Dimensions & Specifications

**SILENT PILER**

**F401-G1200**

**Applicable Piles**
- Tubular Pile: Ø600, 1000, 1200 mm
- Tubular Sheet Pile: Ø660, 1000 mm

**Max. Press-in Force**
- with Chuck Rotation①: 1000 kN
- without Chuck Rotation: 2000 kN

**Max. Extraction Force**
- with Chuck Rotation①: 1600 kN
- without Chuck Rotation: 2200 kN

**Chuck Rotation Torque**
- 900 kN•m
  - (Emergency Use up to 1050 kN•m)

**Chuck Rotation Velocity**
- MAX 11.0 min⁻¹
  - (Emergency Use: up to 1050 kN•m)

**Stroke**
- 1000 mm

**Press-in Speed**
- 0.7 ~ 4.3 m/min

**Extraction Speed**
- 0.7 ~ 3.5 m/min

**Applicable Pile Spacing**
- for 800 mm: 850 ~ 1320 mm
- for 1000 mm: 1050 ~ 1320 mm
- for 1200 mm: 1250 ~ 1505 mm

**Control System**
- Radio Control

**Power Unit**
- EU500C3

- **Power Source:** Diesel Engine
- **Rated Output:** 237 kW (320 hp) / 1800 min⁻¹
- **Super Eco Mode:** 233 kW (315 hp) / 1600 min⁻¹
- **Fuel Tank Capacity:** 850 L
- **Hydraulic Reservoir:** Piler ECO Oil 660 L
- **Moving Speed:** 1.4 km/h
- **Mass:** 10950 kg (with 30m Hose)

**Lubrication System**
- **Power Unit:** AC200V, 50/60Hz, 24KVA or more
- **Water Pump Discharge Rate:** Max. 60 L/min
- **Water Pump Discharge Pressure:** Max. 6 MPa
- **Outer Dimension (W x D x H):** 1505 x 755 x 1230 mm
- **Water Tank Capacity:** 300 L
- **Mass (without water):** 420 kg

[① For Tubular Sheet Pile (Tubular Piles with external interlocks), optional Chuck jaws are required.]
[② An external power source is required for Chuck rotation. (200V-50/60Hz, 220V-60Hz, Min. 30KVA, 3 phases)]

The above specifications are subject to alteration without prior notice.

**For more contact information, please visit:**

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"SILENT PILER" is a registered trademark or trademark of GIKEN LTD. in the United States and other countries.
The Rotary Cutting Press-in Machine for a wide range of Tubular Piles and Tubular Sheet Piles

**SILENT PILER™**

**F401-G1200**

Silent Piler F401-G1200

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1 **Gyropress Method (Rotary Jack-in Method)**

The Gyropress Method is a “reaction based” rotary jack-in method to install tubular piles with cutting bits with self-walking functions. The Gyropress Method enables tubular piles to be installed through existing structures or buried obstructions. Therefore, by this method, construction costs and time can be minimized simultaneously, due to the avoidance of enabling removal works.

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2 **Applicable to a wide range of Tubular Piles and Tubular Sheet Piles**

The F401-G1200 can install tubular piles (Ø 800mm, 1000mm and 1200mm) and tubular sheet piles (Ø400mm and 1000mm) by changing only the Chuck jaws and Clamp jaws. Spacing between Clamps of the F401-G1200 can be adjusted by hydraulic cylinders at an optional distance.

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3 **Outstanding Environmentally-Friendly Design**

**Low Emission Engine**

The Power Unit of the F401 is a new generation model and has environmentally-friendly specifications. It is designed with strict concepts for clean emissions with high combustion efficiency and GIKEN’s original hydraulic control technologies.

**Ultra Low Noise Level**

It clears allowable construction noise levels in many industrialised countries.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Noise Limit (in Urban Area)</th>
<th>Conversation Speech</th>
<th>Power Mode</th>
<th>Eco Mode</th>
<th>Super Eco Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-10.5 dB(A)</td>
<td>-9.2 dB(A)</td>
<td>-6.4 dB(A)</td>
<td>60.3 dB(A)</td>
<td>59.5 dB(A)</td>
</tr>
</tbody>
</table>

*Noise Level at 16m, dB(A) A-weighted Decibels

**Standard Application of Biodegradable Oil**

The F401 uses bio-degradable Piler Eco Oil and Piler Eco Grease. Hence, if hydraulic oil or grease is spilled into soil or water, there will be no environmental damage to the surrounding ecosystem. In addition, the machines are painted with TX-Free non-leaded paint.

