

 **GIKEN**

GYRO PILER™
F401
- G1200

for Tubular Pile 800~1200mm
Tubular Sheet Pile 800,1000mm



The Rotary Cutting Press-in Machine for a wide range of Tubular Piles and Tubular Sheet Piles

GYRO PILER™ F401-G1200

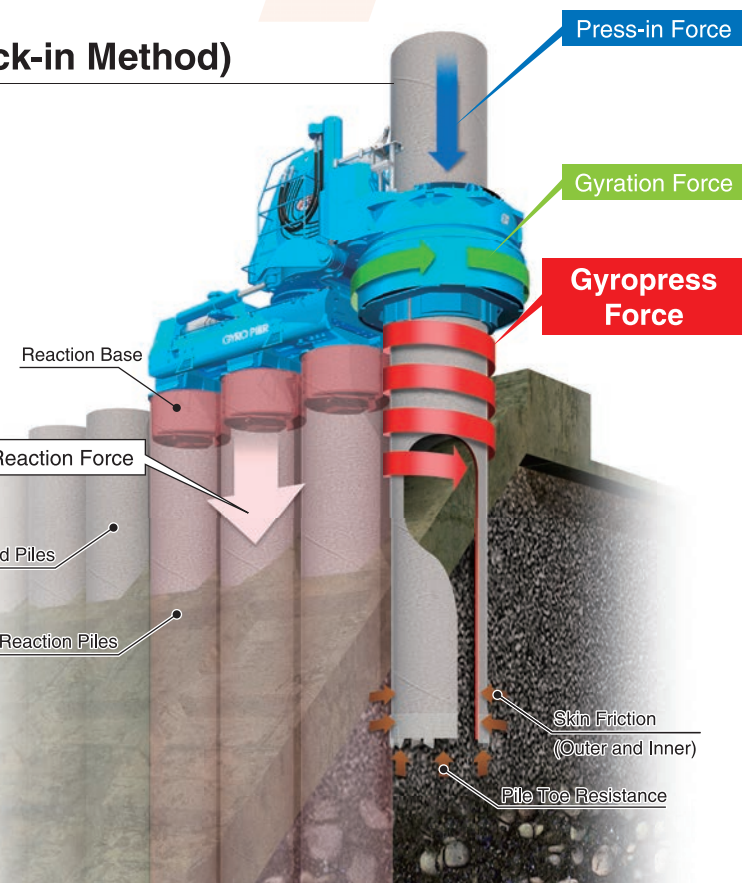
GYRO PILER™ F401-G1200

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.

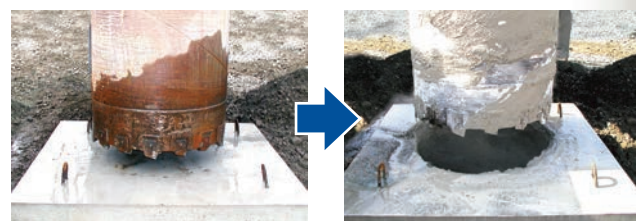
The Gyropress Method enables tubular piles to be installed through existing structures or buried obstructions.

Therefore, by this method, construction costs and time can be minimized simultaneously, due to the avoidance of enabling removal works.



Cutting Reinforced Concrete

The followings present cutting off performance through reinforced concrete (t = 80 cm, $\sigma_{ck} = 24 \text{ N/mm}^2$, D16@250 x 3 layers).



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

The F401-G1200 can install tubular piles (ϕ 800mm, 1000mm and 1200mm) and tubular sheet piles (ϕ 800mm 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.



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

3 Outstanding Environmentally-Friendly Design

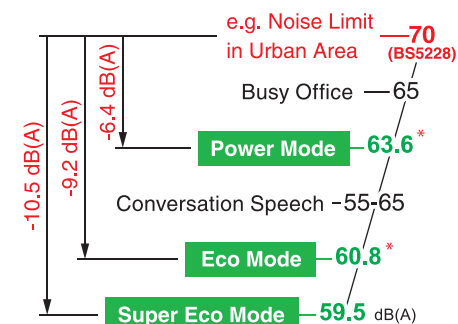
Low Emission Engine

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 original hydraulic control technologies.



