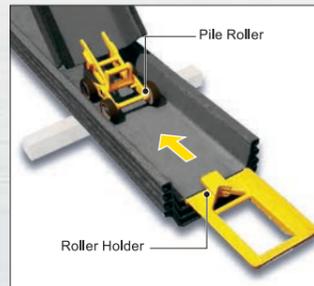
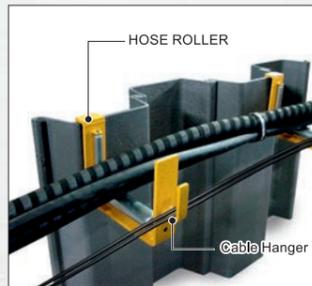


■ Basic Accessories



PILE ROLLER™



HOSE ROLLER™



PILE LASER™



Module Box



Tablet PC (encased)



PILER JET REEL™ (JR28)



PILER STAGE™  
for Standard Mode

■ Super Crush Mode Accessories



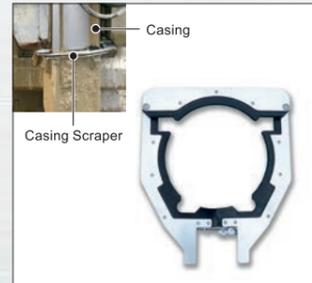
PILER STAGE™  
for Super Crush Mode



Auger Head



Auger Head Replacement  
Attachment



Casing Scraper



Construction Solutions Company

[www.giken.com](http://www.giken.com)

"SILENT PILER" is a registered trademark or trademark of GIKEN LTD. in the United States and other countries.

© 2015 GIKEN LTD. All Rights Reserved.

CONTACT US



T4\_Ver 2.0EN05 / 03 Mar 2026



**SILENT PILER™**  
**F111**  
for U Sheet Piles  
400mm wide



Extremely sophisticated modular model applicable to U Sheet Piles (400mm wide)

