RODELTA®

# PUMP SOLUTIONS FOR FLOODING AND STORM WATER MANAGEMENT

Specialised solutions for leading industries

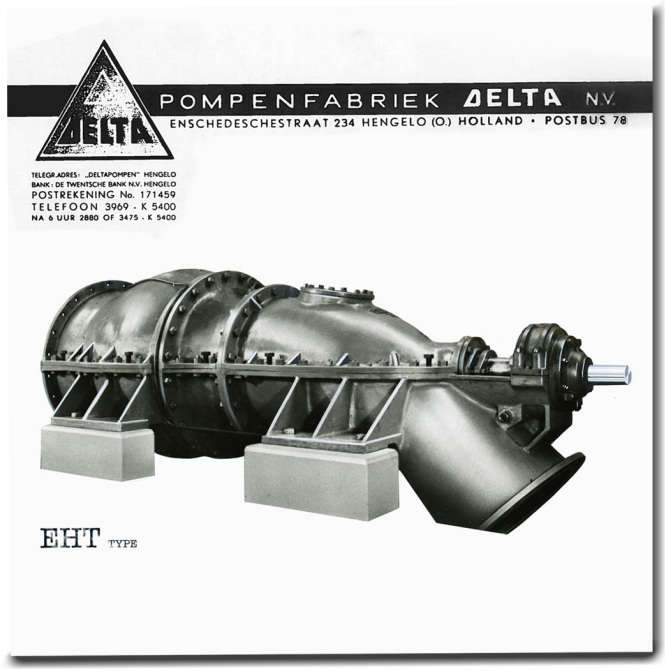
distinctive vision


Entrance main building
Rodelta Pumps International B.V.
On the A35 highway at Almelo,
( Exit 30 )

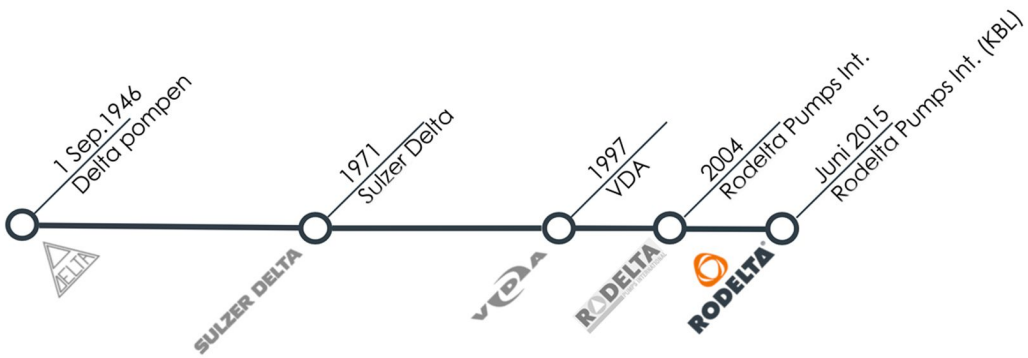
# RODELTA STORM WATER AND FLOOD MANAGEMENT PUMP SOLUTIONS

Rodelta has been designing and manufacturing pumps suitable for various industries since 1946. All Rodelta products are characterized by smooth operation throughout the life cycle of the products. In addition to pumps for the drinking water industry, energy and gas industries,

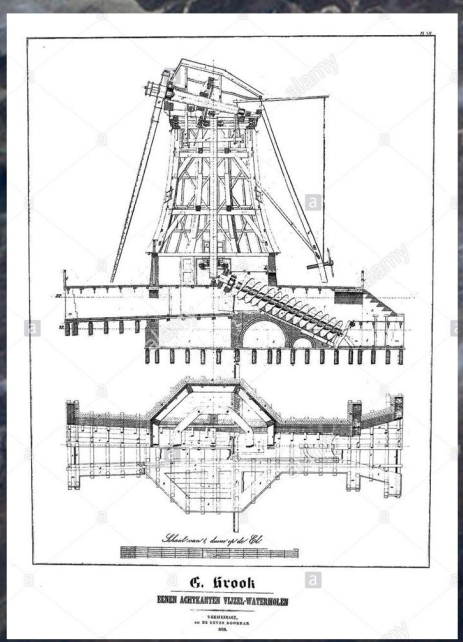
Rodelta has an extensive portfolio of pumps suitable for (storm) water management and flood control. Due to the complexity of water management, each scenario at each pumping station requires a custom solution. The engineering department at Rodelta offers the possibility to satisfy specific hydraulic and mechanical needs. Our engineers are highly experienced in designing pumps for pumping stations and regularly advise during the early stages of development of these pumping stations. This often leads to new perspectives of all parties involved, supporting essential design choices.




*Rodelta pumps in former times called Delta Pumps*




distinctive vision



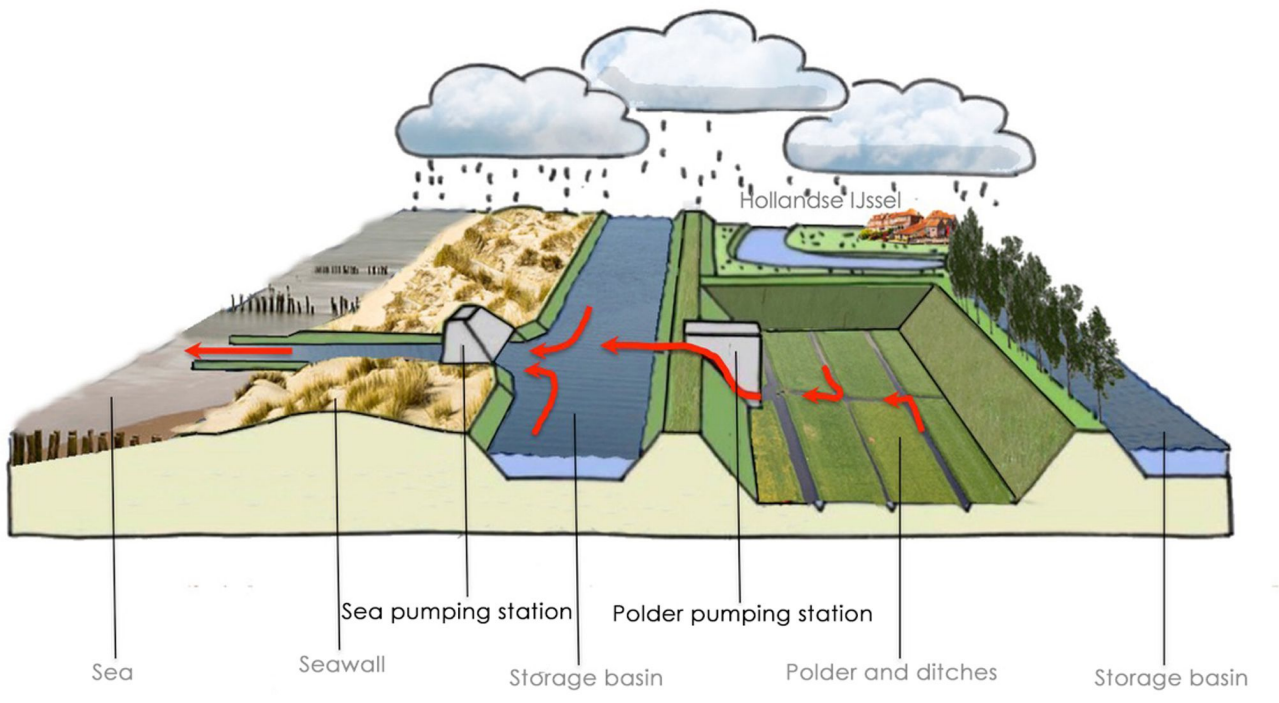

*Old Dutch mill with mortar*
*15th century.*

# CUSTOMIZED SOLUTIONS

The Netherlands is located in the delta-region, where large European rivers mouth into the North Sea. Because of its geographical location, the country has been fighting high and flood tides for centuries. Consequently, a lot of experience has been gained in the field of water management. Especially the development and realization of pumping stations, which regulate the water level in the Netherlands is mastered, it becomes clear that good water management is crucial for the society in the country due to continuously rising sea levels. Partly due to urbanization and the growing population (density) in combination with more severe weather conditions, the number of pumping stations increases each year.

