

GIKEN

SILENT PILER **F201**

for U Sheet Piles

15.74 - 23.62 in wide



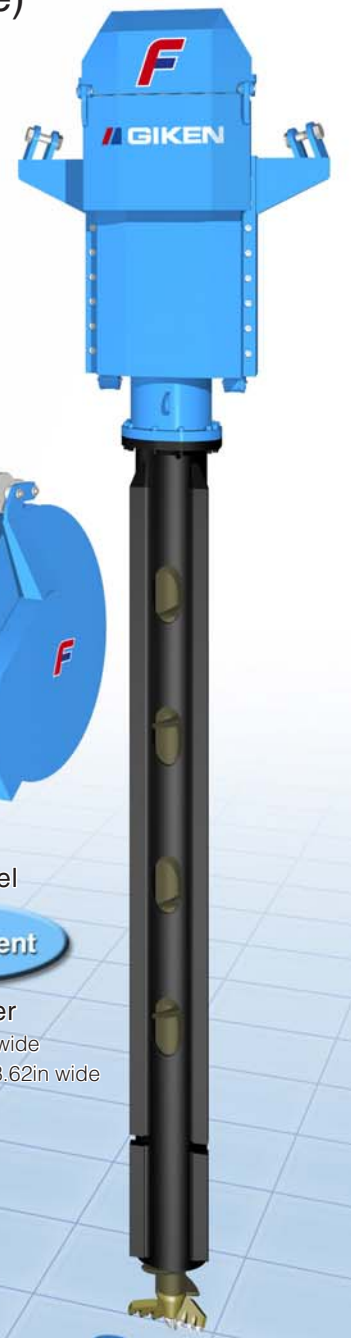
Modular model applicable to U Sheet Piles (15.75-23.62in wide)

SILENT PIER F201


Silent Piler F201

Flexible and Functional Formula

The F201 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.



