**Main application areas**

- **Food factory**: Ketchup, Liquid eggs, Rice cakes, Grated radishes, Miso, Whipped cream
- **Cosmetics, drug medicines, and detergents**: Shampoo/Hair conditioner, Toothpaste, Liquid detergents, Ointments
- **Chemical factory**: Solvent, Adhesive, Thermosetting resin, Latex
- **Recycling facility**: Sludge, Waste liquid, Sawdust, Rice straw
- **Petroleum/Paint/Fat factory**: UV paint, Slurry ink, Grease, Wax
- **Paper factory**: Cellulose, Woody fiber, Japanese paper material, Emulsion, Pulp material
- **Others**: Carbon, Alumina slurry, Mineral slurry (Battery material)

---

**Resistor for having resistance to high viscosity**

**Strong suction**

Strong suction is created by the high-speed rotation of the screw. Complete self-suction method enables the operation without priming.

**Reason for having resistance to contamination**

The rotating part is contactless. Because of a very little abrasion of the screw by the slurry liquid transfer, contamination is not generated.

---

**Transfer in tubes**

**Reason for having resistance to solid materials mixing**

A little shape breaking allows smooth transfer.

**Reason for having resistance to easy to be converted**

In-tube transfer method allows continuous transfer rooms to push out materials without shear force.

No stirring

Pushing out liquids in an axial direction without provision of turning power allows transfer of delicate liquids which can be converted by stirring.

**Reason for having resistance to easy to be broken**

No shear

In-tube transfer method allows continuous transfer rooms to push out materials without shear force.

**Reason for having resistance to water surface stillness**

No pulsation

Continuous transfers by a screw allow constant discharge in regardless of viscosity.

---

**High performance**

High-speed rotation of 3,600 rpm not shared by conventional pumps

- **Maximum discharge pressure of 2.0 MPa is achieved.**

- **Excellent cost performance**
  
  Because the smaller pumps than ever provide the same performance as ever, a difference is made on pump selection.

- **Making a contribution to the line simplification and quality assurance**

  A unit of pump can handle from low viscosity to high viscosity liquids, and the operation efficiency and quality assurance from liquid transfer to CIP (cleaning in place) are realized.

---

**Structure with consideration of disassembling and cleaning**

Easy disassembling and quick perfect cleaning are available.

**Low noise/vibration**

Because the discharge pressure is applied to the thrust load (axial direction), vibration is not generated and operation is noiseless.

---

**FUKKO's Twin Screw Pump is chosen for its excellent transfer technology.**
Two series according to applications
Smooth transfer is achieved.

Transfer of any liquid is enabled.

Standard type
- Structure with consideration of cleaning
  - The part that contacts liquids can be exposed completely for various cleaning methods.
  - Finish processing with consideration to cleaning of inside of the casing.
  - The mechanical seal is removable.
  - The outside of the casing optionally can be finished buffing for the surface to be clean.

Specialized for low moisture content materials difficult to be transferred
- Twin Screw Pump with Screw Conveyor (PAT)
  - Mounting a screw conveyor realizes smooth transfer of superhigh viscosity liquids, soft materials like cakes, and others.
  - The inlet can be expanded for smooth input of materials to be transferred (Optional).

SQ-type

Slide bar specification (PAT)
- The casing can be attached/removed without touching the screws.

Slide bar docking system
- Operations are easy on a dedicated wagon.

Stad specification
- Easy disassembling/assembling allows effective daily cleaning.

A block of materials can be crumbled to be even.

Twin Screw Pump with Paddle
- Furthermore with a feeder paddle mounted, materials like cakes almost solid can be crumbled to prevent bridges for smooth transfer.

Options are available that are suitable for your cleaning environment.

Applications
- Bean curd refuse, corns, etc.
- Easy disassembling/assembling allows effective daily cleaning.

Standard type
- Slide bar specification (PAT)
- The casing can be attached/removed without touching the screws.

Slide bar docking system
- Operations are easy on a dedicated wagon.

Stad specification
- Easy disassembling/assembling allows effective daily cleaning.

A block of materials can be crumbled to be even.

Twin Screw Pump with Paddle
- Furthermore with a feeder paddle mounted, materials like cakes almost solid can be crumbled to prevent bridges for smooth transfer.

Applications
- Grease, oil cakes, etc.

Low moisture content
- More special applications can be handled.

