SILENT PILER
F301
for Hat Sheet Piles
35.43 in wide
Silent Piler F301

Flexible and Functional Formula

The F301 features a new modular design developed by optimising all the parts and drastically modifying the structure, shape, and material. Not only are the main component parts more versatile, it is also equipped with a cutting-edge control system, and realising high functionality and longer operation life.

1 Optimising Work Efficiency with Modular Design

Silent Piler F301 is applicable to Standard, Water Jetting, and Super Crush press-in works by changing the chuck and chuck frame, and equipping attachments. The machine can be utilised more efficiently because it is adjustable to various soil conditions and working conditions.

2 Longer Operational Life and Higher Functionality by New Control System

The new control system manages the position of the press-in machine and controls load generation from press-in work during operation, maximising the durability of each part. Also, control of the machine is remarkably improved by the Press-in Force Control System and the Phaseless Linear Auger Torque Control System.

3 Advanced Principles for Higher Accuracy

The combination of Silent Piler F301 and Hat Sheet Pile achieves high quality installation.
4 Pile Installation into Hard Ground

The "Pilot Coring Theory", GIKEN’s original theory, makes the Hard Ground Press-in Method able to install sheet piles into difficult ground conditions such as gravelly soil and cobble or boulder mixed soil without losing the advantages of the Press-in Method. The augering area can be reduced to assist pile installation, minimising volume of spoil and disturbance to the soil strata. Hence, high bearing capacity is available from sheet piles which are installed by the Hard Ground Press-in Method.

5 New Generation Power Unit EU300K4

Low Emission Engine
The Power Unit for the F301 is a new generation model with environmentally friendly specifications. It is designed with strict concepts for clean emissions with high combustion efficiency and with GIKEN’s original hydraulic control technologies.

Ultra Low Noise Level
It clears allowable construction noise levels in many industrialized countries.

Standard Application of Biodegradable Oil
The F301 uses biodegradable Piler Eco Oil and Piler Eco Grease. Therefore, 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.

6 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).
### Dimensions & Specifications

#### Super Crush Mode

<table>
<thead>
<tr>
<th>Power Source</th>
<th>Diesel Engine</th>
<th>Rated Output</th>
<th>355 HP / 1800 rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank Capacity</td>
<td>112 US gal (Super Crush Mode)</td>
<td>91 US gal (Super Crush Mode)</td>
<td></td>
</tr>
<tr>
<td>Press-in Force</td>
<td>39.2 ton (US)</td>
<td>33.4 ton (US)</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>30-46 in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Press-in Speed</td>
<td>142.7 fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraction Speed</td>
<td>8.0 ~ 10.5 fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control System</td>
<td>Radio Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction Stand</td>
<td>Self-Moving</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Standard / Water Jetting Mode

<table>
<thead>
<tr>
<th>Power Source</th>
<th>EU300K4</th>
<th>Rated Output</th>
<th>316 HP / 1800 rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank Capacity</td>
<td>91 US gal</td>
<td>76 US gal</td>
<td></td>
</tr>
<tr>
<td>Press-in Force</td>
<td>33.4 ton (US)</td>
<td>29.6 ton (US)</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>30-46 in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Press-in Speed</td>
<td>105.9 fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraction Speed</td>
<td>4.0 ~ 10.5 fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control System</td>
<td>Radio Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction Stand</td>
<td>Self-Moving</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Accessories

#### Standard Accessories

- **Piler Stage**
- **Chuck Stage**
- **Auger Head Replacement Attachment**
- **Pile Roller**
- **Hose Roller**
- **Pile Laser**
- **Casing Scraper**
- **Module Box**

#### Optional Accessories

- **Piler Jet Reel (JR29)**
- **Auger Head**
GIKEN LTD.

Global Network: Japan, USA, UK, Germany, Singapore, China

For more contact information, please visit: