



GIKEN

SILENT PILER **F201**

for U Sheet Piles
400-600mm wide

Modular model applicable to U Sheet Piles (400-600mm wide)

SILENT PILER 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.

Modular Base Components

Leader Mast
Slide Frame
Saddle
Clamps

Hose Reel

Attachment

Pile Auger
• for 400mm wide
• for 500-600mm wide

Compatible with
Various Types of Chuck

400mm wide
Standard Mode
Chuck

400mm wide
Super Crush Mode
Chuck

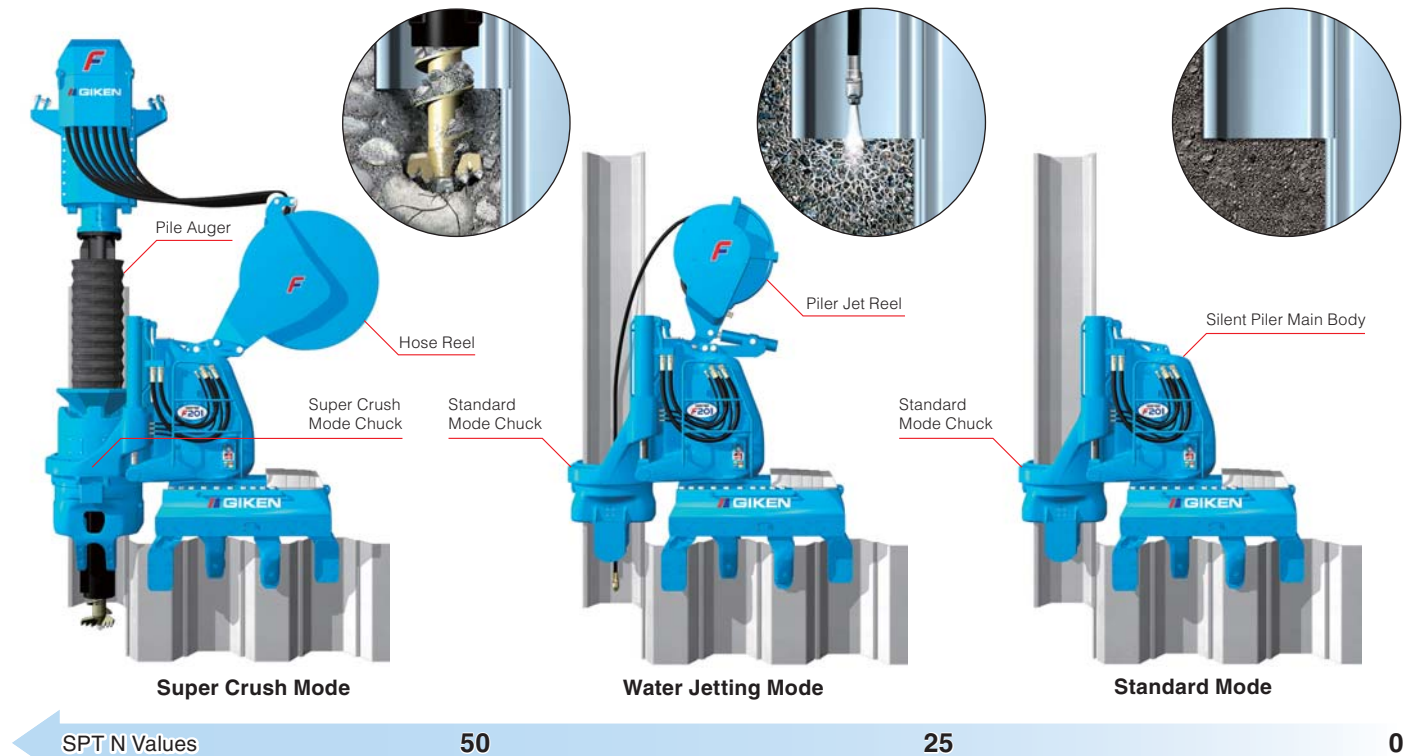
500,600mm wide
Standard Mode
Chuck

500,600mm wide
Super Crush Mode
Chuck

SILENT PILER 

1 Applicable to 400-600mm 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 400mm, 500mm and 600mm wide U sheet pile by changing the chuck and chuck frame, and equipping suitable attachments.