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4 **Scientific Execution of Press-in Work & Advanced IT Functions**

**GIKEN IT System**

GIKEN’s engineers can monitor individual Silent Pilers, such as operating condition, maintenance records and location. Quick advice for any technical troubles is available promptly and appropriate information can also be provided to prevent troubles.

**Press-in Monitoring and Data Logging System**

Press-in monitoring data can be used for quality control and information modelling of the foundation. Operators are able to keep working while checking data such as press-in force, auger torque, and working hours of press-in work, on a tablet or PC (both optional extras).

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*For Tubular Sheet Piles (Tubular Piles with external interlocks), optional Chuck jaws are required.*
**Dimensions & Specifications**

### SILENT PILER

**F401-G1200**

<table>
<thead>
<tr>
<th>Applicable Piles</th>
<th>Tubular Pile (Ø600, 1000, 1200 mm)</th>
<th>Tubular Sheet Pile (Ø800, 1000 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Press-in Force</td>
<td>with Chuck Rotation*1 1000 kN</td>
<td>without Chuck Rotation 2000 kN</td>
</tr>
<tr>
<td>Max. Extraction Force</td>
<td>with Chuck Rotation*1 1600 kN</td>
<td>without Chuck Rotation 2200 kN</td>
</tr>
<tr>
<td>Chuck Rotation Torque</td>
<td>with Chuck Rotation*2 900 kNm</td>
<td>Emergency Use up to 1050 kNm</td>
</tr>
<tr>
<td>Chuck Rotation Velocity</td>
<td>MAX 11.0 min⁻¹</td>
<td>(for Tubular Pile 800mm-1200mm, Max. 1050K N/min)</td>
</tr>
<tr>
<td>Stroke</td>
<td>1000 mm</td>
<td></td>
</tr>
<tr>
<td>Press-in Speed</td>
<td>0.7 m/min</td>
<td>0.7 m/min</td>
</tr>
<tr>
<td>Extraction Speed</td>
<td>0.7 m/min</td>
<td>0.7 m/min</td>
</tr>
<tr>
<td>Applicable Pile Spacing</td>
<td>for 800mm 850 ~ 1320 mm</td>
<td>for 1000mm 1050 ~ 1320 mm</td>
</tr>
<tr>
<td>Control System</td>
<td>Radio Control</td>
<td></td>
</tr>
<tr>
<td>Mass</td>
<td>for 800mm 31850 kg</td>
<td>for 1000mm 33600 kg</td>
</tr>
<tr>
<td></td>
<td>for 1200mm 33600 kg</td>
<td></td>
</tr>
</tbody>
</table>

**Power Unit EU500C3**

<table>
<thead>
<tr>
<th>Power Source</th>
<th>Diesel Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Output</td>
<td>335 kW (456 ps) /1600 min⁻¹</td>
</tr>
<tr>
<td>Eco Mode</td>
<td>335 kW (456 ps) /1600 min⁻¹</td>
</tr>
<tr>
<td>Super Eco Mode</td>
<td>293 kW (399 ps) /1400 min⁻¹</td>
</tr>
<tr>
<td>Fuel Tank Capacity</td>
<td>850 L</td>
</tr>
<tr>
<td>Hydraulic Reservoir</td>
<td>Piler Eco Oil 660 L</td>
</tr>
<tr>
<td>Moving Speed</td>
<td>MAX 4255 m/min</td>
</tr>
<tr>
<td>Mass</td>
<td>2070 kg (with 30m Hose)</td>
</tr>
</tbody>
</table>

**Lubrication System OP114A**

| Input Voltage (3 phases) | AC200V, 50/60Hz, 24kVA or more |
| Water Pump Discharge Rate | Max. 60 l/min |
| Water Pump Discharge Pressure | Max. 6 MPa |
| Outer Dimension (W x D x H) | 1505 x 755 x 1230 mm |
| Water Tank Capacity | 300 L |
| Mass (without water) | 490 kg |

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1. For Tubular Sheet Piles (Tubular Piles with external interlocks), optional Chuck jaws are required. 
2. An external power source is required for Chuck rotation. (200V-50/60Hz, 220V-60Hz, Min. 30KVA, 3 phases)

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**Dimensions & Specifications**

**Power Unit**

**Lubrication System**

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**GIKEN LTD.**

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