# SILENT PILER™ F111

SILENT PILER™ F111

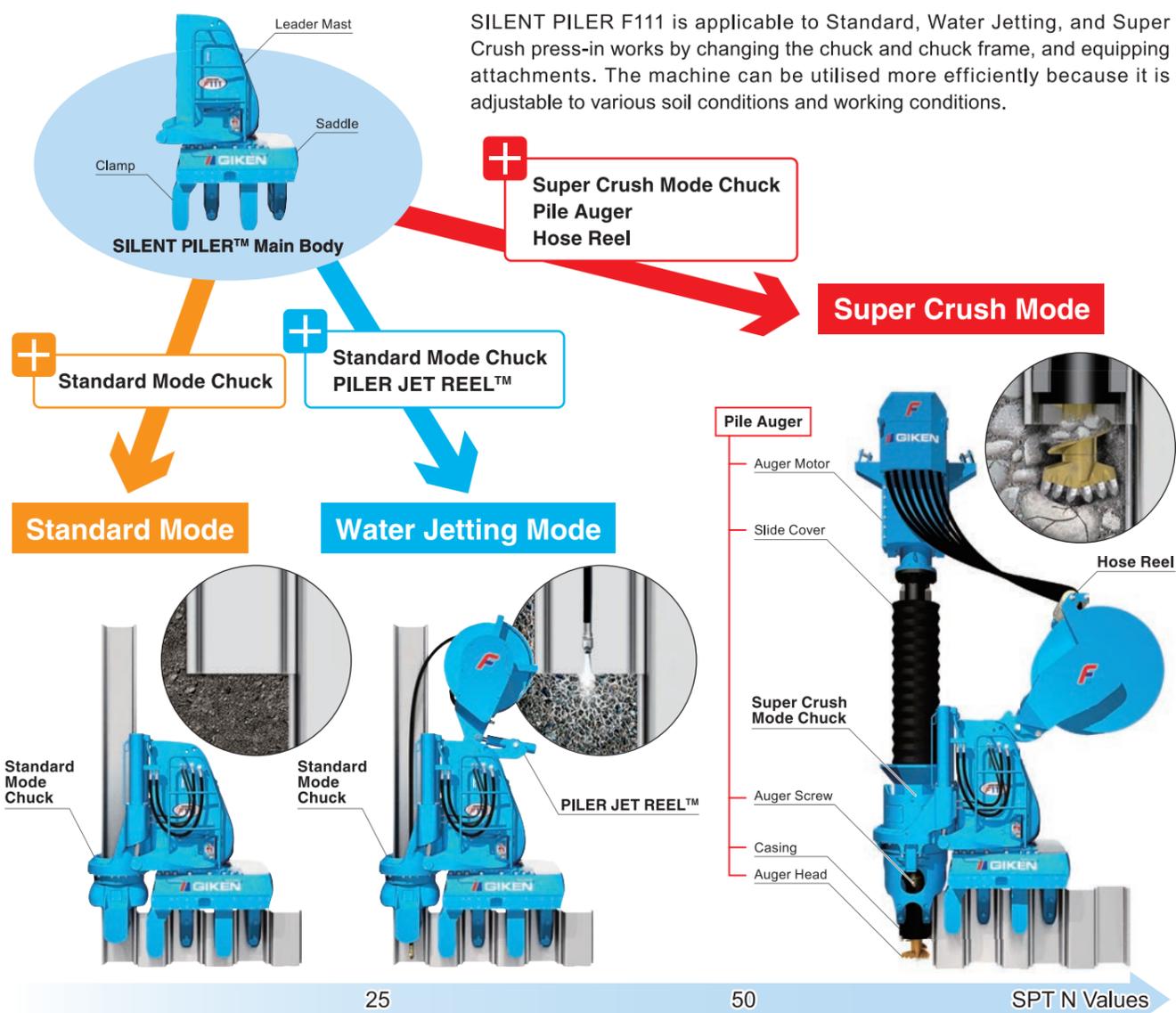
## Flexible and Functional Formula

The F111 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.



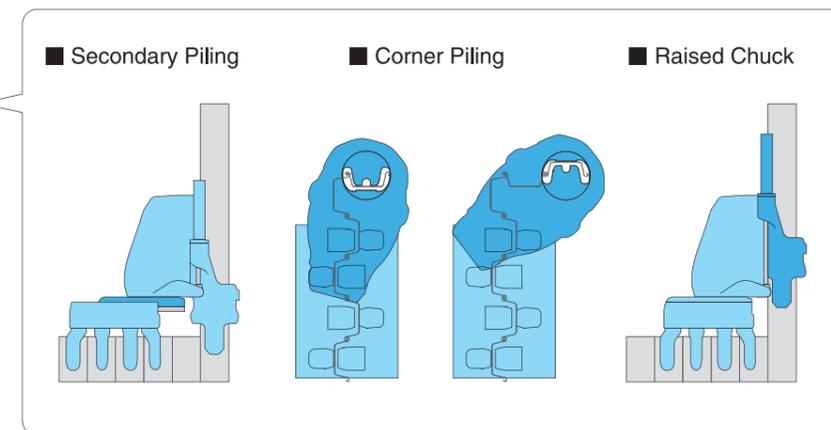
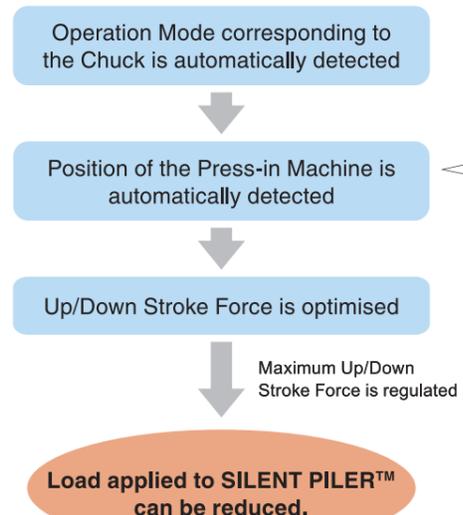
### 1 Optimising Work Efficiency with Modular Design