Attachment

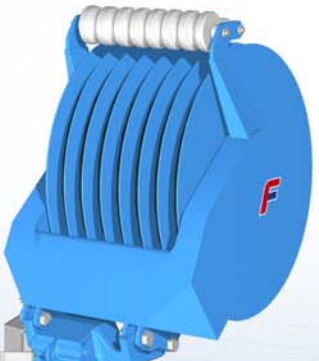


Piler Jet Reel

Modular Base Components


Leader Mast
Slide Frame
Saddle
Clamps

Attachment



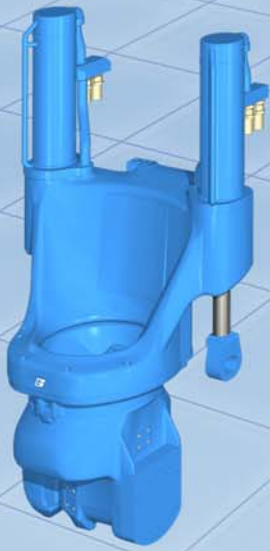
Hose Reel

Attachment

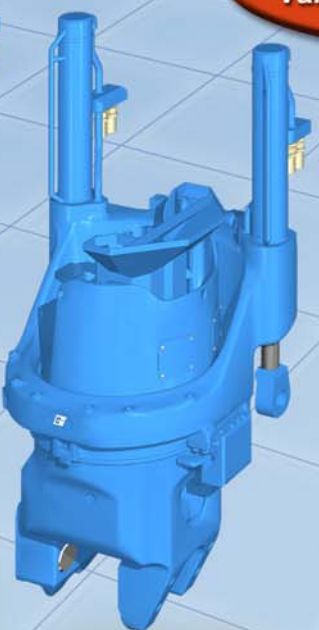


Pile Auger
• for 15.75in wide
• for 19.69-23.62in wide


Compatible with Various Types of Chuck



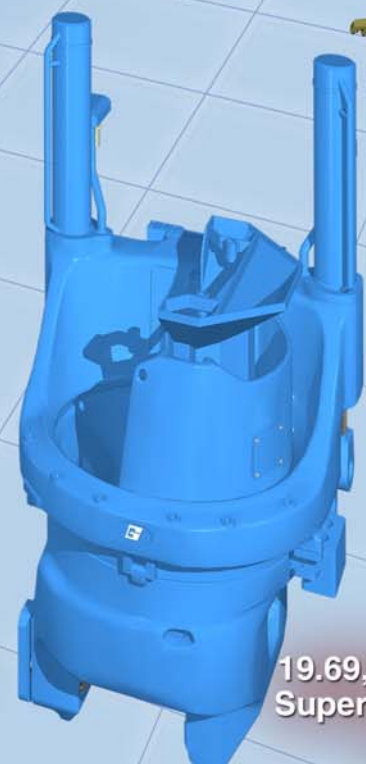
15.75in wide
Standard Mode
Chuck



15.75in wide
Super Crush Mode
Chuck



19.69,23.62in wide
Standard Mode
Chuck



19.69,23.62in wide
Super Crush Mode
Chuck

1 Applicable to 15.75-23.62in wide U Sheet Pile and soft to hard ground conditions

F201 has wider adoptability and is applicable to Standard Mode, Water Jetting Mode, and Super Crush Mode and 15.75in, 19.69in and 23.62in wide U sheet pile by changing the chuck and chuck frame, and equipping suitable attachments.

Super Crush Mode

SPT N Values: 50

Water Jetting Mode

SPT N Values: 25

Standard Mode

SPT N Values: 0

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.



Pile width corresponding to the Chuck is automatically detected.

↓

Position of the Press-in Machine is automatically detected

↓

Up/Down Stroke Force is optimised.

↓

Maximum Up/Down Stroke Force is regulated.

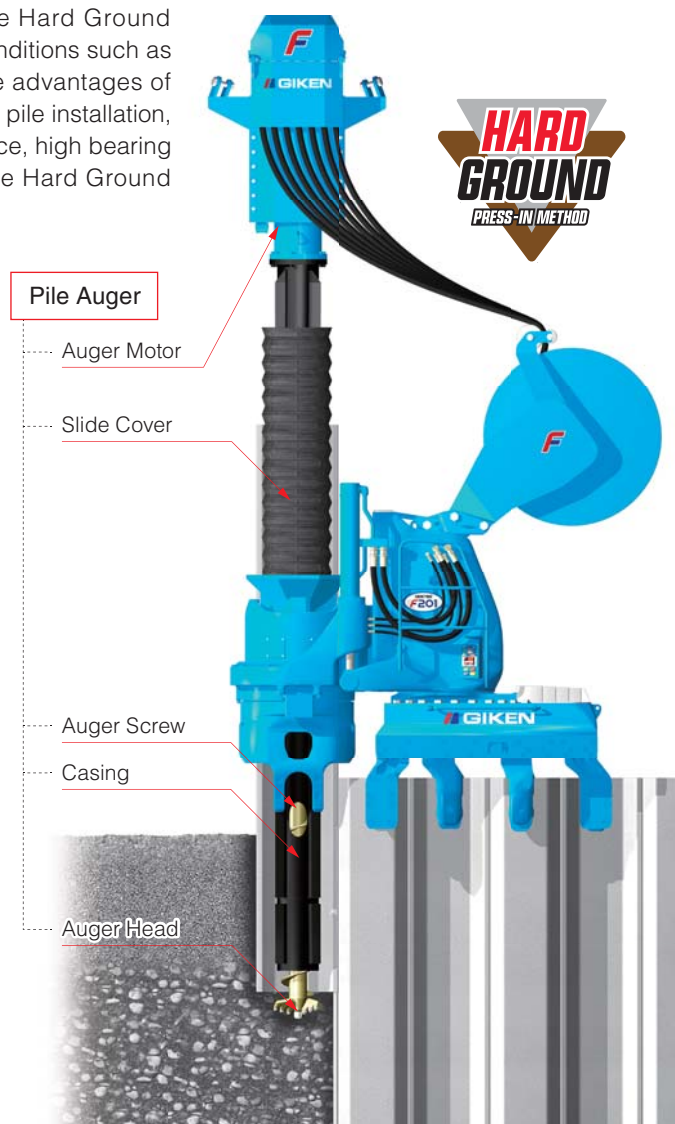
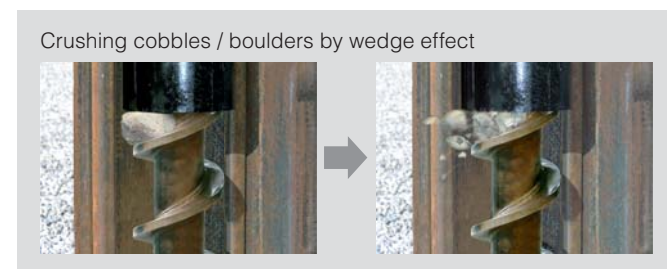
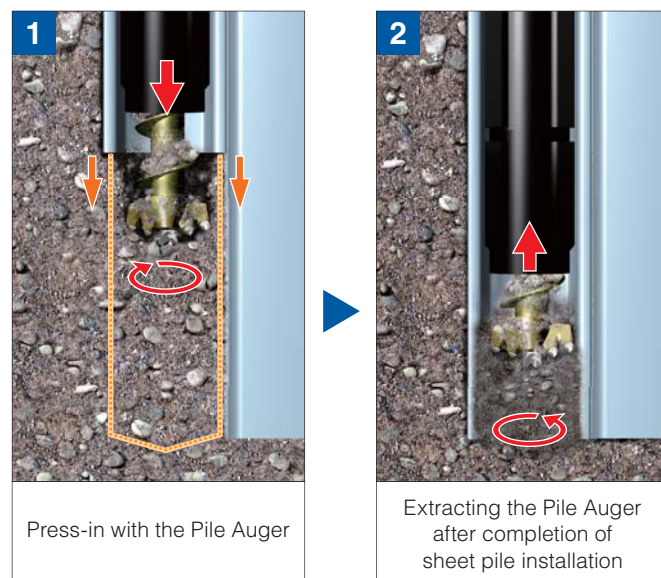
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Load applied to Silent Piler can be reduced.