The infrastructural networks of waterways, sluices, roads and other constructions such as bridges and viaducts in polders become increasingly more complex. Consequently, the network of pumping stations needs to be adapted and expanded to properly manage the water

A nature reserve area requires a completely different regulation of water levels, compared to farming fields or pastures. Polder pumping stations are used to pump excess water from these areas into storage basins, canals or lakes. From these basins the water can be discharged to the sea at low tide through sluices. If the sea level is above the water level in the basin, the water can only be discharged by means of pumping stations in the basins. This is a common occurrence in the Netherlands, as approximately 26 % of the main land is located below sea level. Therefore, all Dutch water boards require custom solutions in order to regulate the water levels. Rodelta offers engineering support and is capable of supplying a wide range of pumping station solutions, ensuring reliable and efficient water level management. In addition, Rodelta addresses ecological aspects of these pumping stations and each solution is available with fish passable hydraulics, which ensures save fish migration through our extensive network of pumping stations.



# RODELTA AIDS FISH ON THEIR JOURNEY

## HYDRAULIC NATURE APPLIED FOR THE BENEFIT OF NATURE

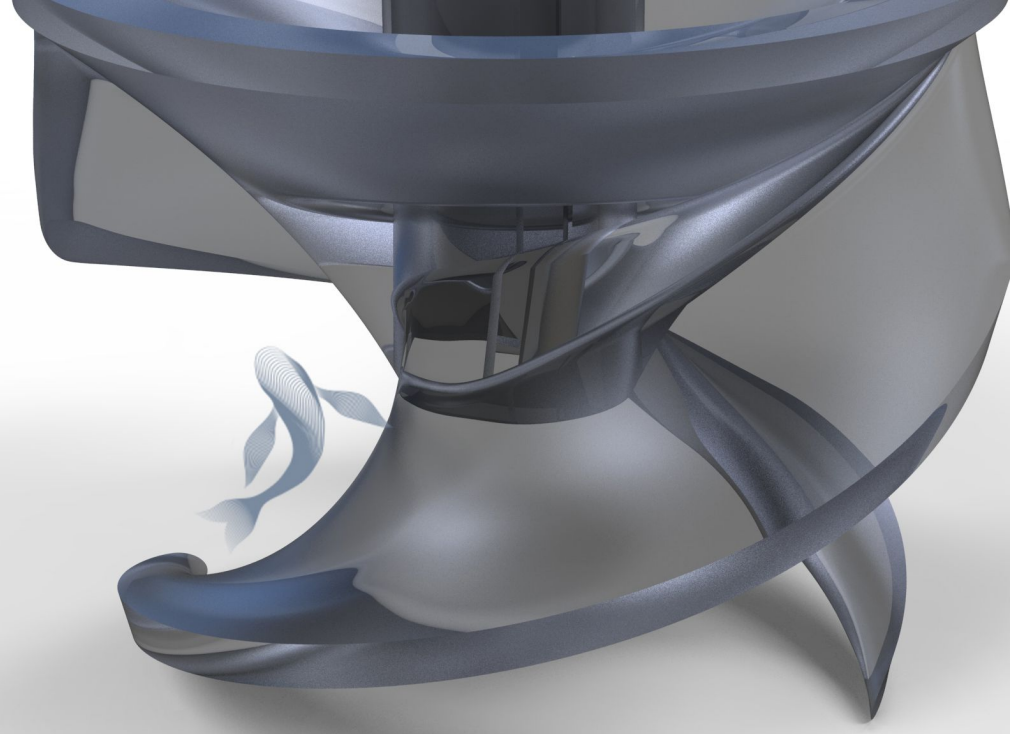
Rodelta is experienced in developing fish friendly pumping stations, such that fish can safely migrate between rivers, streams, ditches and even between salt and fresh water in order to reproduce, feed or avoid predatory fish. For example, eels move as much as 6.000 kilometers to reproduce, all the way across the Atlantic to the Sargrasso sea. Adolescent eels migrate back to Europe to fully mature in European rivers.


These fish encounter many obstacles along their journey many of them being pumping stations. Pumping stations are essential for the Netherlands in order to regulate the water level in ditches, canals, rivers and lakes. Omitting these pumping stations is not feasible due to their crucial function. Rodelta develops solutions for pumping stations that ensure save fish passages while the maintaining an efficiently functioning pumping station.

The ecological balance of nature is maintained by allowing various fish species to migrate between their natural habitats. Together we create a more diverse and better world, prioritizing nature once again, facilitated by clever design techniques.