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.

Posture of the Press-in Machine is automatically detected.

Up/Down Stroke Force is optimised.

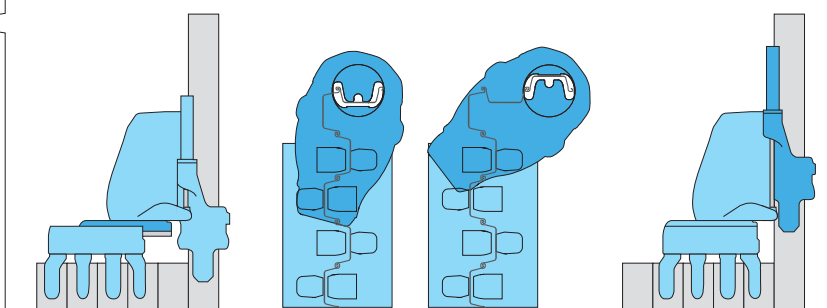
Maximum Up/Down
Stroke Force
is regulated.

Load applied to Silent Piler
can be reduced.

■ Secondary Piling

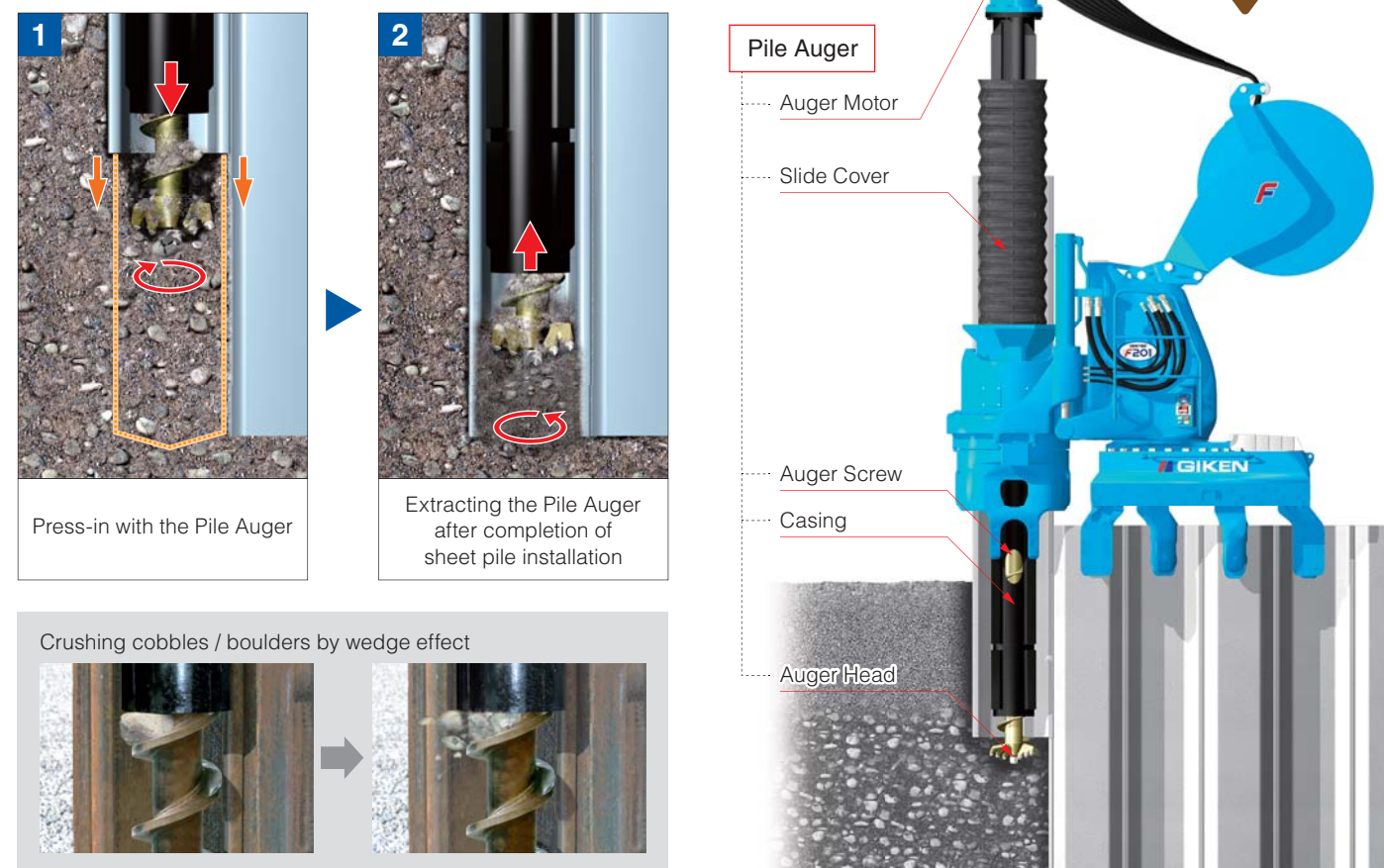
■ Corner Piling

■ Chuck Up



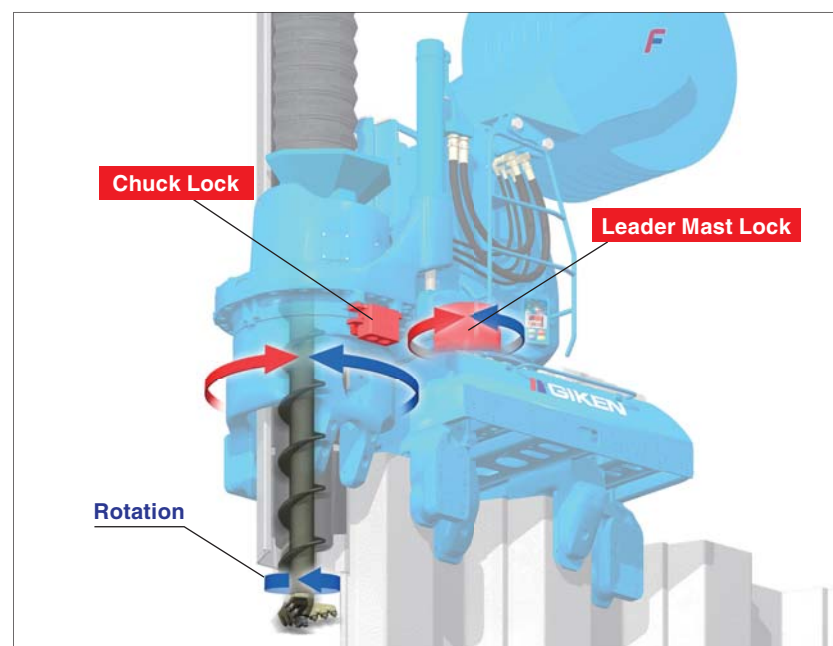
3 Pile Installation into Hard Ground

The "Directional 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 Outstanding Environmentally-Friendly Design

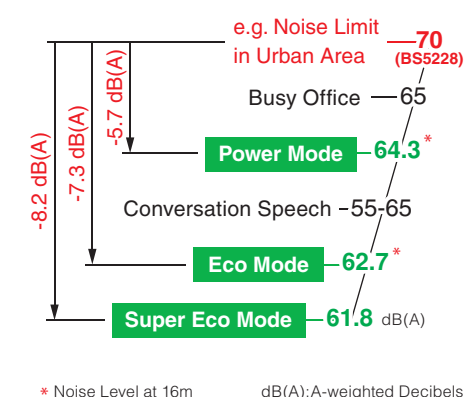
Low Emission Engine

The Power Unit of the F201 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.



Standard Application of Biodegradable Oil

The F201 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*.