■ Secondary Piling ■ Corner Piling ■ Raised Chuck

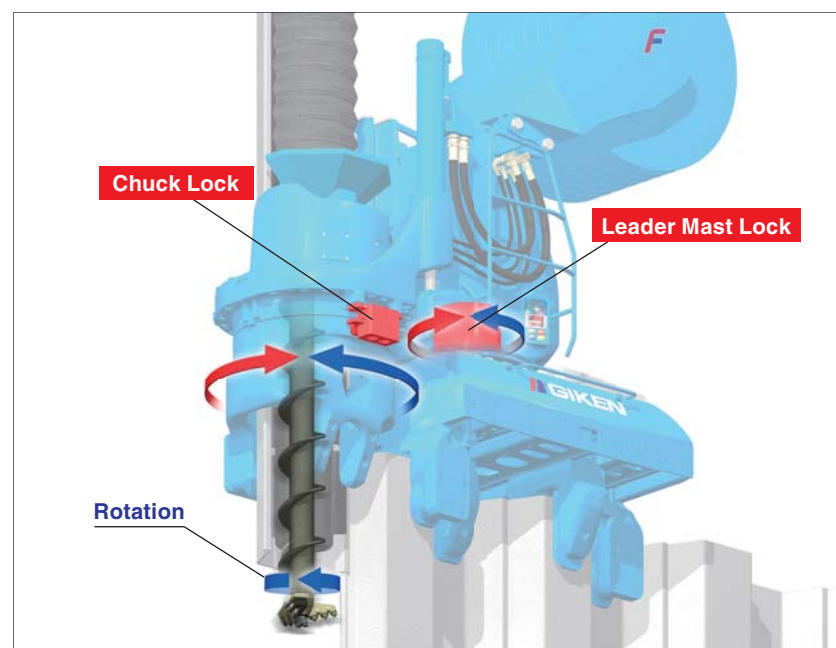
3 Pile Installation into Hard Ground

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.



Locking Function

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



4 New Generation Power Unit EU300K4

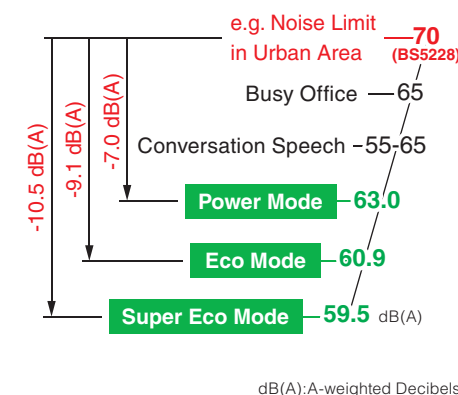
Low Emission Engine

The Power Unit for the F201 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 F201 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-lead paint*.

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



5 Scientific Execution of Press-in Work & Advanced IT Functions

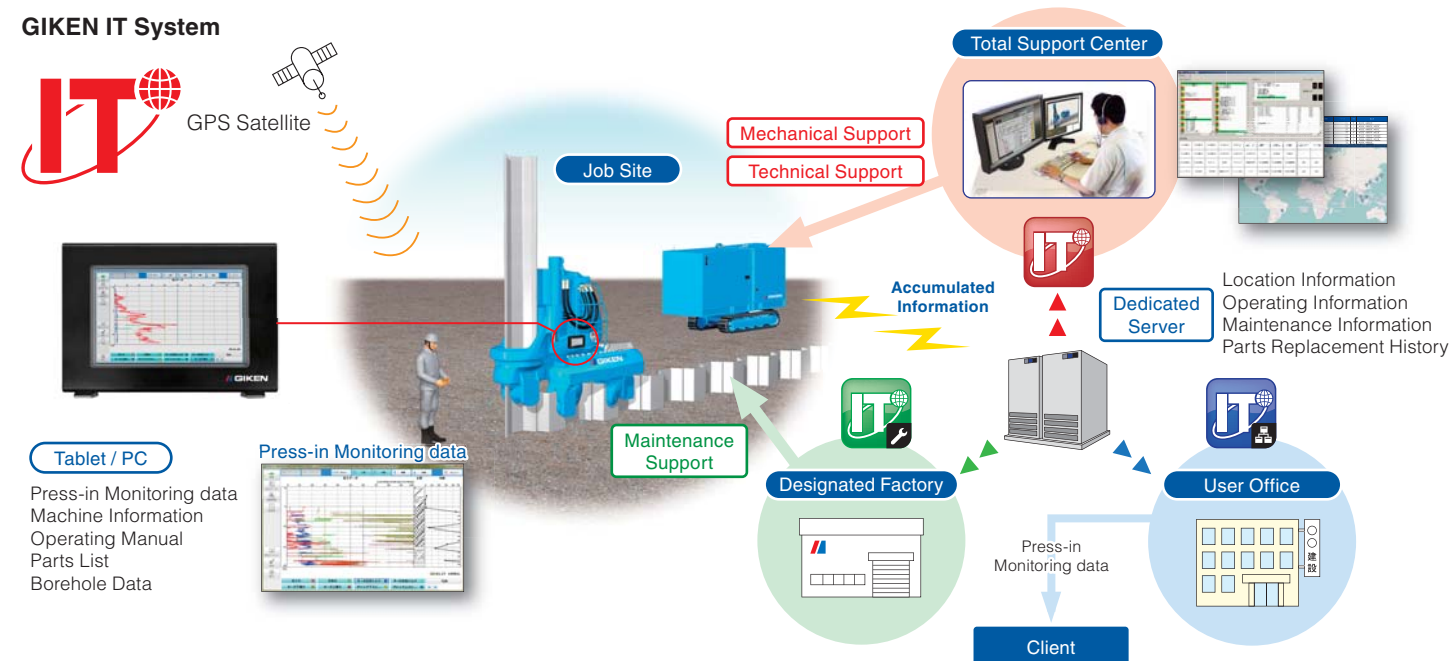
GIKEN IT System

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.

* 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).



Dimensions & Specifications

Super Crush Mode

15.74 in wide

F201-C400

for 15.74 in wide Super Crush Mode Chuck

19.68 in wide

F201-C500

for 19.68-23.62 in wide Super Crush Mode Chuck

23.62 in wide

F201-C600

for 19.68-23.62 in wide Super Crush Mode Chuck

Water Jetting Mode

F201-400

Piler Jet Reel JR28

F201-500

F201-600

Standard Mode

F201-400

for 15.74 in wide Standard Mode Chuck

F201-500

for 19.68-23.62 in wide Standard Mode Chuck

F201-600

for 19.68-23.62 in wide Standard Mode Chuck

F201 Specifications

● Super Crush Mode

Max. Press-in Force	89.9 ton(US)
Max. Extraction Force	101.1 ton(US)
Stroke	33.46 in
Press-in Speed	1.6 ~ 14.7 ft/min
Extraction Speed	3.6 ~ 30.8 ft/min
Control System	Radio Control
Mass	for 15.74 in wide sheet pile 29012 lb (Main Body & Hose Reel) for 19.68, 23.62 in wide sheet pile 30115 lb
Hose Reel	HR17C
Mass(Standard)	6194 lb (including Hose Reel Bracket)
Pile Auger	PA22
Applicable pile length (Standard)	Max 78.74 ft*
Auger Motor	4078 lb
Mass	Casing Auger for 15.74 in wide sheet pile 19951 lb for 19.68, 23.62 in wide sheet pile 22156 lb
Total Mass	for 15.74 in wide sheet pile 24030 lb for 19.68, 23.62 in wide sheet pile 26235 lb