DISTINCTIVE VISION

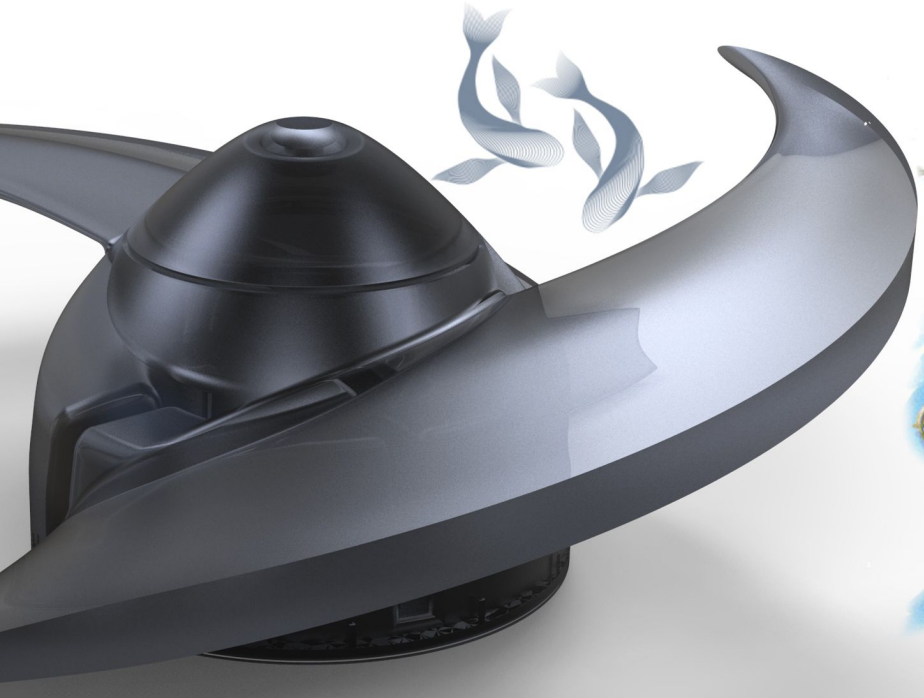
RODELTA
FISH PASSABILITY

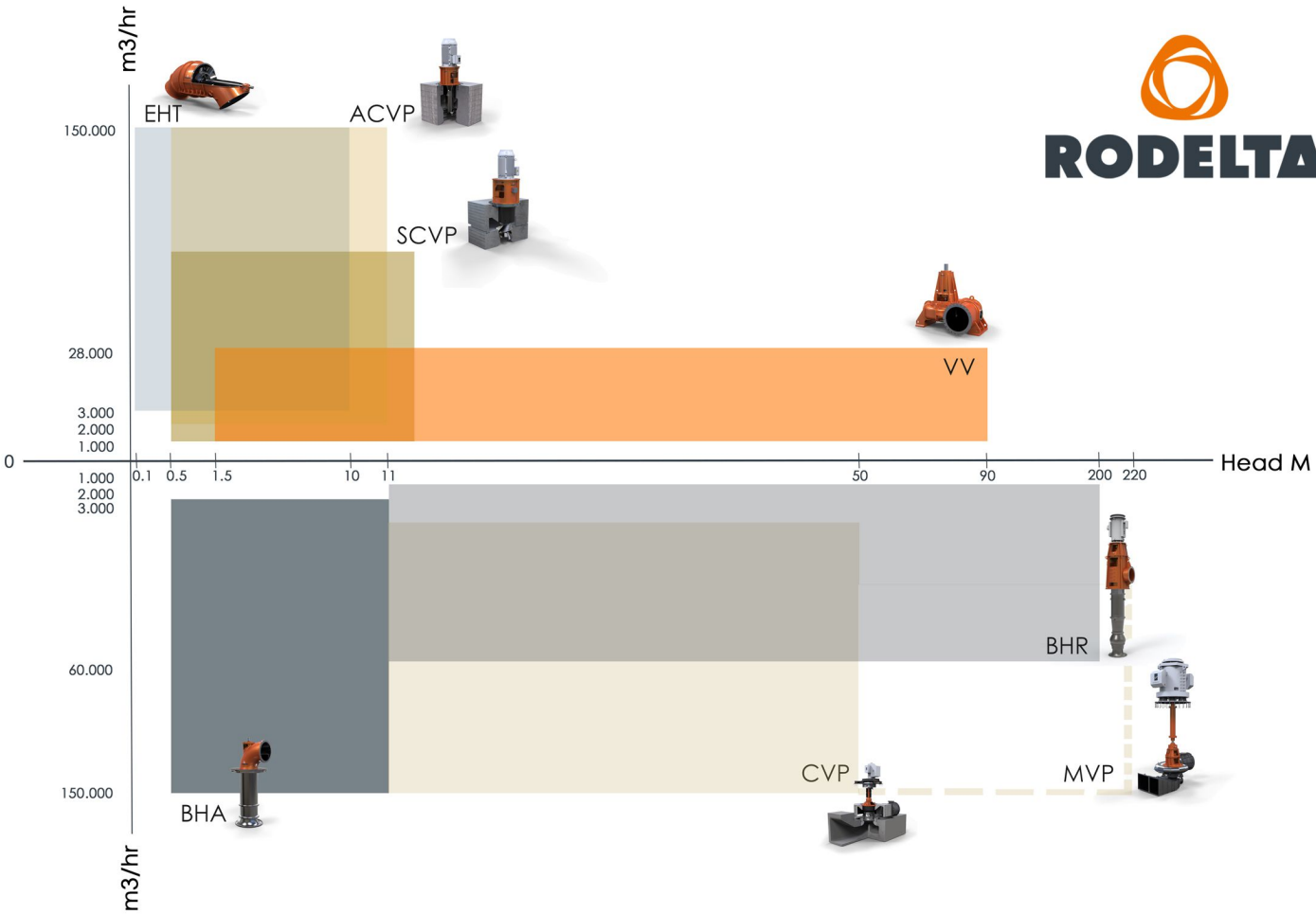


# RODELTA HYDRAULICS AND FISH PASSABILITY

## EXPERIENCE IN EACH DISCIPLINE IN OUR INDUSTRY

The hydraulic department of Rodelta is one of the leading pump technology centers in the world. Our highly skilled team of engineers are capable of swiftly supplying high level custom engineered pumping solutions, that have proven their validity in practice. The department cooperates closely with the University of Twente in the field of Fluid Mechanics and Computational Fluid Dynamics (CFD). Students regularly carry out their (final) thesis on these topics at Rodelta, where the hydraulic department closely supervises the students. In addition to the extensive hydraulic knowledge, our engineers are highly experienced in fish passability of pumps. The Dutch standard for fish passability (NEN 8775) is established with close cooperation of our engineers. Fish passability is a complex subject and cannot be summarized in a few sentences, we would like to invite you to personally discuss this topic instead. Please feel free to make an appointment with our sales department.






# SELECTION CRITERIA

Selecting a suitable pump depends on the requirements and the scenarios in which a pump has to operate. The characteristic parameters of each pump type determine whether or not it is suitable to fulfil the requirements

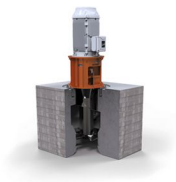
The pump efficiency is of a major importance and can be interpreted in various ways by different manufactures and organizations. Efficiency may indicate the pump efficiency, the system efficiency or the impeller efficiency. These interpretations of the word efficiency may be of major importance when selecting a pump (solution). Criteria such as construction and lift clearance of the rotor unit have a significant impact on the to be developed pumping station. The cost per unit volume is considerable, especially when construction is required to be underground. These costs increase with tough soils such as swamp lands or bedrock

Due to its critical function, the reliability and the KPI factor is highly important to pumping stations and the selected pump (solution). An example is the Rodelta EHT pump, which is a horizontal dry-lined axial pump, often referred to as an elbow pump. The main characteristic of the pump is its placement on the top of a dike. No valves are required in the suction and discharge side of the rotor to ensure no cross flow between both sides of the dike. This is a clear advantage of this pump type when reliability is absolutely required.

Due to the geographical layout of the Netherlands, there are few natural height differences. Pumping stations require little total dynamic head as a result. Parameters such as pipe resistance have a major influence on the efficiency of the pump. As an example, a total dynamic head of 60 cm with 15 cm of resistance losses yields a 25 % loss of energy. This yields significant operating costs when considering the costs of energy.

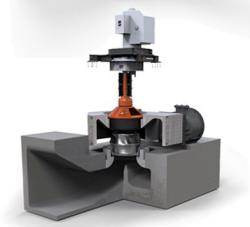
This example demonstrates the significance of one of the many parameters. It can be stated that pumping stations contain many criteria that influence the selection of a pump (solution). By means of concrete and clear examples our specialists create awareness to aspects partners may have never previously considered. After all, Rodelta's range of pump station solutions is extensive. Rodelta is convinced that the Total Cost of Ownership should be the main aspect when selecting a pump (solution).

**EHT (Elbow pump)**
Rodelta EHT is a single-stage, axially divided, axial flow pump commonly known as the "elbow" pump.
*- Page 10/11 -*



**ACVP (Axial Concrete Volute Pump)**
Rodelta ACVP (Axial Concrete Volute Pump) is a vertically dry mounted, single stage, axial flow pump employing a spiral pre-fabricated concrete volute casing.
*- Page 12/13 -*

**SCVP (Single-vane Concrete Volute Pump)**
Rodelta SCVP (Single-vane Concrete Volute Pump) is a vertical dry pit, single stage,mixed flow pump with a pre-fabricated volute casing.
*- Page 14/15 -*



**CVP (Concrete Volute Pump)**
Rodelta CVP (Concrete Volute Pump) is a vertically dry mounted, single stage, mixed flow pump employing a pre-fabricated concrete volute casing.
*- Page16/17 -*

**VV (Vertical Volute)**
Rodelta VV (Vertical Volute) pump is a vertical mixed flow pump employing a metal volute casing.
*- Page 18/19 -*

**BHA (Vertical Axial Submersible Pump) VS3**
Rodelta VHA VS3 (Vertical Axial Submersible Pump) is a vertical axial single impeller pump employing a vane housing.
*- Page 20/21 -*

**BHR, BHQ, BHM, BHMa (vertical submersible) VS1**
Rodelta VS1 pumps are vertical submersible mixed flow pumps with single or multi-stage impellers.
*- Page 22/23 -*

**MVP (Welded Metal Volute)**
Rodelta MVP (Welded Metal Volute Pump) is a vertically dry mounted single-stage pump employing a welded metal volute casing installed into a concrete foundation
*- Page 24/25 -*

# EHT
# (Elbow pump)

| EHT | EU | US |
|---|---|---|
| Design | Horizontal axial flow elbow pump | |
| Features | Horizontal split, open impeller with axial diffuser design | |
| Capacity @ BEP | Upto 150000 m3/hr | Upto 660600 Gpm |
| Head | Upto 11 m | Upto 36 feet |
| Temperature Range | -10 to 50 Deg C | 14 to 122 Deg F |
| Efficiency | Upto 86 % | |
| Material (Casing/Impeller) | Cast Iron, Bronze, SS, Duplex, Super Duplex | |
| Nozzle Orientation (suc/dis) | Depends on site layout and can be customized as per requirement. | |
| Standard Motor Sync. Speed | upto 600 rpm | |
| Options | Direc drive / Gear box drive | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

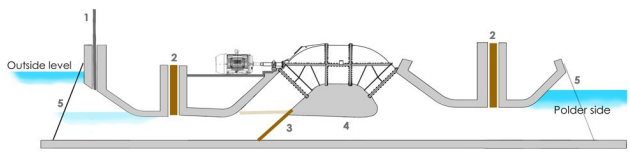
* Higher flow and head than above possible on request

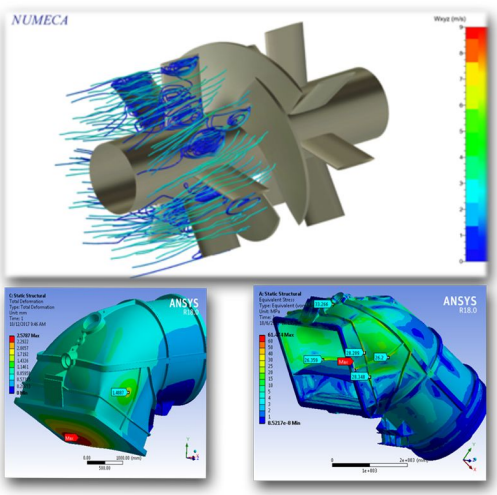
The pump type EHT is a single-stage, axially split pump with axial impeller, known as a "elbow pump" at Rodelta. This design uses the siphon principle and is therefore energy saving. It also minimizes the use of valves in the system. The pumps are used where low delivery heads and high capacities are required. usually to bring water across a dike or dam.