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



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

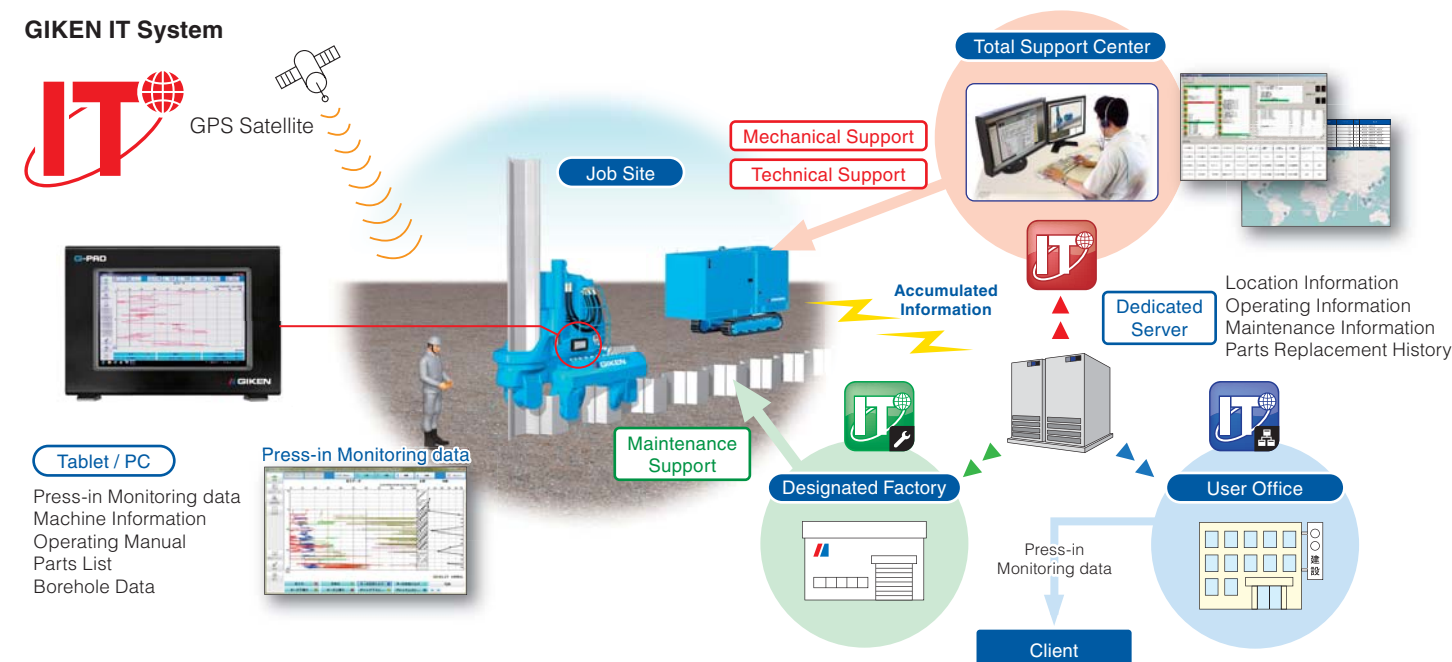
GIKEN IT System

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

400mm wide

F201-C400

for 400mm wide Super Crush Mode Chuck

1200

1265

1450

2000

3350

At Transportation 3560

470

1295

At Transportation 2835

MAX 4085

32500 (For sheet pile length 24m)

500mm wide

F201-C500

for 500-600mm wide Super Crush Mode Chuck

1200

1265

1450

2000

3510

At Transportation 3720

470

1295

At Transportation 2835

MAX 4085

32500 (For sheet pile length 24m)

600mm wide

F201-C600

for 500-600mm wide Super Crush Mode Chuck

1200

1265

1450

2000

3510

At Transportation 3720

470

1295

At Transportation 2835

MAX 4085

32500 (For sheet pile length 24m)

F201 Specifications

● Super Crush Mode

Max. Press-in Force

800 kN

Max. Extraction Force

900 kN

Stroke

850 mm

Press-in Speed

0.5 ~ 4.5 m/min

Extraction Speed

1.1 ~ 9.4 m/min

Control System

Radio Control

Mass

for 400mm wide sheet pile 13110 kg

for 500, 600mm wide sheet pile 13610 kg

Hose Reel

HR17C

Mass(Standard)

2760 kg

(including Hose Reel Bracket)

Pile Auger

PA22

Applicable pile length (Standard)