### 2 Features of SILENT PILER F Series (New Standards of Press-in Machine)

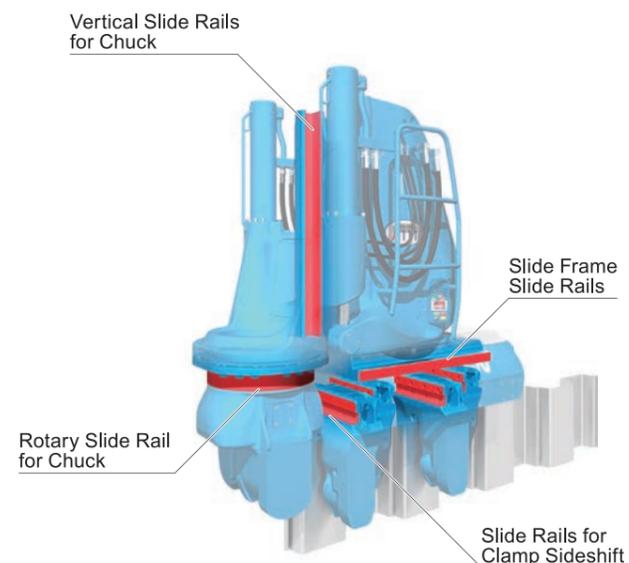
#### ● New Control System

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.



#### ● Increased Machine Rigidity and Guiding Precision

For SILENT PILER F Series, rigidity of components and guiding precision are increased compared to the previous models to achieve higher durability of the machines. Also, assembly tolerances in guiding systems are minimised by implementing longer slide rails and greater sliding surfaces to increase machine life.



#### ● Addition of Abrasion Resistant Plates

Detachable abrasion resistant plates have been added along the vertical slide rails for Chuck and that provides 3.6 times wear resistance compared to the previous models. Hence, high guiding precision is achieved and maintenance costs are reduced.



#### ● Tablet PC

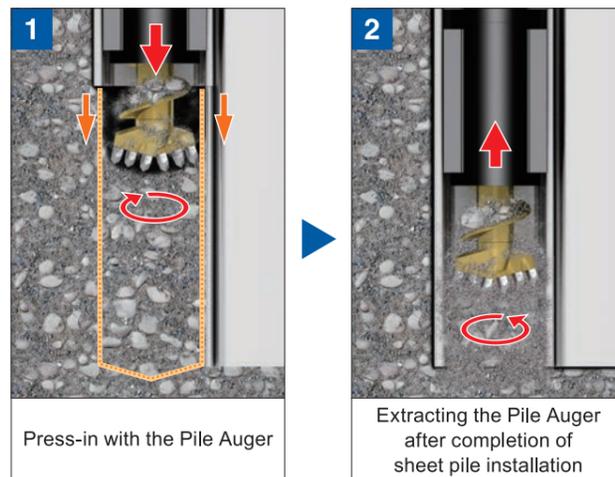
The real-time information of piling operations can be displayed on a tablet PC which can be attached to the side of the SILENT PILER.