*Max 98.42 ft in special mode

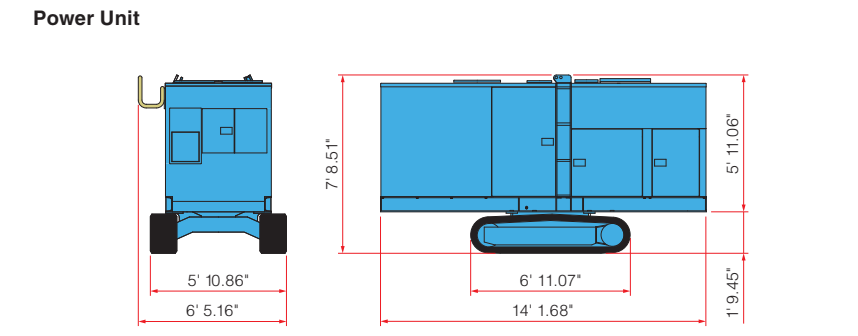
● Water Jetting Mode

Max. Press-in Force	168.6 ton(US)
Max. Extraction Force	179.8 ton(US)
Stroke	33.46 in
Press-in Speed	4.5 ~ 98.4 ft/min
Extraction Speed	3.6 ~ 76.1 ft/min
Control System	Radio Control
Mass	for 15.74 in wide sheet pile 23854 lb (Main Body & Piler Jet Reel) for 19.68, 23.62 in wide sheet pile 24515 lb
Piler Jet Reel	JR28
Applicable pile length	Standard 55.77 ft (Max. 88.58 ft)
Mass	1807 lb

Piler Jet Reel is an optional item

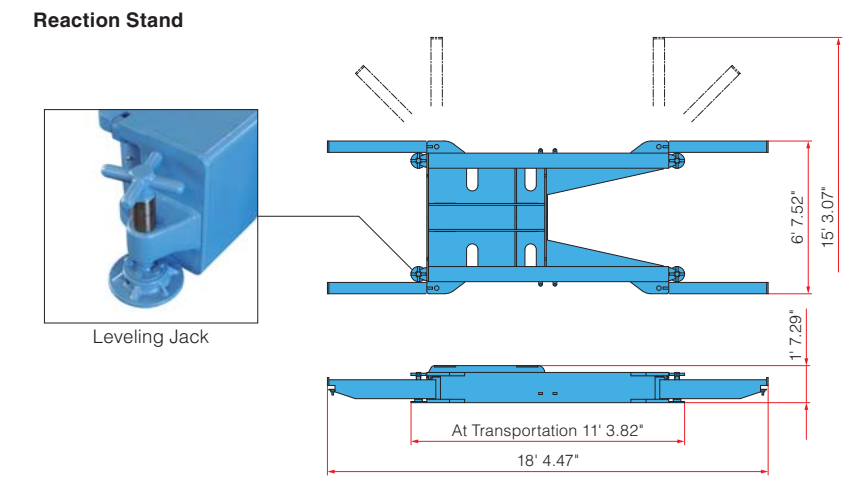
● Standard Mode

Max. Press-in Force	168.6 ton(US)
Max. Extraction Force	179.8 ton(US)
Stroke	33.46 in
Press-in Speed	4.59 ~ 98.42 ft/min
Extraction Speed	3.60 ~ 76.11 ft/min
Control System	Radio Control
Mass	for 15.74 in wide sheet pile 22046 lb (Main Body) for 19.68, 23.62 in wide sheet pile 22707 lb



Power Unit

Power Source	Diesel Engine	EU300K4
Power Mode	355 HP / 1800 rpm	
Rated Output	Eco Mode 316 HP / 1600 rpm	
	Super Eco Mode 276 HP / 1400 rpm	
Fuel Tank Capacity	159 US gal	
Hydraulic Reservoir	Piler ECO Oil 166 US gal	
Urea Additive Tank Capacity	10 US gal	
Moving Speed	0.87 mph	
Mass	15983 lb (with 65.61 ft Hose)	



Reaction Stand (with Leveling Jack)

Mass	4188 lb
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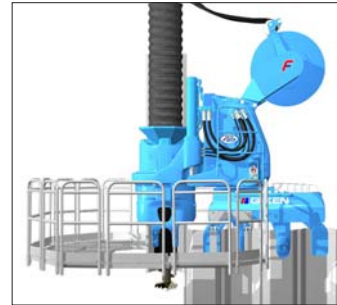
Chuck Mass