Axial flow pumps are often constructed with a horizontal axis and with suction and drainage pipes made of concrete. (inlet and outlet ducts). Other advantages of this type of pump is that the construction can be placed on a simple foundation and ensures good accessibility for inspection. After removal of the upper half of the pump housing it is easy to disassembled and assembled the rotor unit with impeller. In this construction the water level does not pose any problems, since the impeller is located above the water level. Rodelta also offers the possibility of equipping existing EHT models with an new hydraulic or drive train.

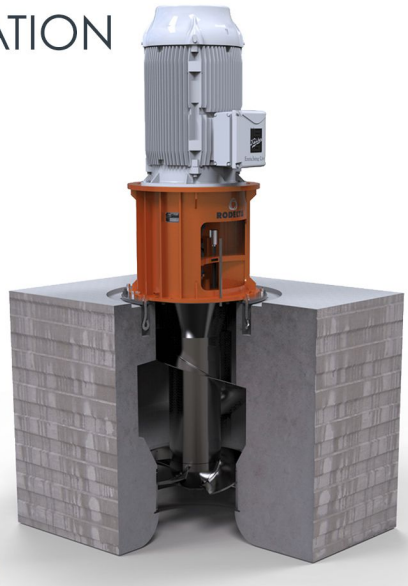
The pumps of this type can be built for very large capacities, and can be designed in a bi-directionally execution.
Because the impeller of a pump is above the water level, it is necessary to draw the pump chamber full of water by means of a vacuum pump before the pump can be started up.

The pump can also be designed at an angle (e.g. 45 degrees).




EHT 2400



# ACVP
# (Axiale CVP)

| ACVP | EU | US |
|---|---|---|
| Design | Concrete Volute pump | |
| Features | Prefabricated concrete volute, axial open impeller design | |
| Capacity @ BEP | Upto 150000 m3/hr | Upto 660600 Gpm |
| Head | Upto 11 m | Upto 36 feet |
| Temperature Range | -10 to 50 Deg C | 14 to 122 Deg F |
| Efficiency | Upto 82 % | |
| Material (Impeller) | Nickel Bronze, SS, Duplex, Super Duplex | |
| Nozzle Orientation (suc/dis) | Formed suction intake and horizontal discharge | |
| Standard Motor Sync. Speed | upto 600 rpm | |
| Options | Direc drive / Gear box drive | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

TURBINE

* Higher flow and head than above possible on request

The pump type ACVP (Axial Concrete Volute Pump) is a vertical dry mounted pump, single-stage with volute made of prefabricated concrete material. The extractable unit of the ACVP is equipped with an axial impeller construction. The material of the metal pull-out unit depends on the liquid to be pumped and is available in different materials.

Among other things, the ACVP is designed for water supply and discharge for water level control. This can be in polders or lower-lying areas. The pump is also extremely suitable for water replenishment in canals with sluices, or to supply higher-lying areas with water in times of drought. It is also possible to equip this pump with turbine functionality. This means that in times of little water it can be pumped, and in times of too much water energy can be recovered. By allowing surface water to flow back through the pump, the rotor is driven and energy is generated. The models can also be supplied in a fish-friendly version.

*Installing prefabricated concrete block on suction box*

The ACVP is a pump with an axial impeller, which discharges into a specially designed extracted concrete volute. The flow is guided as optimally as possible through this volute form by the use of a metal spiral, which is attached to the pull-out unit. This volute form is relatively large. The reason for this is to keep the loss of efficiency in the volute as low as possible and to keep any blockages in the pump to a minimum.

In addition to durability and maintenance-friendly advantages, the use of concrete also contributes to a solid construction and low noise level of the pump.

*Concrete volute ACVP*

Fish passable version ACVP 85

# WATER PUMPING STATION SOLUTIONS

# SCVP

## (Single-vane CVP)

| SCVP | EU | US |
|---|---|---|
| Design | Concrete Volute pump | |
| Features | Prefabricated concrete volute, single-vane impeller design | |
| Capacity @ BEP | Upto 54.000 m3/hr | Upto 237755 Gpm |
| Head | Upto 12 m | Upto 39 feet |
| Temperature Range | -10 to 50 Deg C | 14 to 122 Deg F |
| Efficiency | Upto 83 % | |
| Material (Impeller) | Nickel Bronze, SS, Duplex, Super Duplex | |
| Nozzle Orientation (suc/dis) | Formed suction intake and horizontal discharge | |
| Standard Motor Sync. Speed | upto 600 rpm | |
| Options | Direc drive / Gear box drive | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

* Higher flow and head than above possible on request

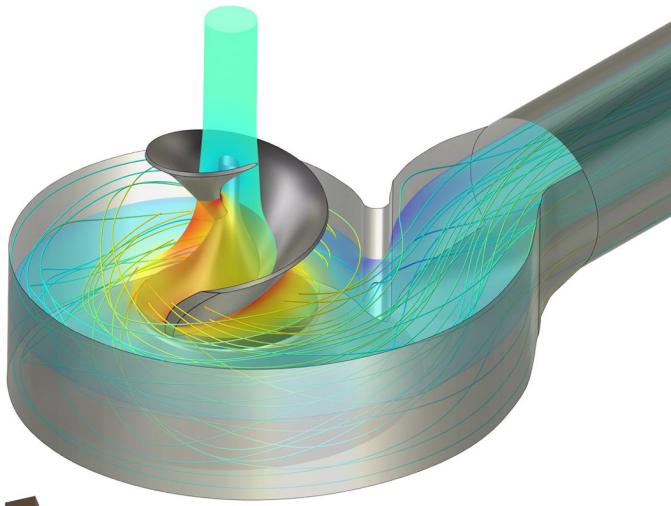
The pump type SCVP (Single-vane Concrete Volute Pump) is a vertical dry pit pump, single stage with volute pump casing of pre-fabricated concrete material. The pull-out unit of the SCVP is equipped with a single vane impeller design. The material of the metal pull-out unit depends on the pump liquid and is available in various materials. The SCVP pump can be used for flood control, drainage, irrigation and sewage applications. Because the SCVP pump is very suitable in situations where non-clogging and fish pass ability is an essential requirement.

Among other things, the SCVP is designed for water supply and discharge for water level control. This can be in polders or lower-lying areas. The pump is also extremely suitable for water replenishment in canals with sluices, or to supply higher-lying areas with water in times of drought. It is also possible to equip this pump with turbine functionality.