Max 24 m*

Auger Motor

1850 kg

Mass

Casing Auger

for 400mm wide sheet pile 9050 kg

for 500, 600mm wide sheet pile 10050 kg

for 400mm wide sheet pile 10900 kg

for 500, 600mm wide sheet pile 11900 kg

Total Mass

for 500, 600mm wide sheet pile 11900 kg

*Max 30m in special mode

Water Jetting Mode

F201-400

Piler Jet Reel JR28

At Extraction

At Transportation

2590

At Transportation 3000

2650

MAX 4180

F201-500

At Extraction

At Transportation

2785

At Transportation 2985

2650

MAX 4180

F201-600

At Extraction

At Transportation

2970

At Transportation 3170

2650

MAX 4180

F201 Specifications

● Water Jetting Mode

Max. Press-in Force

1500 kN

Max. Extraction Force

1600 kN

Stroke

850 mm

Press-in Speed

1.4 ~ 30.0 m/min

Extraction Speed

1.1 ~ 23.2 m/min

Control System

Radio Control

Mass

for 400mm wide sheet pile 10820 kg

for 500, 600mm wide sheet pile 11120 kg

Piler Jet Reel

JR28

Applicable pile length

Standard 17.0 m (Max. 27.0 m)

Mass

820 kg

Piler Jet Reel is an optional item

F201 Specifications

● Standard Mode

Max. Press-in Force

1500 kN

Max. Extraction Force

1600 kN

Stroke

850 mm

Press-in Speed

1.4 ~ 30.0 m/min

Extraction Speed

1.1 ~ 23.2 m/min

Control System

Radio Control

Mass

for 400mm wide sheet pile 10000 kg

for 500, 600mm wide sheet pile 10300 kg

Power Unit

1800

1960

2350

1805

545

2110

3975

Power Unit

EU30013

Power Source

Diesel Engine

Power Mode

230 kW(313 ps)/1800 min⁻¹

Rated Output

Eco Mode 204 kW(278 ps)/1600 min⁻¹

Super Eco Mode 179 kW(243 ps)/1400 min⁻¹

Fuel Tank Capacity

500 L

Hydraulic Reservoir

Piler ECO Oil 490 L

Moving Speed

1.4 km/h

Mass

6400 kg (with 20m Hose)

Reaction Stand

2030

4650

490

3450

5600

Leveling Jack

Reaction Stand (with Leveling Jack)

Mass

1900 kg

Chuck Mass

Sheet Pile Width	Standard Mode Chuck	Super Crush Mode Chuck
500, 600 mm	2850 kg	3400 kg
400 mm	2550 kg	2900 kg

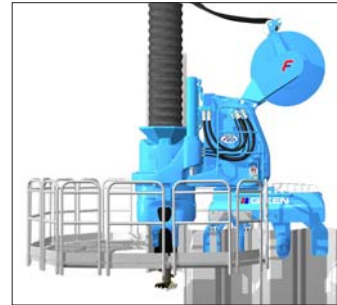
The above specifications are subject to alteration without prior notice

5

6

Accessories

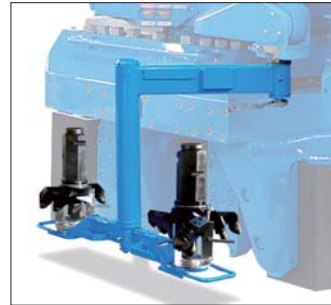
Standard Accessories



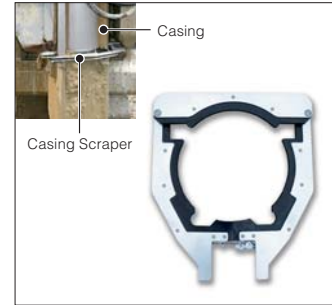
Piler Stage



Chuck Stage *

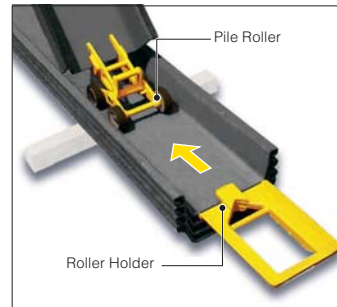


Auger Head Replacement Attachments *

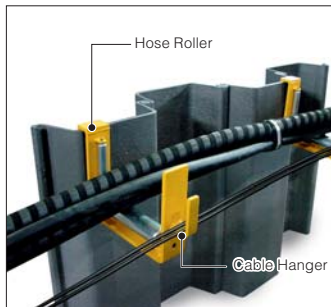


Casing Scraper *

* Available for Super Crush Mode only.