Sheet Pile Width	Standard Mode Chuck	Super Crush Mode Chuck
19.68, 23.62 in	6283 lb	7495 lb
15.74 in	5621 lb	6393 lb

The above specifications are subject to alteration without prior notice

Accessories

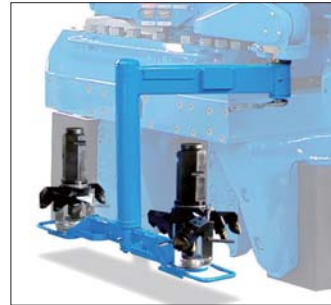
Standard Accessories



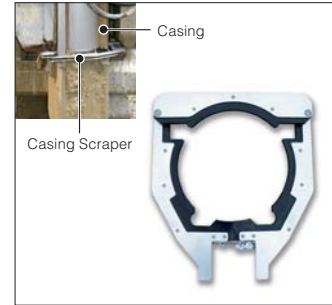
Piler Stage



Chuck Stage *

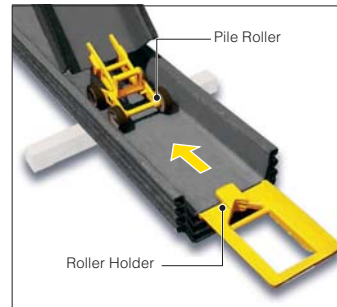


Auger Head Replacement Attachment *

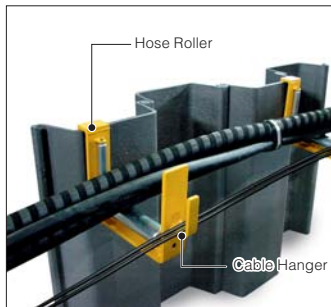


Casing Scraper *

* Available for Super Crush Mode only.



Pile Roller



Hose Roller



Pile Laser



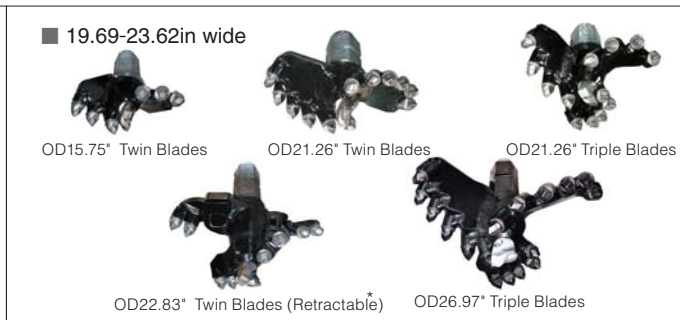
Module Box



■ 15.75in wide

OD12.99" Twin Blades OD17.72" Twin Blades

OD17.72" Triple Blades OD21.26" Triple Blades



■ 19.69-23.62in wide

OD15.75" Twin Blades OD21.26" Twin Blades OD21.26" Triple Blades

OD22.83" Twin Blades (Retractable) OD26.97" Triple Blades

Auger Head *

* for 23.62in wide only

Optional Accessories



Piler Jet Reel (JR28)

F201 Project Data Sheet

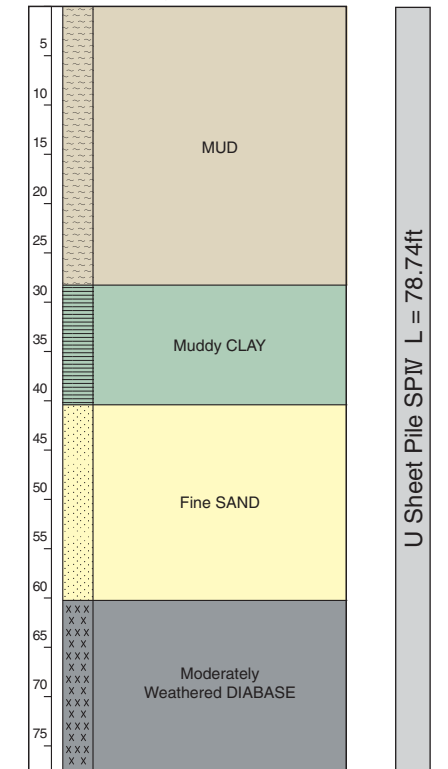
F201 Demonstration Test



Project : Cofferdam Test Piling
 Location : Dong Gang Business District, Dalian China
 Period : November 2013 ~ December 2013
 Silent Piler : F201
 Type of Sheet Pile : U Sheet Pile SP IV
 Pile Length : 39.37ft (Standard Mode)
 39.37ft, 78.74ft (Super Crush Mode)