Low moisture content
- The inlet can be expanded furthermore.
### Outer dimensions/structure drawing/specifications

#### SQ-type (Standard type)

**Outer dimensions**

![Outer dimensions diagram](image)

**Structure drawing**

![Structure drawing diagram](image)

**SQW-type (with a screw conveyor)**

![SQW-type diagram](image)

#### Main specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>SQW-25</th>
<th>SQW-40</th>
<th>SQW-65</th>
<th>SQW-80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seal method</td>
<td>Mechanical seal (single/edge)</td>
<td>Mechanical seal (single/edge)</td>
<td>Mechanical seal (single/edge)</td>
<td>Mechanical seal (single/edge)</td>
</tr>
<tr>
<td>Connection method</td>
<td>Femac, IDF screw, and JIS Flange</td>
<td>Femac, IDF screw, and JIS Flange</td>
<td>Femac, IDF screw, and JIS Flange</td>
<td>Femac, IDF screw, and JIS Flange</td>
</tr>
<tr>
<td>Discharge pressure</td>
<td>Max 2.1MPa</td>
<td>Max 2.1MPa</td>
<td>Max 2.1MPa</td>
<td>Max 2.1MPa</td>
</tr>
<tr>
<td>Rotation speed</td>
<td>Max 3,600rpm</td>
<td>Max 3,600rpm</td>
<td>Max 3,600rpm</td>
<td>Max 3,600rpm</td>
</tr>
<tr>
<td>Flow capacity</td>
<td>500,000m³/h</td>
<td>500,000m³/h</td>
<td>500,000m³/h</td>
<td>500,000m³/h</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>100°C (Standard specification)</td>
<td>100°C (Standard specification)</td>
<td>100°C (Standard specification)</td>
<td>100°C (Standard specification)</td>
</tr>
<tr>
<td>Drive system</td>
<td>Direct coupling and V belt drive</td>
<td>Direct coupling and V belt drive</td>
<td>Direct coupling and V belt drive</td>
<td>Direct coupling and V belt drive</td>
</tr>
</tbody>
</table>

*Please consult with us for more than 100°C.*

#### Main part standard material

- Housing: SCS16
- Casing: SCS16
- Sleeve: SUS329J
- Thrust washer: SUS329J
- Shaft: SUS329J
- Washer: 316L

*Note: Unit: mm*

### Performance curves

#### SQ-25, SQ-40, SQ-50

![Performance curve SQ-25, SQ-40, SQ-50](image)

#### SQ-65, SQ-80

![Performance curve SQ-65, SQ-80](image)

### Model indications

- MB: V belt drive
- MG: Reducer
- MV: Continuously variable transmission
- Inverter motor
- Movable carriage
- Two floors type
- Quenching
- Cap shape
- Flange
- Bolt specification
- Screw pump
- With a slide bar
- With a screw conveyor
- With a screw conveyor con
If you have any inquiries: We would appreciate your help if you fill in the following information sheet before you make an inquiry, for example when looking for an estimate. (Please fill in the data to the extent of your knowledge.)

<table>
<thead>
<tr>
<th>Material</th>
<th>Liquid</th>
<th>Cake-like materials</th>
<th>Solid with some fluidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of the material</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Temperature</td>
<td>Common use: °C / Maximum: °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning</td>
<td>□ None</td>
<td>□ Clean ( °C )</td>
<td>( □ Hot water □ CIP □ SIP □ Vapor)</td>
</tr>
<tr>
<td>Relative density</td>
<td>( at °C )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>mPa·s ( at °C )</td>
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<td></td>
</tr>
<tr>
<td>Solid mixture</td>
<td>□ None</td>
<td>□ Mixed (Properties: Granularity: Rate of mixture: %)</td>
<td></td>
</tr>
<tr>
<td>Corrosive</td>
<td>□ No</td>
<td>□ Yes</td>
<td></td>
</tr>
<tr>
<td>Discharge volume</td>
<td>L / min</td>
<td>m³ / Hr</td>
<td></td>
</tr>
<tr>
<td>Discharge pressure</td>
<td>m</td>
<td>MPa</td>
<td></td>
</tr>
<tr>
<td>Intake pressure</td>
<td>Push (+): m</td>
<td>Suction (-): m</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>V</td>
<td>Hz</td>
<td>□ Indoors</td>
</tr>
<tr>
<td>Type</td>
<td>□ TEFC</td>
<td>□ Explosion proof safety increased</td>
<td>□ Explosion proof</td>
</tr>
<tr>
<td>Driving method</td>
<td>□ V belt</td>
<td>□ Reduction gears</td>
<td>□ Continuously variable transmission</td>
</tr>
<tr>
<td>Intake duct aperture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge duct aperture</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Piping drawing**

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**Safety precautions**

Carefully read the manual before use. Use this product properly.

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FUKKO KINZOKU Industry Co., Ltd.

Head office and factory: 2-33 Fukiyacho, Wakayama City, Wakayama Pref. 640-8324
PHONE +81-73-424-8155 / FAX +81-73-426-0710

Tokyo office: 3F Shioe Bldg., 4-9-6 Hachchobori, Chuo Ward, Tokyo 104-0032
PHONE +81-3-3553-0351 / FAX +81-3-3553-0352

Osaka office: PHONE +81-6-4803-6644 / FAX +81-6-4803-6511

Kokawa Factory: PHONE +81-736-73-6161 / FAX +81-736-73-7110

URL: http://www.fukko.com/
E-mail: fukkopump@fukko.com
Visit our web for details. Search

ISO 9001:2008 Certified organization: Head office

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