- Displays piling monitoring data
- Displays comparison of the current data to the previous monitoring results
- Displays the machine settings and status during piling work
- Displays borehole log
- Displays Operation Manual & Parts List

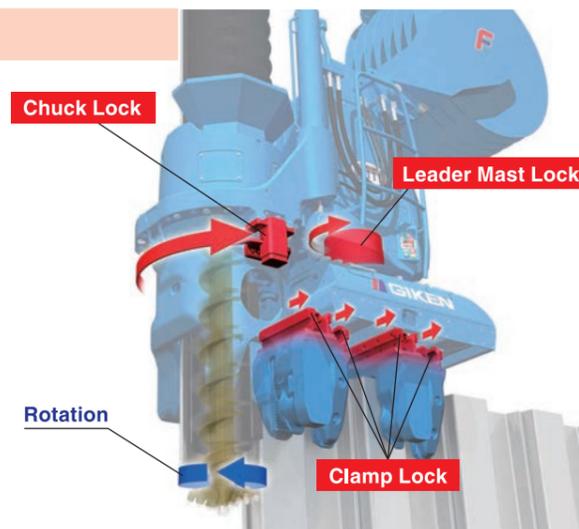
### 3 Pile Installation into Hard Ground

The "Pilot Coring Theory", GIKEN 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. Previous models have proved the superiorities of the Hard Ground Press-in Method in the field. 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. The Hard Ground Press-in Method can install sheet piles even under restricted site conditions such as on slopes or water where conventional piling techniques would be ineffective. By adapting the GRB System™, temporary work platforms are no longer necessary, dramatically reducing the environmental burden.



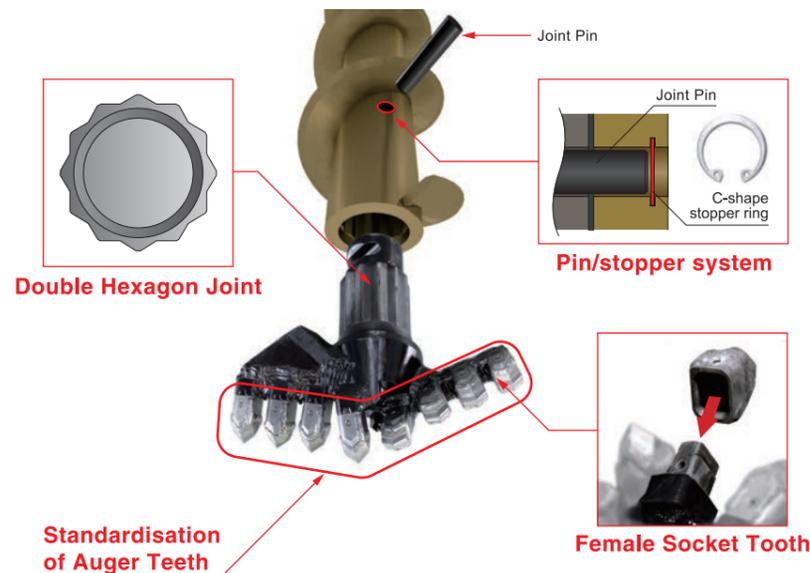
### 1 Locking Function

Lock functions in the chuck, leader mast, and clamps secure SILENT PILER against drilling torque and increase drilling efficiency and accuracy of pile installation.



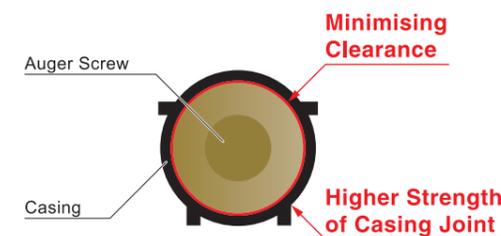
### 2 Improved Design of Auger Head and Teeth

Female Socket Teeth can minimise wear on tooth mount and maximise drilling efficiency with minimal assembly tolerance. Also, pilot teeth and outer teeth are standardised. 12 point double hexagon joint of the Auger Shaft and Auger Head achieves higher torque application and reduces weight. The joint is locked with only one stopper pin instead of two for easier assembly and securely locked with C-shape stopper ring.