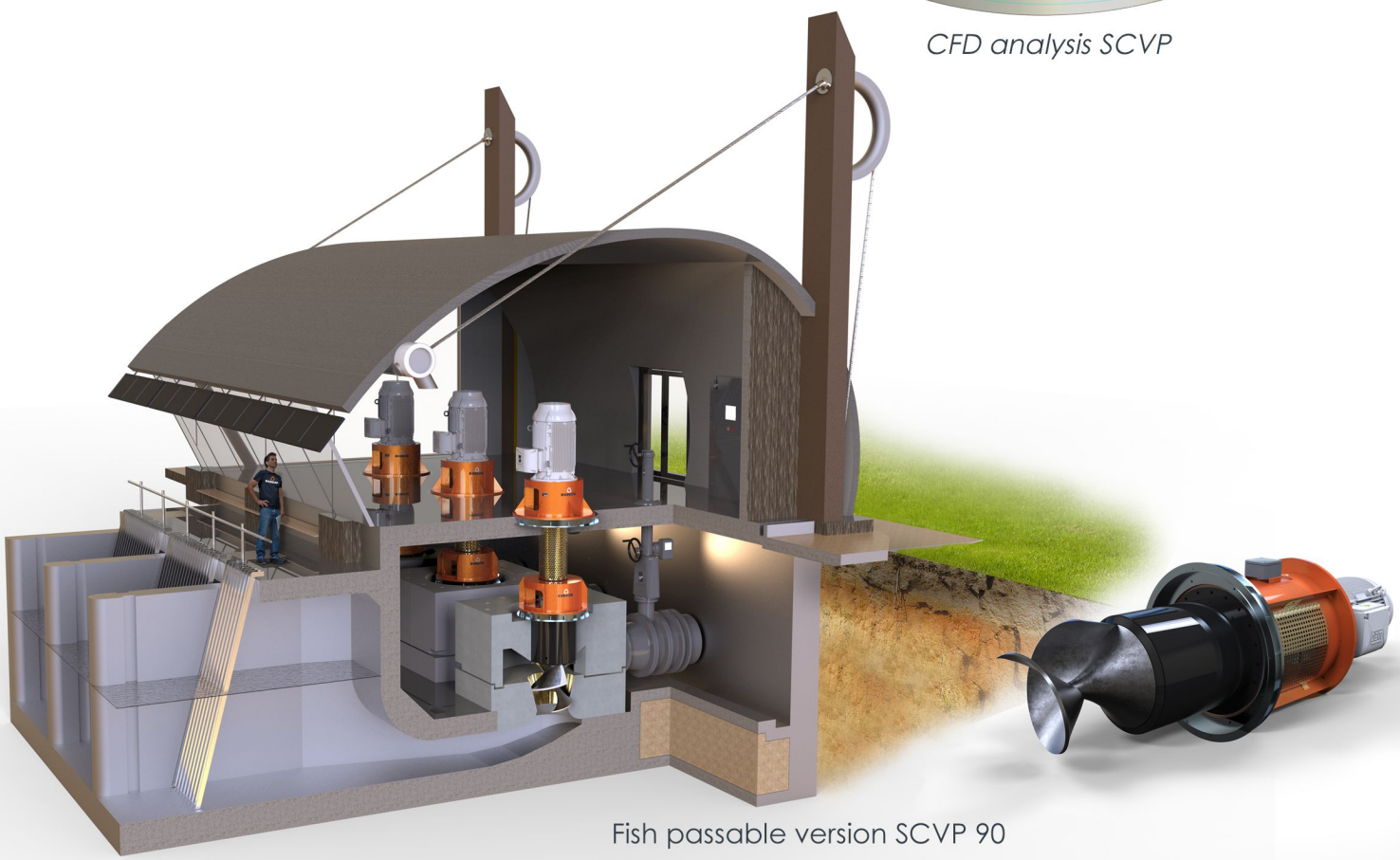
*Installing prefabricated concrete block on suction box*

The SCVP is a pump with an single vane impeller, which discharges into a specially designed concrete volute. The fluid flow is optimally guided through the shape of the pull out unit in to the volute. This volute is relatively large.
This was done to keep energy losses as low as possible and to minimise possible blockages by the pumped medium.

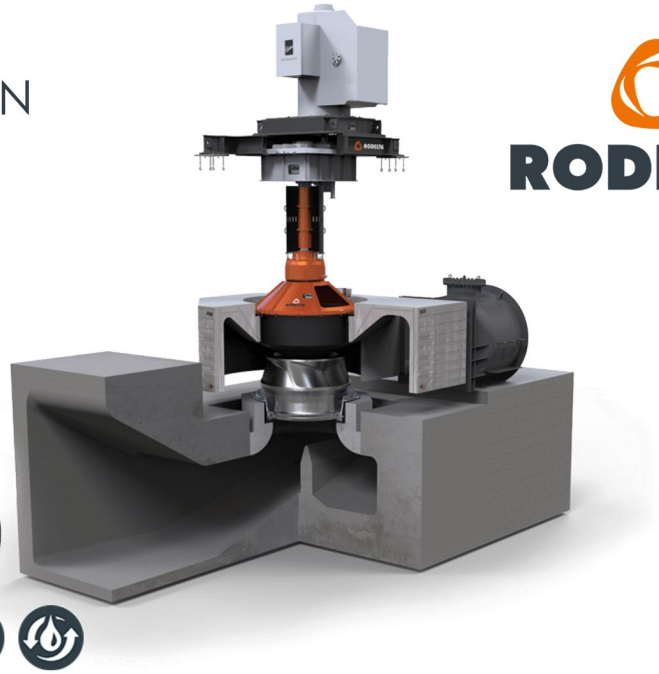
In addition to the advantages of durability and ease of maintenance, the use of concrete also contributes to a solid construction and a low noise level of the pump.



*CFD analysis SCVP*



Fish passable version SCVP 90



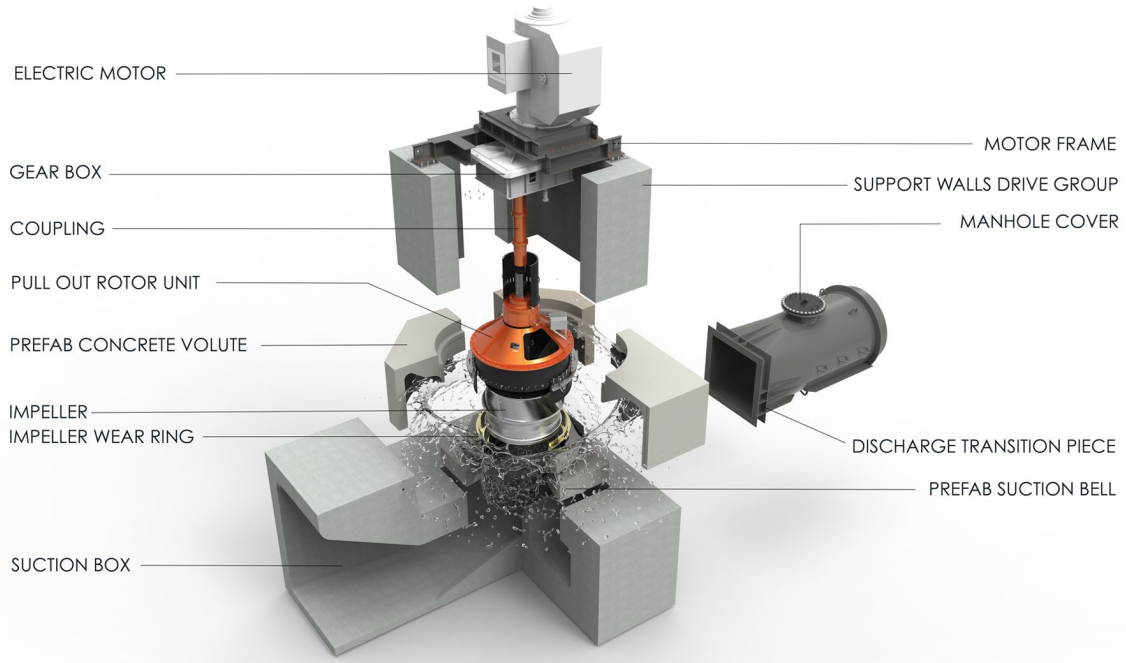
# CVP
# (Concrete volute)

| CVP | EU | US |
|---|---|---|
| Design | Concrete Volute pump | |
| Features | Prefabricated concrete volute, enclosed impeller design | |
| Capacity @ BEP | Upto 150000 m3/hr | Upto 660600 Gpm |
| Head | Upto 50 m | Upto 164 feet |
| Temperature Range | -10 to 50 Deg C | 14 to 122 Deg F |
| Efficiency | Upto 92 % | |
| Material (Impeller) | Nickel Bronze,SS,Duplex,Super Duplex | |
| Nozzle Orientation (suc/dis) | Formed suction intake and horizontal discharge | |
| Standard Motor Sync. Speed | upto 600 rpm | |
| Options | Direc drive / Gear box drive | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

* Higher flow and head than above possible on request

The pump type CVP "Concrete Volute Pump" is a vertical dry mounted pump, single-stage with a volute made of concrete material. The CVP has a pull-out rotor. The material of the metal pull-out rotor unit depends on the medium to be pumped, but can be supplied in different types of material. The CVP pump is used in cooling water, drainage and irrigation applications.