Ultra Low Noise Level

It clears allowable construction noise levels in many industrialised countries.



* 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-lead paint*.

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



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

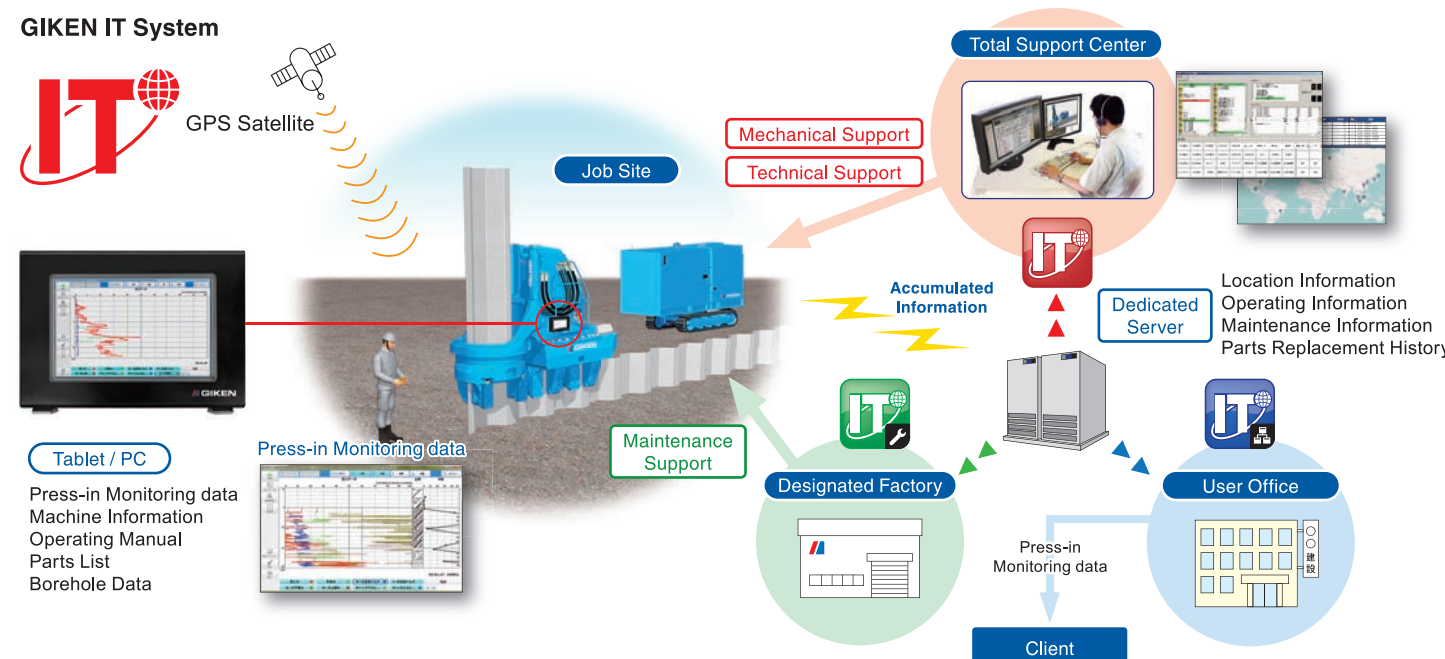
GIKEN IT System

GIKEN engineers can monitor individual GYRO 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.

