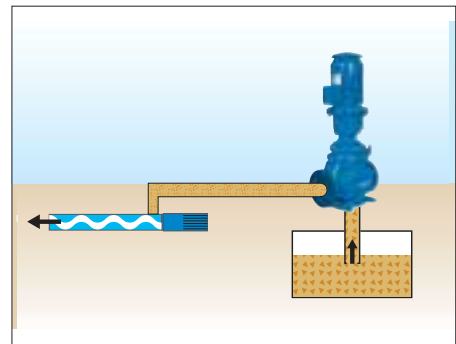
- protection for pumping stations on raw sewage
- maceration and mixing in industries (paper - breweries food - agriculture - oil...)

Typical installations

- In line circulation
(ie: recycling of digested sludge)



- Bottom entry for sewage
(ie: pumping station)



Sludge recycling: Porto-Freixo and Versailles-Sevesc



Dewatering mobil unit



Head Office:

PCM S.A.

17 rue Ernest Laval - BP 35
92173 VANVES Cedex
FRANCE

Tel : 33 (0)1 41 08 15 15

Fax : 33 (0)1 41 08 15 00

Internet : www.pcm.eu

E-mail : contact@pcm.eu