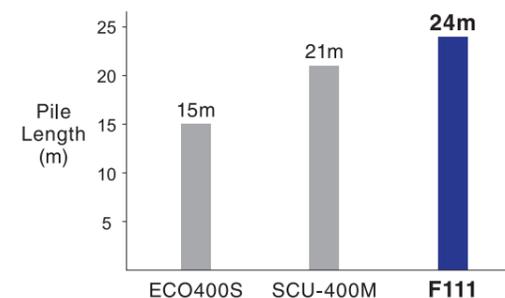
### 3 Improved Auger Screw & Casing

Improved Auger Screw and Auger Casing provide higher torque application and centre drilling accuracy, which achieve higher augering efficiency. The durability of auger screw is also extended by minimising the tolerance between auger screw and auger casing; therefore the auger is less likely to wear out.



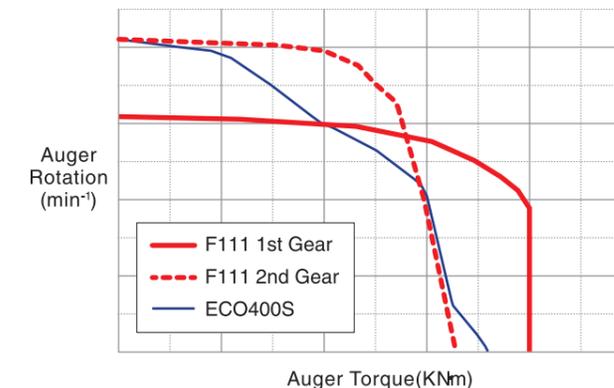
### 4 Longer Applicable Pile Length

The applicable sheet pile length for F111 is 24m maximum, which is greater than those of previous models.



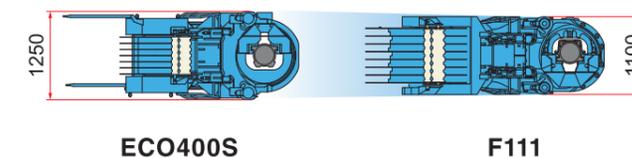
### 5 Increased Power Capacity of Auger

Auger motor of F111 has 1.4 times higher power capacity than the previous model (ECO400S). This results in maintaining high speed augering even in a greater torque range.



### 6 Compact Machine Size

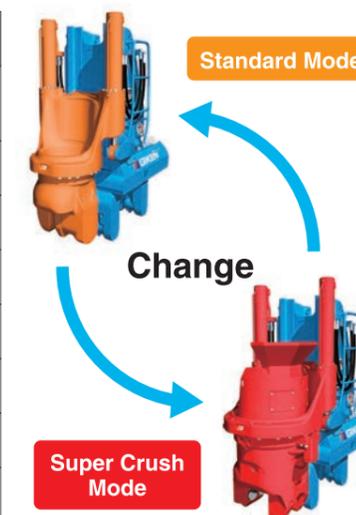
F111 is 150mm narrower than the previous model (ECO400S) and can be adopted to more confined site conditions.



### 4 High Performance Also in Standard Mode

Despite its universal design, F111 provides a similar high performance as a Standard Mode Custom Model.

| Model                         | ECO100-4CA                      | F111                            | ECO400S                         |
|-------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Operation Mode                | Standard Mode (Custom Model)    | Standard Mode (Modular Model)   | Standard Mode (Custom Model)    |
| Max. Press-in Force           | 1000 kN                         | 1000 kN                         | 800 kN                          |
| Max. Extraction Force         | 1100 kN                         | 1100 kN                         | 900 kN                          |
| Press-in Speed                | 1.9 ~ 35.2 m/min                | 2.0 ~ 43.5 m/min                | 1.5 ~ 35.5 m/min                |
| Extraction Speed              | 1.8 ~ 39.1 m/min                | 1.5 ~ 32.3 m/min                | 1.5 ~ 50.5 m/min                |
| Mass (SILENT PILER Main Body) | 7050 kg                         | 7120 kg                         | 7400 kg                         |
| Mass (Power Unit)             | 6650 kg                         | 7250 kg                         | 7300 kg                         |
| Rated Output                  | 195 kW / 1800 min <sup>-1</sup> | 265 kW / 1800 min <sup>-1</sup> | 195 kW / 1800 min <sup>-1</sup> |