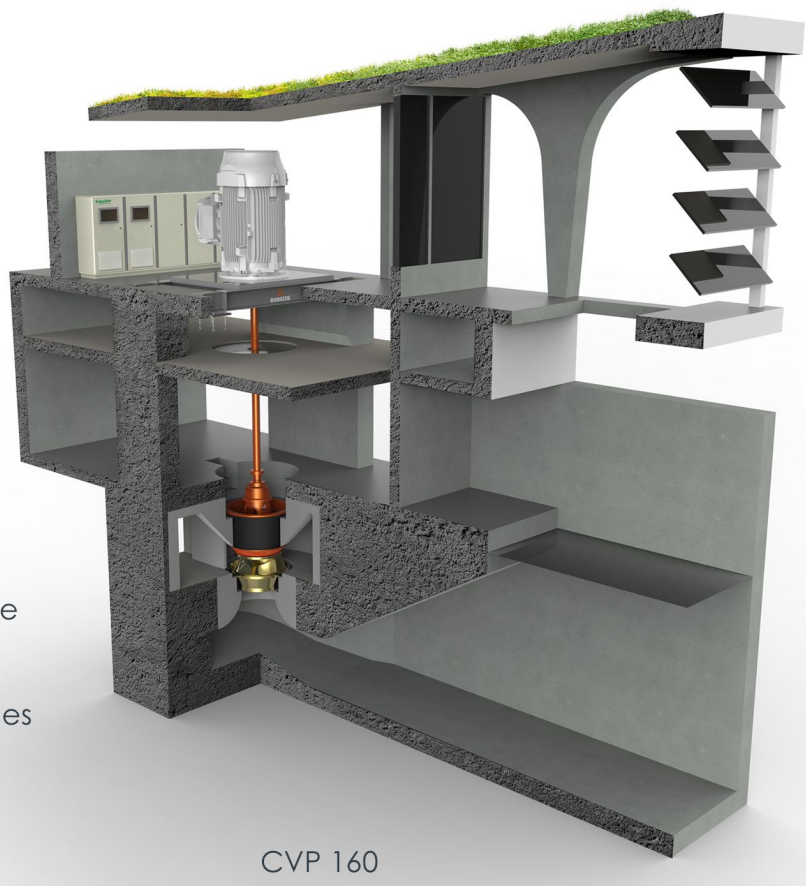
The great advantage of concrete volute pumps is that there are no maintenance costs for the volute housing. In addition, the concrete construction provides a very solid foundation for the pumps and contributes to a low vibration and noise level. The production of the concrete volute pumps can be carried out in two ways. By pouring the concrete volute on the construction site or by means of prefabricated volute parts that can be installed within one day.



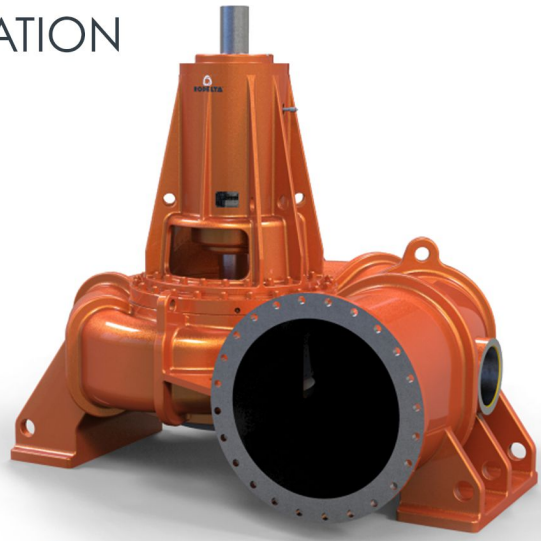

## Features: CVP

- Corrosion resistance concrete volute pump casing and few metal parts in contact with pump liquid reducing material cost in corrosive/erosive applications (e.g. seawater)
- Space saving construction (pit depth, hoisting length/building height) compared with vertical turbine pumps
- Less vibration due to robust design with casing of concrete
- Low noise
- Low inspection and maintenance cost
- Bearings not in liquid flow,very beneficial for sand contaminated fluids
- Fish friendly version available

**CVP Prefabricated concrete ellement**
A volute element of a prefabricated concrete volute pump (CVP), A complete volute consists of 2 or 4 prefabricated concrete parts. The suction bell from the intale is also produced from 1 or sometimes 2 prefabricate concrete elements.



CVP 160



# VV
# (Metal volute)

| VV | EU | US |
|---|---|---|
| Design | Vertical metal volute pump | |
| Features | Metal volute pump, half open or closed impeller design | |
| Capacity @ BEP | Upto 24000 m3/hr | Upto 105700 Gpm |
| Head | Upto 90 m | Upto 295 feet |
| Temperature Range | -10 to 50 Deg C | 14 to 122 Deg F |
| Efficiency | Upto 92 % | |
| Material (Impeller) | Nickel Bronze,SS,Duplex,Super Duplex | |
| Nozzle Orientation (suc/dis) | Concrete suction chamber and horizontal discharge | |
| Standard Motor Sync. Speed | upto 1500 rpm | |
| Options | Direc drive / Gear box drive | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

* Higher flow and head than above possible on request

The VV pumps are vertical dry mounted pumps, single-stage with cast or welded volute. The volute can be equipped with a double slag tongue to balance the radial load on the shaft. The high-efficiency impellers are cast using high-grade casting methods, so the efficiencies are guaranteed. The impeller can be half open or closed, depending on the head and application. The pumps can be supplied in different materials, depending on the liquid to be pumped.

One of the many advantages of this pump type is its simple set-up. The pump can easily be placed on walls and connected to the suction box when the pump building is ready. This suction box can be cast out of concrete. In this way, the freedom is retained in this design that even the pump volute can be modified when upgrading the pumping station, as it is not part of the building.


VV 800-800

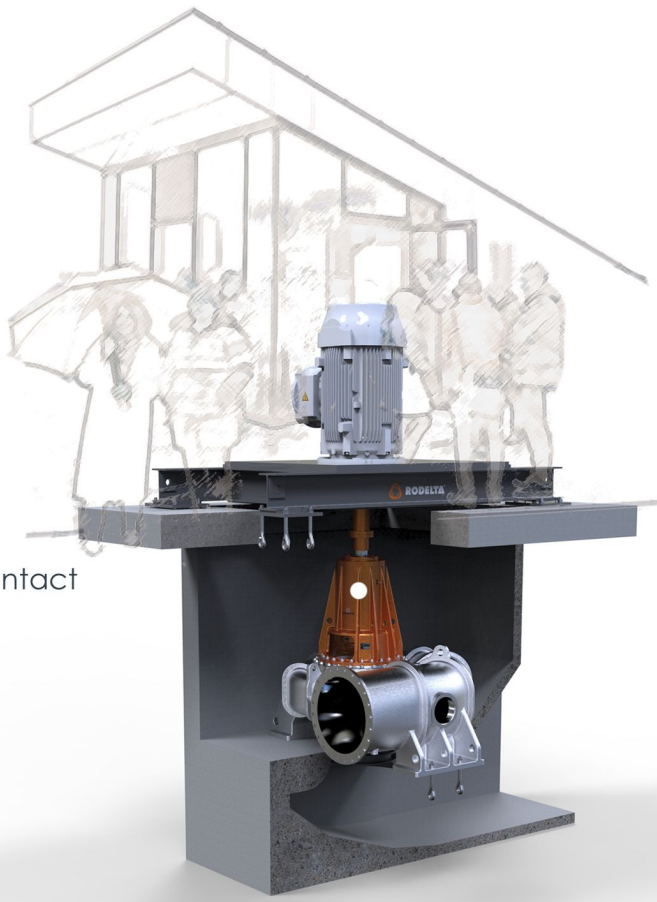
VV 700-700 *Roestvaststaal uitvoering*

**Features: VV**

- Compact pump housing.
- Lower NPSHR.
- Lower maintenance costs.
- High reliability.
- High Efficiency upto 92%
- Minimum total cost of ownership. (TCO)
- Vibration-free performance.
- No priming required.
- Direct drive/rectangular drive.
- Rotor unit extendable.
- Stuffing box gasket / mechanical seal.
- Fish passable version possible.
- Direct drive or one or two floor arrangements.
- Pumps can also be supplied in horizontal
  The design will be delivered.
- The medium to be pumped does not come into contact with the pump bearings. This prevents wear and contributes to low replacement costs of parts.

