ShinMaywa
Submersible Pumps & Water Treatment Equipment
ShinMaywa has long history and experiences as a pump manufacture since we started manufacturing of Pumps in 1955.

And we enjoy reputation of high quality water treatment equipments until today. Therefore, all products are in operation not only in Japan, but also in many countries. Our variety of products help and satisfy your requests to solve waste water treatment. Many applications such as in public facilities and waste water treatment plants prove our confidence and durability.

Here, you can find a number of features of our products.

ShinMaywa America

* Both flange and automatic connecting type are available (except CNT, CWT & FP)
* Wide range of options are available (motor protector, cable length, materials, etc)

** Related Products **

- Submersible Ejector: J, JA
- Submersible Aerator: SJ, SUL, SU
- Submersible Mixer: SM
- Air Blower: ARH-S, ARS, RB
- Submersible Screen: BS, SS, VS

** Remarks **

- Self air priming type
- Forced air priming (use with blower)
- Helical rotor type
- Spur rotor type
- Helical rotor type

Details refer to individual catalogues.
There are MANY ADVANTAGES with ShinMaywa Submerible Pump

**Cable Insertion Hole**
The stuffing box is located at the cable entry section and takes the part of sealing of water. As the cable conductors consists of multi stranded conductor, water may penetrate into the motor by the capillary phenomenon when cable sheath or insulation is damaged or when the end of the cable is submerged. Therefore, a certain part of insulation of each conductor is peeled, and sealed with rubber to prevent water penetration from this part.

**Motor protection**
Employing auto cut or thermal protector to prevent overheat due to overload, impeller lock, open phase. Auto cut is a snap-action bi-metal device. When temperature of the coil exceeds designed temperature, it bends automatically and stops the electric circuit. Thermal protector is employed for star-delta starting type and it operates same way.

**Motor**
Employing a dry type motor for all kinds of submersible pump. E or F class insulation is available for the type of motors.

**Mechanical Seal**
Employing double mechanical seal with high wear resistance material to prevent water penetration into motor room. Also, in combination with employing such kinds of oil seal, life time of mechanical seal becomes long.

**Impeller**
Many kinds of impeller types suitable for each application are available. (For example, volute type, non-clog type, vortex type, screw type.)

**Impellers—Wide range of types are available**

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<th>IMPELLER TYPE</th>
<th>APPLICABLE MODEL</th>
<th>DESIRABLE APPLICATION</th>
<th>PUMP EFFICIENCY</th>
<th>FEATURES</th>
<th>PASSAGE CAPABILITY</th>
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<tr>
<td>A AH</td>
<td>Drainage Defoaming Effluent</td>
<td>Excellent</td>
<td>Unsuitable</td>
<td>Unsuitable</td>
<td>Unsuitable</td>
</tr>
<tr>
<td>CN CNH CNL CNT</td>
<td>Raw water Sewage Sanitary</td>
<td>Good</td>
<td>Best suited</td>
<td>Applicable</td>
<td>Applicable</td>
</tr>
<tr>
<td>CJ</td>
<td>Raw water Sewage Sanitary</td>
<td>Good</td>
<td>Best suited</td>
<td>Best suited</td>
<td>Applicable</td>
</tr>
<tr>
<td>CV CVH CVL CVS CVM CVC CR CRS</td>
<td>Raw water Sewage Sanitary Sludge</td>
<td>Normal</td>
<td>Best suited</td>
<td>Best suited</td>
<td>Best suited</td>
</tr>
<tr>
<td>CW CWH CWT</td>
<td>Raw water Sewage Sanitary Sludge</td>
<td>Excellent</td>
<td>Best suited</td>
<td>Applicable</td>
<td>Best suited</td>
</tr>
</tbody>
</table>

* Cutter pump (Model: CK) is also available.
* Grinder pump (Model: CKM) is also available.
With these ShinMaywa’s equipments, you can enjoy desirable treatment process effectively. For example, this is one popular water treatment process.
SUBMERSIBLE PUMP

NON-CLOGGING TYPE

CN/CNH

Non-clog impeller ensures that waste water and sewage can be efficiently transferred. Under 7.5kW models employs semi-open type impeller (others are closed type) The models exceed φ 500 bore and 75kW output are also available.

CN

VOLUTE TYPE

A

“A” pump is compact, lightweight and easy to handle. This pump is suitable for waste water transferring

AH

This model is ideal for high-head applications.

VOlTERX TYPE

CV/CVH

“CV” pump features a vortex structure and wide pump casing interior, preventing clogging by solids and fibrous foreign matters.