Borehole Log



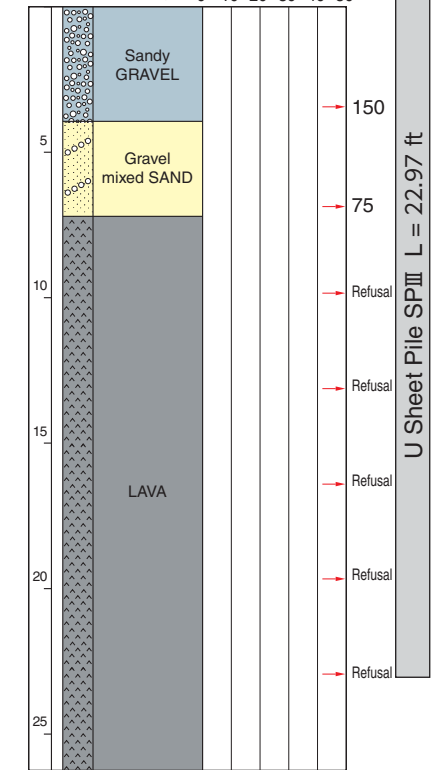
Emergency Land Slide Remedial Works



Project : Emergency Channel Construction Works
 Location : Oshima Town, Tokyo
 Period : March 2014 ~ May 2014
 Silent Piler : F201
 Type of Sheet Pile : U Sheet Pile SP III
 Pile Length : 22.97 ft



Borehole Log

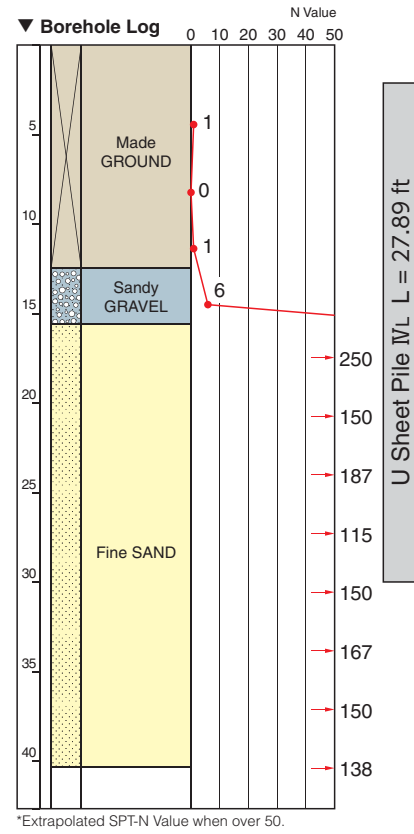


*Extrapolated SPT-N Value when over 50.

Drainage Restoration Works in Dense Residential Area



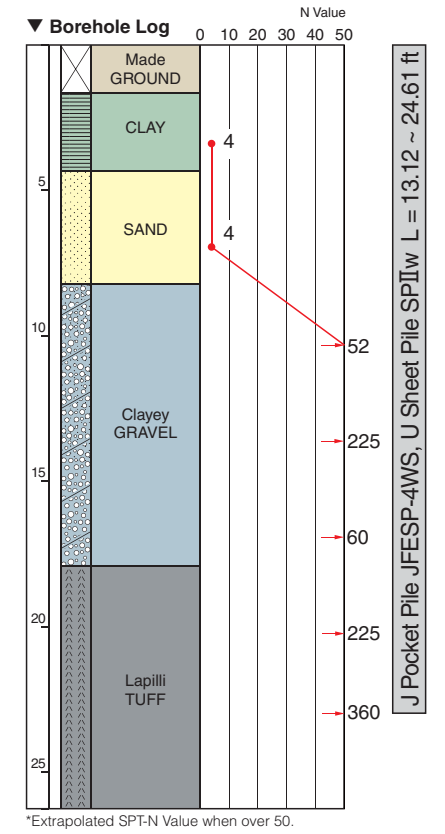
Project : Machida City Public Sewer System, Storm-Water Sewer Construction Works
 Location : Machida City, Tokyo
 Period : May 2013
 Silent Piler : F201
 Type of Sheet Pile : U Sheet Pile SP VL
 Pile Length : 27.89 ft