**Customer-specific designs**

*VV Pumps can be made according to the requirements of the location.*




VV 700

# BHA
# (Axial pump)

| BHA | EU | US |
|---|---|---|
| Design | VS3 Wet Pit,Vertically suspended | |
| Features | Single casing diffuser, axial flow impeller design for high flow, low head requirements | |
| Capacity @ BEP | Upto 180000 m3/hr | 792720 Gpm |
| Head | Upto 12 m | Upto 40 feet |
| Temperature Range | 10 to 60 Deg C | 50 to 140 Deg F |
| Discharge Pressure | upto PN 16/PN 25 | upto Class 125/Class 150 |
| Material (Casing/Impeller) | Cast Iron, Bronze, SS, Duplex, Super Duplex | |
| Standard Motor Sync. Speed | Upto 1500 rpm | Upto 1200 rpm |
| Options | Dry / Wet Pit, Pull-out / Non pull-out, Gland packing / Mechanical Seal, Gear box driven | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

* Higher flow and head than above possible on request

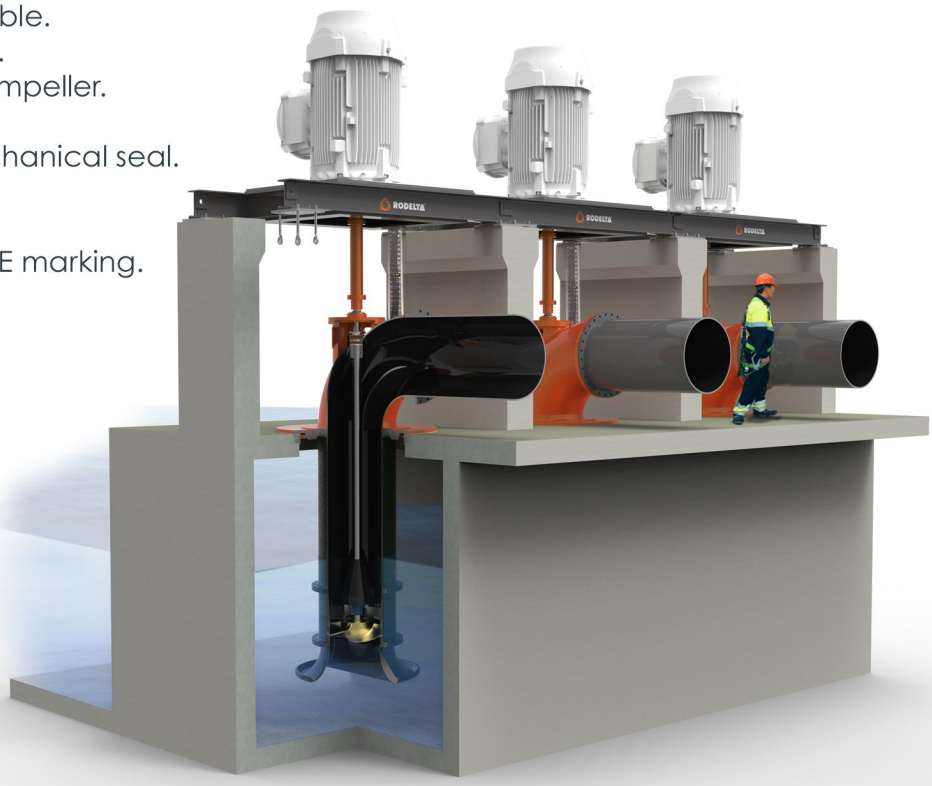
The BHA is a vertical submersible pump type VS3 with an axial single-stage impeller consisting of a diffuser (stator) assembly. Different models are available to operate at 50Hz and 60Hz with wet and dry well installation. These pumps are rigidly constructed to ensure low-vibration operation. The hydraulic design is always optimised by our continuous R&D efforts to meet the requirements of higher efficiency, lower immersion, high reliability and optimum system design.

BHA 700

**Features: BHA (VS3) Axial vertical turbine**

- Low vibration resistance.
- Low immersion.
- No priming required.
- Dry well/wet well setup available.
- Direct drive/rectangular drive.
- Extendable/non-extendable impeller.
- Pull-out/Non-pull-out design.
- Stuffing box packaging / Mechanical seal.
- Axial flow type.
- 50Hz / 60Hz availability.
- The pumps are offered with CE marking.
- Fish passable version possible.

Axial impeller design




BHA 800

# BHR
# (Submersible pump VS1)

| BHR | EU | US |
|---|---|---|
| Design | Vertical suspended turbine pumps | |
| Features | Single casing diffuser, Single / Multistage enclosed / mixed / open impeller design | |
| Capacity @ BEP | Upto 60000 m3/hr | 264240 Gpm |
| Head | Upto 240 m | Upto 790 feet |
| Temperature Range | 10 to 60 Deg C | 50 to 140 Deg F |
| Discharge Pressure | upto PN 16/PN 25 | upto Class 125/Class 150 |
| Material (Casing/Impeller) | Cast Iron, Bronze, SS, Duplex, Super Duplex | |
| Standard Motor Sync. Speed | Upto 1500 rpm | Upto 1200 rpm |
| Options | Dry / Wet Pit, Pull-out / Non pull-out, Gland packing / Mechanical Seal, Gear box driven | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

* Higher flow and head than above possible on request

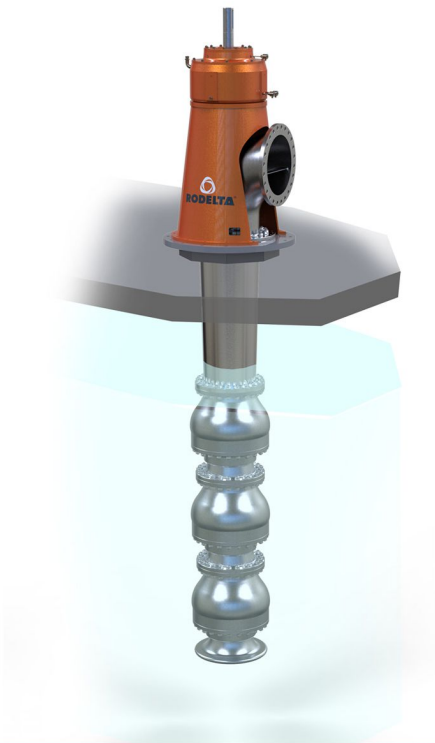
The type BHR (VS1), vertical submersible pumps with single or multistage impeller, consisting of a bowlsystem. Different models are available to operate at 50Hz and 60Hz with wet and dry well installation. These pumps are solidly constructed to ensure low-vibration operation. The hydraulic design is always optimised by our continuous R&D efforts to meet the requirements of higher efficiency, lower immersion, high reliability and optimum system design. The BHR is also suitable as a fire pump solution.

BHR 500

BHR Bowl diffuser vanes

**Features: (vertical turbine pump VS1)**

- Vibration-free performance
- Low submergence
- No priming required
- Dry pit/Wet pit arrangement available
- Direct drive/Right angle gear drive
- Impeller pull-out/Non-pull-out
- Bowl pull-out/Non-pull-out
- Gland packed / Mechanical seal
- Radial/ Axial/Mixed flow type
- 50Hz / 60Hz availability
- The pumps are offered with CE marking Depending on the application, area classification ATEX certification is possible.




BHR 400

# MVP
# (Metal volute)

| MVP | EU | US |
|---|---|---|
| Design | Metallic Volute pump | |
| Features | Fabricated volute, enclosed impeller design | |
| Capacity @ BEP | Upto 120000 m3/hr | Upto 528480 Gpm |
| Head | Upto 220 m | Upto 720 feet |
| Temperature Range | -10 to 50 Deg C | 14 to 122 Deg F |
| Efficiency | Upto 90 % | |
| Material (Casing/Impeller) | Fabricated MS volute and impeller with Cast Iron, Bronze, SS, Duplex, Super Duplex | |
| Nozzle Orientation (suc/dis) | Formed suction intake and horizontal discharge | |
| Standard Motor Sync. Speed | upto 600 rpm | |
| Options | Direc drive / Gear box drive | |
| Flange drilling standard | BS EN/DIN/ANSI /AWWA | |