## 5 New Generation Power Unit EU300K4

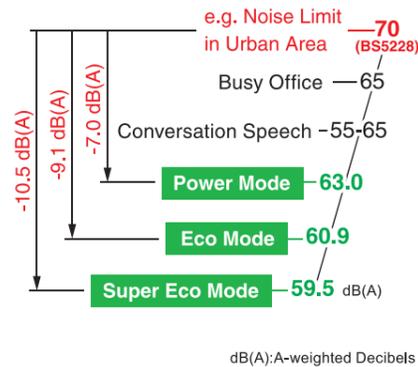
### Low Emission Engine

The Power Unit of the F111 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 original hydraulic control technologies.



### Ultra Low Noise Level

It clears allowable construction noise levels in many industrialised countries.



### Standard Application of Biodegradable Oil

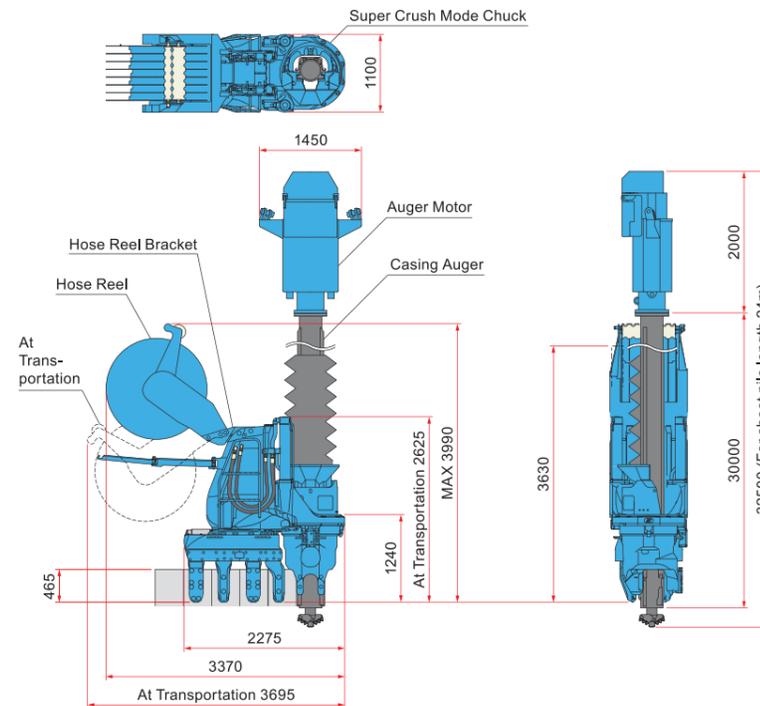
The F111 uses bio-degradable PILER ECO™ OIL and PILER ECO Grease. Hence, if hydraulic oil or grease is spilled into soil or water, there will be no environmental damage to the surrounding ecosystem. In addition, the machines are painted with TX-Free non-lead paint\*.

\* Environmentally-friendly paint which does not contain toluene, xylene and lead based pigment.