Pile Roller



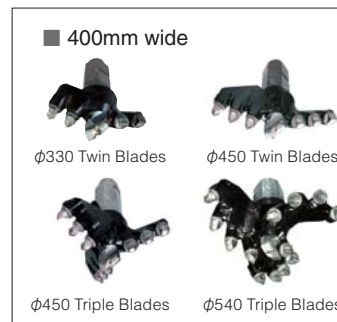
Hose Roller



Pile Laser



Module Box



■ 400mm wide

φ330 Twin Blades φ450 Twin Blades

φ450 Triple Blades φ540 Triple Blades



■ 500-600mm wide

φ400 Twin Blades φ540 Twin Blades φ540 Triple Blades

φ580 Twin Blades (Retractable)* φ685 Triple Blades

Auger Head *

* for 600mm wide only

Optional Accessories



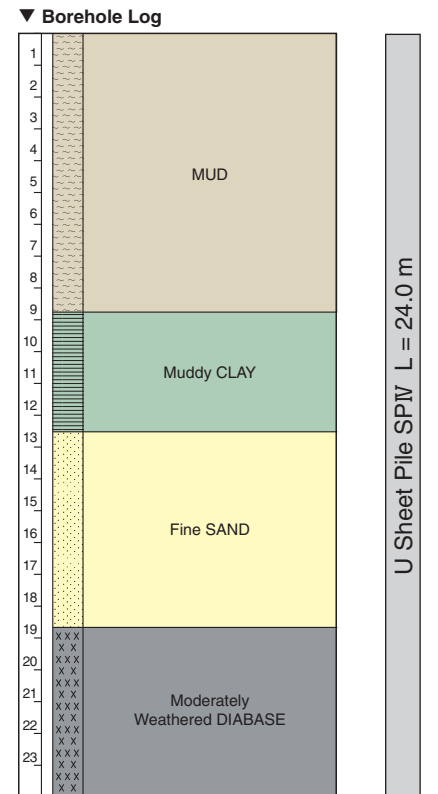
Piler Jet Reel (JR28)

F201 Project Data Sheet

F201 Demonstration Test



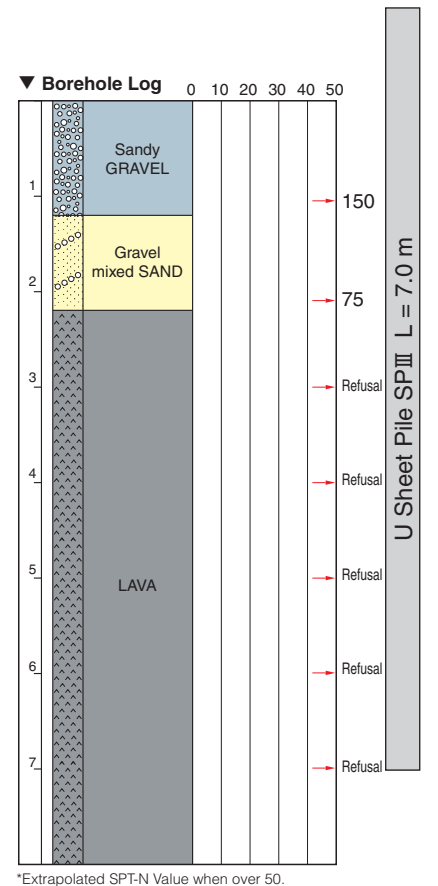
Project : Cofferdam Test Piling
Location : Dong Gang Business District, Dalian China
Period : November 2013 ~ December 2013
Silent Piler : F201
Type of Sheet Pile : U Sheet Pile SP IV
Pile Length : 12m (Standard Mode)
12m, 24m (Super Crush Mode)