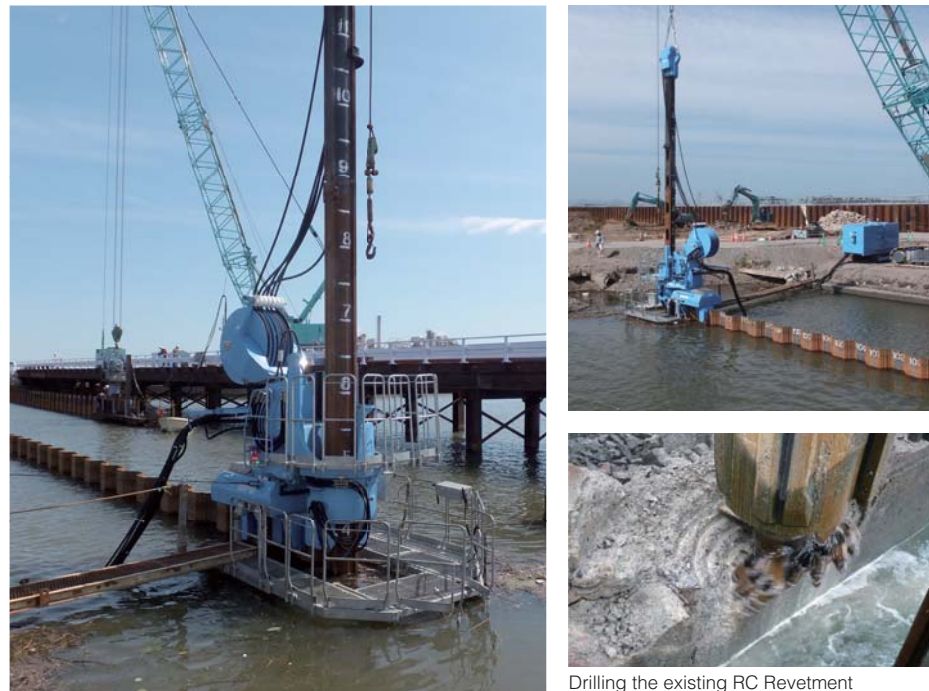
Installation of Sheet Pile Cut-off Wall into Hard Ground



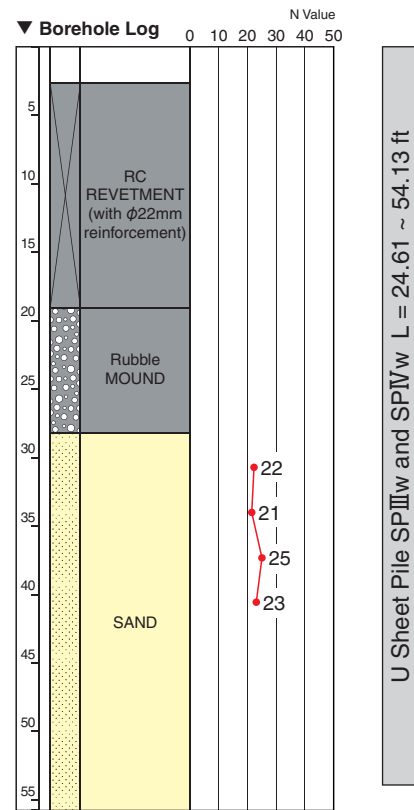
Project : Demolition of Miyagi Prefectural Public Health and Environment Bldg.- Second Phase
 Location : Sendai City, Miyagi
 Period : October 2013 ~ November 2013
 Silent Piler : F201
 Type of Sheet Pile : J Pocket Pile JFESP-4WS, U Sheet Pile SP IIw
 Pile Length : 13.12 ~ 24.61 ft



River Dike Disaster Remedial Works



Project : Embankment Restoration Work Section 4, Natori River
 Location : Natori City, Miyagi
 Period : September 2013 ~ October 2013
 Silent Piler : F201
 Type of Sheet Pile : U Sheet Pile SP IIIw and SP IVw
 Pile Length : 24.61 ~ 54.13 ft

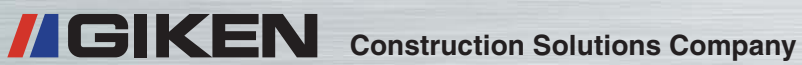


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Data sheets can be searched and downloaded by category.



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