## Dimensions & Specifications

### Super Crush Mode F111-C400



| SILENT PILER™                    | F111  |          |
|----------------------------------|---|----------|
| Applicable sheet piles           | U Sheet Piles 400mm wide (SPII, SPIII, SPIV)              |          |
| Max. Press-in Force              | 800kN (Super Crush Mode)<br>1000 kN (Standard / WJ Mode)  |          |
| Max. Extraction Force            | 900 kN (Super Crush Mode)<br>1100 kN (Standard / WJ Mode) |          |
| Stroke                           | 850 mm  |          |
| Press-in Speed                   | 2.0 ~ 43.5 m/min  |          |
| Extraction Speed                 | 1.5 ~ 32.3 m/min  |          |
| Control System                   | Radio Control   |          |
| Movement                         | Self-Moving   |          |
| Mass                             | Super Crush Mode (Main Body & Hose Reel)                  | 10640 kg |
|                                  | Water Jetting Mode (Main Body & PILER JET REEL)           | 7960 kg  |
|                                  | Standard Mode (Main Body)                                 | 7120 kg  |
| Hose Reel                        | HR17B   |          |
| Mass (Standard)                  | 2790 kg (including Hose Reel Bracket)                     |          |
| Pile Auger                       | PA22  |          |
| Applicable pile length(Standard) | Max 24 m*   |          |
| Mass                             | Auger Motor   | 1850 kg  |
|                                  | Casing Auger  | 9050 kg  |
| Total Mass                       | 10900 kg  |          |

\*Max 30m in special mode

## 6 Scientific Execution of Press-in Work & Advanced IT Functions

### GIKEN IT System

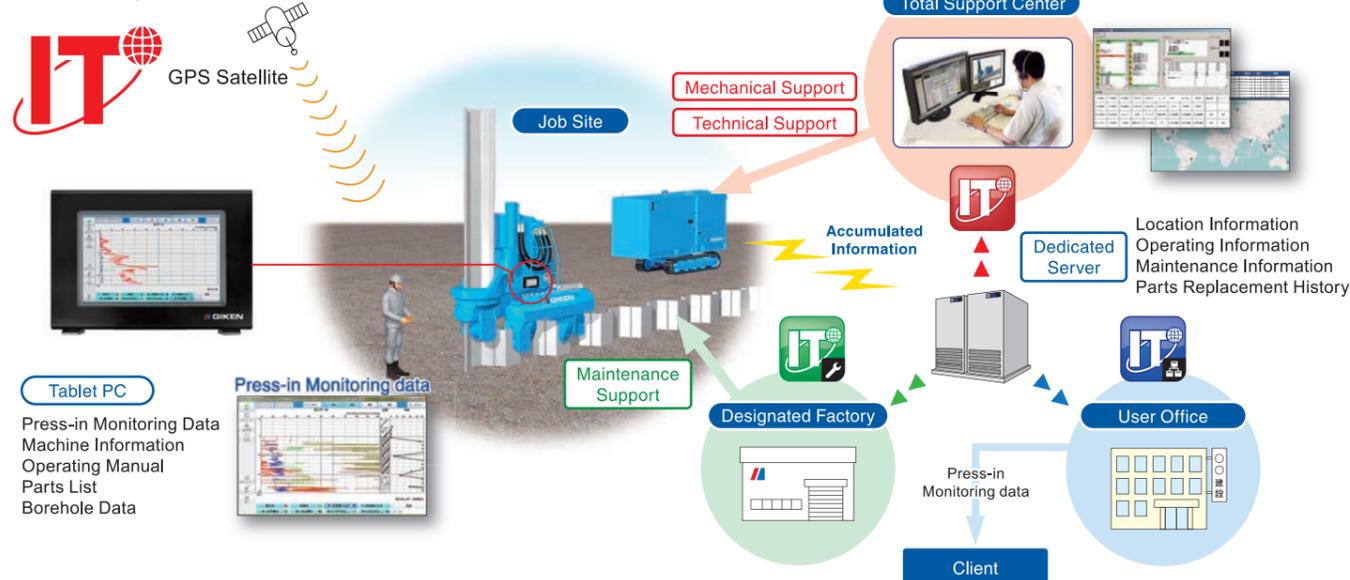
GIKEN engineers can monitor individual SILENT PILER, such as operating condition, maintenance records and location. Quick advice for any technical troubles is available promptly and appropriate information can also be provided to prevent troubles.

\* The system is not available in the countries where authorisation for usage cannot be acquired.