Emergency Land Slide Remedial Works



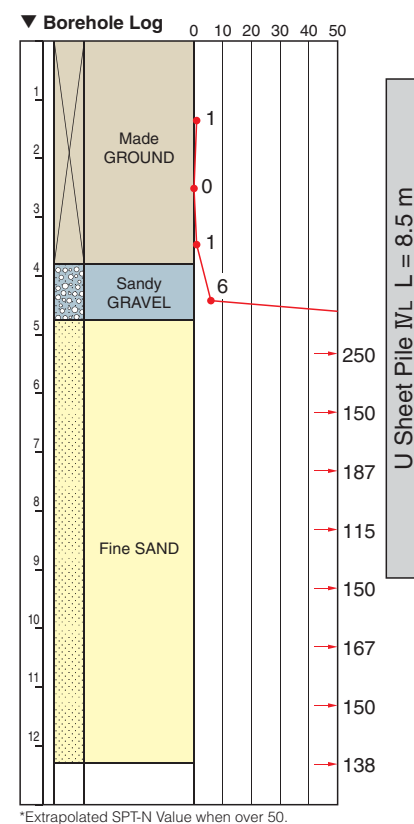
Project : Emergency Channel Construction Works
Location : Oshima Town, Tokyo
Period : March 2014 ~ May 2014
Silent Piler : F201
Type of Sheet Pile : U Sheet Pile SP III
Pile Length : 7.0 m



Drainage Restoration Works in Dense Residential Area



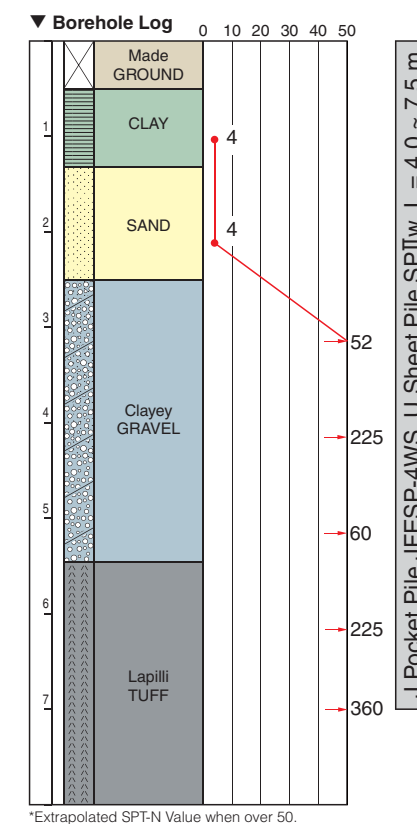
Project : Machida City Public Sewer System, Storm-Water Sewer Construction Works
Location : Machida City, Tokyo
Period : May 2013
Silent Piler : F201
Type of Sheet Pile : U Sheet Pile SP VL
Pile Length : 8.5 m



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 : 4.0 ~ 7.5 m

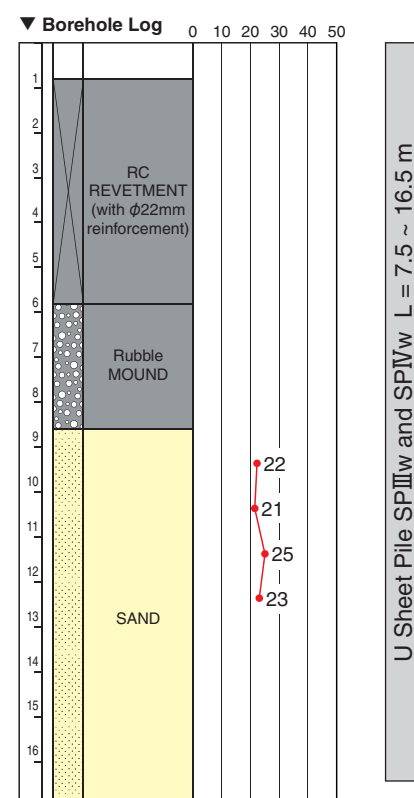


River Dike Disaster Remedial Works



Drilling the existing RC Revetment

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 : 7.5 ~ 16.5 m



Visit the following URL for more details.

GIKEN Project Leaflet Database
<http://www.gtoss.net/en/pressin-archive>



Data sheets can be searched and downloaded by category.



www.giken.com

GIKEN LTD.

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

International Business Department

3948-1 Nunoshida, Kochi-shi, Kochi 781-5195, Japan

Tel. : +81-(0)88-846-2980 Fax : +81-(0)88-826-5288

Email : international@giken.com

For more contact information, please visit:

<http://www.giken.com/en/contactus/groupcompanies>