CV

“CVS” pump has a high efficiency and head model of vortex type. (2poles)
**SUBMERSIBLE PUMP**

**DEBRIS SHREDDING MECHANISM TYPE**

**CJ**

In combination with well-designed suction hole, special heat treated chopper blade cuts debris without clogging. If necessary, more reliable cutter pump ‘CK’ and grinder pump ‘CKM’ are available.

**SCREW TYPE**

**CW/CWH**

“CW” pump is a screw impeller type developed especially for sewage and sludge transferring pump. Foreign matter such as vinyl and fiber or highly concentrated sludge can be pumped by “CW”

**DRY PIT TYPE**

**CNT**

Employing newly developed air-cooled type submersible motor. Both submersible and dry-pit applications are available. There are a lot of models from 1.5kW to 22kW. (Screw impeller model (CWD) is also available.)

**ENGINEERING PLASTIC-STAINLESS COMPOSITE TYPE**

ShinMaywa has a wide range of engineering plastic-stainless pumps, “NORUS” series.

**Features**

1. Dramatically reduced weight
   NORUS pump has reduced the pump weight by more than 50% (compared with our conventional cast iron pumps).

2. Increased resistance and strength against impact.
   NORUS pump are made of a special-grade resin having excellent impact resistance. As a result, NORUS is 6 times as strong as other resin pumps.

3. Pumps equipped with float switch are available.
   With these models, alternative operation is possible.

**CR**

High passage capability model

**CRS**

High pump-efficiency model

**CRC**

Closed type Non-clog impeller model for high head.
MIXED FLOW PUMP / AXIAL FLOW PUMP

SD/SA
It can be set up minimal space within a short period with very little installation restriction. It is also a very economical pumping station as water is siphoned from the lower part of the discharge pipe and up through it for draining.

FLOAT PUMP
FP
Pump floats and vacuum the top water effectively.

SUBMERSIBLE EJECTOR
J/JA
Aeration with low initial and running costs can be realized. "J"-type is applicable for 2~5m depth and from 20m²~300m³ preliminary Aeration tank.

SUBMERSIBLE AERATOR
SJ
Both mixing and aeration are available.
SJ type has a high Oxygen transfer efficiency and easy maintenance due to motor direct linkage system.
Strong downward flow provides efficient mixing.

AIR BLOWER (Land Type)
ARH-S
Low Noise
ARS
High efficiency

SUBMERSIBLE MIXER
SM
Powerful and effective mixing but low power consumption can be realized.
Various models from 0.25kW to 7.5kW are available.

PUMP-RELATED PRODUCT
LC
LC is quite reliable and durable float switch. It doesn’t cause chattering.

MS
MS11 can control one level, and MS21 can control two levels.

FV
FV can control on and off with 1unit(1m length) more than 1m length requires 2 units. This switch is suitable for waste water.

Specifications and dimensions are subject to change without notice.

ShinMaywa Industries, Ltd.
Overseas Sales Department
2-43, Shitte 3-chome, Tsurumi-ku, Yokohama-shi, 230-0003, Japan
Phone: +81-45-584-1321  Fax: +81-45-584-1320
E-mail: sales.info@sb.shinmaywa.co.jp

ShinMaywa (America), Ltd.
10737 Gateway West, Suite 112, El Paso, Texas 79935, U.S.A.
Phone: +1-915-594-9862
Fax: +1-915-594-9866
E-mail: info@shinmaywaamerica.com

ShinMaywa (Bangkok) Co., Ltd.
105, Sukhumvit 57 Road, Klongton-Nua Sub-district, Watana District, Bangkok Metropolis 10110 Thailand
Phone: +66-2-382-1331
Fax: +66-2-392-2057
E-mail: Bangkok SA@shinmaywa.co.jp

ShinMaywa (Asia) Pte. Ltd.
51 Goldhill Plaza #14-01
Singapore 308900
Phone: +65-6224-6728
Fax: +65-6224-9678
E-mail: asia.ad@shinmaywa.com.sg

ShinMaywa (Malaysia) Sdn. Bhd.
Suite 7.3, 7th Floor, Menara Ak Huat, Changkat Raja Chulan, 50200 Kuala Lumpur, Malaysia
Phone: +60-3-2026-2388
Fax: +60-3-2026-2399
E-mail: info@shinmaywa.com.my

ShinMaywa (Shanghai) Trading Co., Ltd.
Room2001, Shanghai Masdo Centre, No. 8 Xing Yi Road, Hong Qiao Development Zone, Shanghai, China 200336
Phone: +86-21-5208-1375
Fax: +86-21-5208-1379
E-mail: miura.T@sb.shinmaywa.co.jp

http://www.shinmaywa.co.jp

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