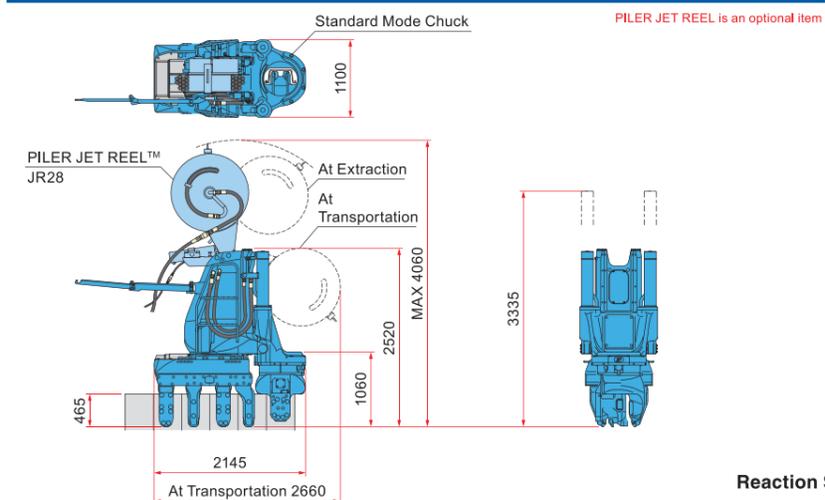
### Press-in Monitoring and Data Logging System

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).

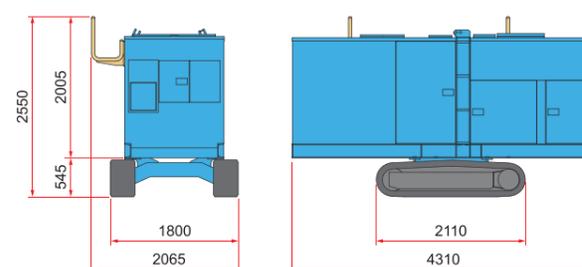
### GIKEN IT System



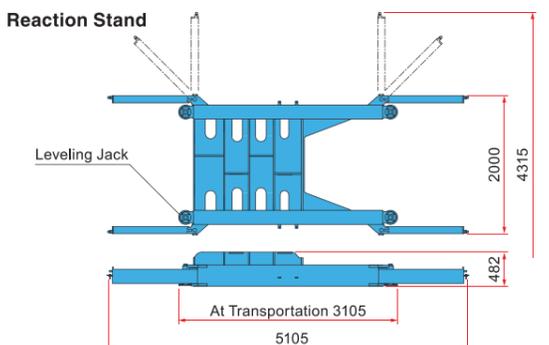
### Standard / Water Jetting Mode F111-400



### Power Unit



### Reaction Stand



| PILER JET REEL™                     | JR28                                  |         |
|-------------------------------------|---------------------------------------|---------|
| Applicable pile length              | Standard 17.0 m (Max. 27.0 m)         |         |
| Mass                                | 840 kg                                |         |
| Power Unit                          | EU300K4                               |         |
| Power Source                        | Diesel Engine                         |         |
| Rated Output                        | 265 kW / 1800 min <sup>-1</sup>       |         |
| Fuel Tank Capacity                  | 600 L                                 |         |
| Hydraulic Reservoir                 | PILER ECO™ Oil 630 L                  |         |
| Urea Additive Tank Capacity         | 38 L                                  |         |
| Moving Speed                        | 1.4 km/h                              |         |
| Mass                                | with 20 m Super Crush hose (Standard) | 7250 kg |
|                                     | with 30 m Super Crush hose            | 7550 kg |
| Reaction Stand (with Leveling Jack) |                                       |         |
| Mass                                | 1400 kg                               |         |
| Mass (Chuck Only)                   |                                       |         |
| Standard Mode Chuck                 | 1970 kg                               |         |
| Super Crush Mode Chuck              | 2700 kg                               |         |

The above specifications are subject to alteration without prior notice