* Higher flow and head than above possible on request

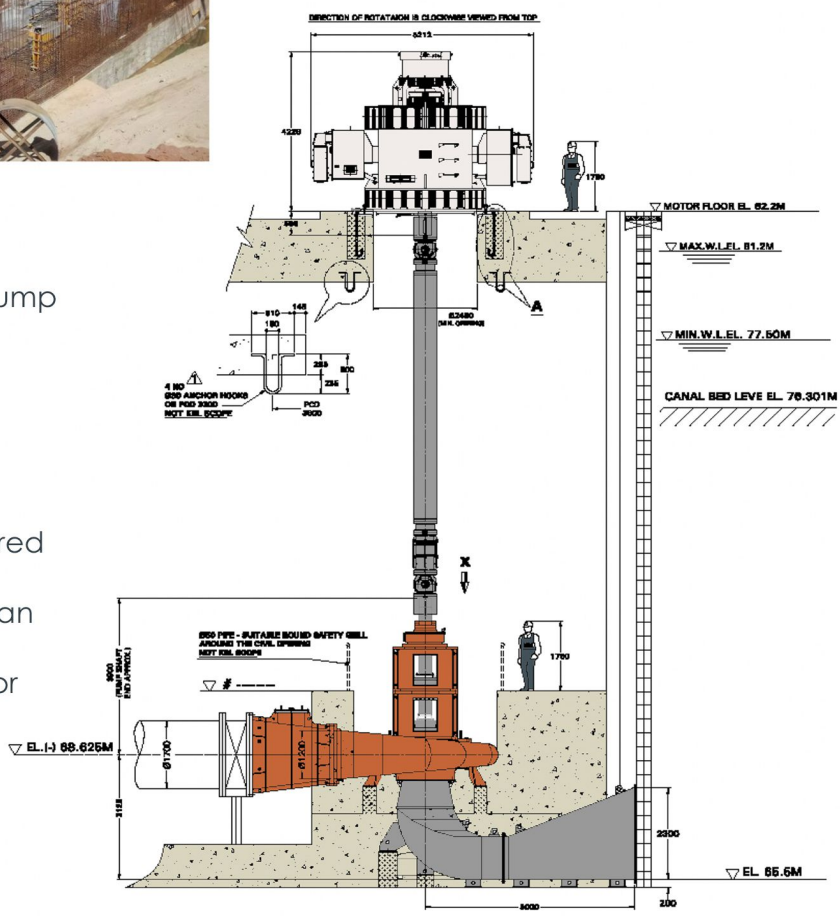
Pump type MVP is a vertical dry mounted pump, single-stage with metal casing. These pumps are mainly designed for applications where high flow rates with high head are required. The main applications are in lift irrigation, water supply schemes, circulating cooling water for power plants. MVP pumps consist of a spiral casing made of steel or stainless steel, and a cast, closed impeller which can be supplied in various materials. This type of pump is often used when the head is the limit. reached for a concrete volute pump.

BHR 500

MVP unit

## Features:

- Reduced civil construction costs of pump house.
- Lower NPSHR.
- Lower maintenance costs. (TCO)
- Pumps run at low speeds.
- Low vibration level due to concrete containment of volute.
- Construction builds less deep compared to submersible pumps.
- Less alignment problems due to cardan shaft.
- Higher reliability - Extremely suitable for large volumes.



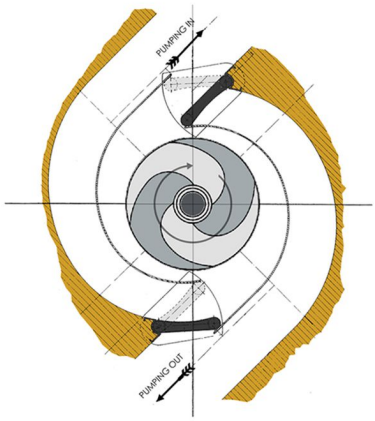

MVP1700

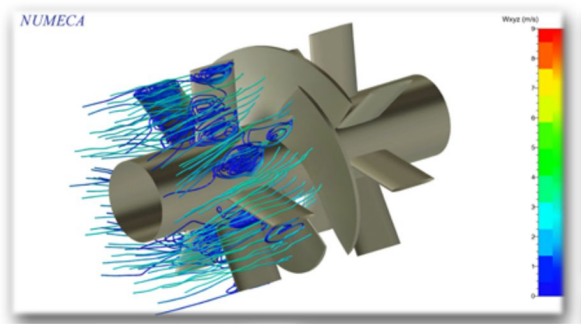
# R&D SOLUTIONS

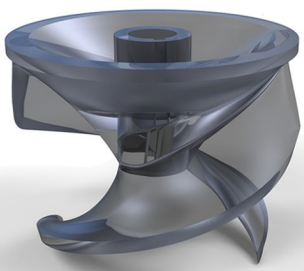
## HYDRAULIC AND MECHANICAL ENGINEERING DEPARMENT

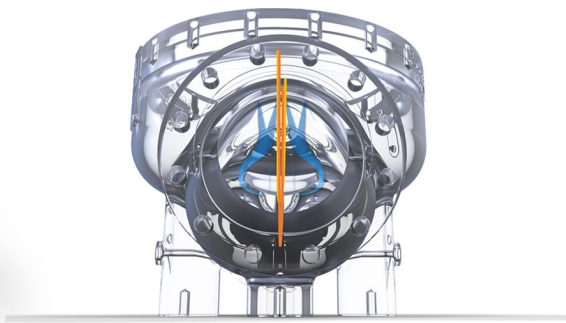
The research and development (R&D) department at Rodelta is continuously developing and improving solutions for the current pump industry. Fish friendly hydraulics are being developed for the bi-directional EHT elbow pump and turbine operation of the ACVP. Innovations in suction design has led to great development of the ETL pump type suction intake. Employing Computational Fluid Dynamics (CFD) has led to organic and natural suction intake shapes, resulting in improved pump performance

Problems considering environmental change and the impact on pumping stations are present day topics. It becomes clear that the discharge of excess water in rainy seasons is not the main purpose of the future pumping stations. Even outside of rainy seasons (summer) discharging excess water to neighboring areas is desired in case of dry periods and water shortage.



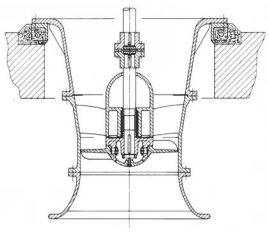



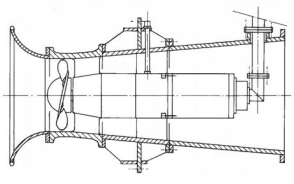



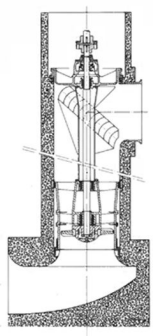


Rodelta shows to be a creative partner specializing in customer specific, custom engineered solutions. This is made possible due to the experience of our hydraulic and mechanical engineering department and our continuous drive for innovation and progress.

DISTINCTIVE VISION







*Not all pump types are listed in this brochure. Please contact our sales department for more information on all Rodelta Products.*

RODELTA
SERVICE

ROTASERVE®

Your Service Partner

**Diagnostic and consulting Services**
Energy scans- On-site inspections

**Maintenance and support services**
Spare part fast track- On-site service - Workshop service
Preventive and corrective maintenance

**Technical and economic optimization**
Upgrades - Modifications - Pump hydraulic optimization

For more info www.rotaserve.com

# ROTASERVE, RODELTA'S DEDICATED SERVICE PARTNER

## EXCEPTIONAL VALUE: A TOTAL SERVICE AND SOLUTIONS PROVIDER

At Rodelta, we like to think in terms of a system instead of just the pump when selecting the appropriate solution. However, selecting a pump is only a first step. To ensure long pump lifetime, low down time and minimized maintenance and operation costs, it is important that pumps are installed and aligned properly. Rotaserve, Rodelta's dedicated service partner takes care of all pump installation activities. The team consists of highly skilled service engineers, who have all the required knowledge and experience in hand. Furthermore, they are widely qualified for on-site jobs and API pumps.

In addition, Rotaserve provides a wide range of pump service jobs, including aligning and balancing, on-site inspection and preventive and corrective maintenance. Please contact Rotaserve, has many possibilities for overhauling old and damaged pumps, instead of replacing them entirely. Parts can be repaired and restored to its original new condition. They can also supply spare parts directly from stock, or reproduce specific parts, even for old discontinued pump types. Rotaserve can perform pump upgrades, if you need increased capacity or efficiency for instance. This can be achieved by replacing parts or by creating a completely new custom hydraulic design. Rotaserve gets your old pumps up and running again! For more info go to Rotaserve

RODELTA®

Sales program: Pumps for pumping stations


**Rodelta Pumps International B.V.**
Twentepoort Oost 24, 7609 RG
Almelo, Nederland
Tel +31 (0)85 049 5900
Email: info@rodelta.com
www.rodelta.com




distinctive vision