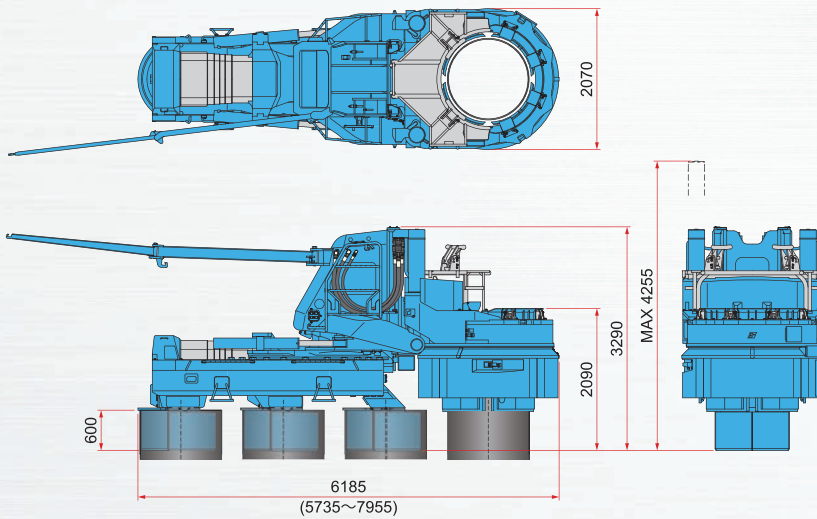
* The system is not available in the countries where authorisation for usage cannot be acquired.

Press-in Monitoring and Data Logging System

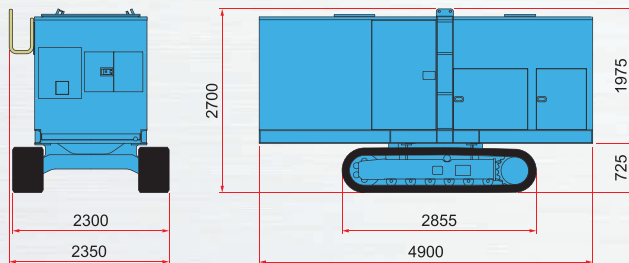
Press-in monitoring data can be used for quality control and information modelling of the foundation. Operators are able to keep working while checking data such as press-in force, auger torque, and working hours of press-in work, on a tablet or PC (both optional extras).



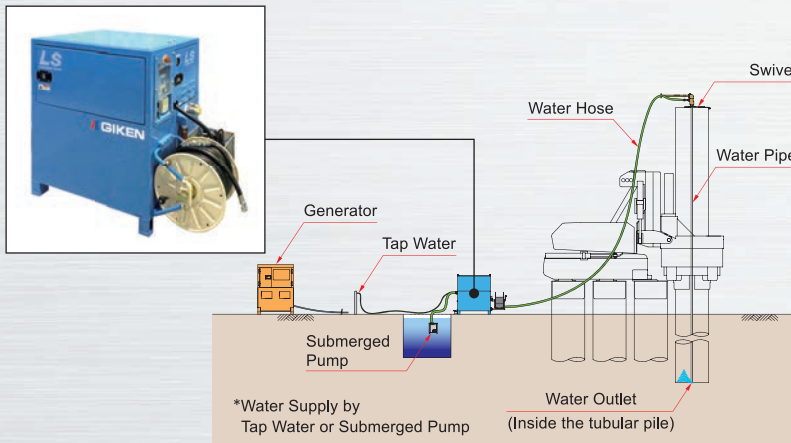
Dimensions & Specifications



Power Unit



Lubrication System



GYRO PILER	F401-G1200	
Applicable Piles	Tubular Pile ϕ 800, 1000, 1200 mm Tubular Sheet Pile ϕ 800, 1000 mm ^{*1}	
Max. Press-in Force	with Chuck Rotation ^{*2}	1500 kN
	without Chuck Rotation	2000 kN
Max. Extraction Force	with Chuck Rotation ^{*2}	1600 kN
	without Chuck Rotation	2200 kN
Chuck Rotation Torque	900 kN·m (Emergency Use up to 1050kN·m)	
Chuck Rotation Velocity	MAX 11.0 min ⁻¹	
Stroke	1000 mm	
Press-in Speed	0.7 ~ 4.9 m/min	
Extraction Speed	0.7 ~ 3.5 m/min	
	for 800mm	850 ~ 1320 mm
Applicable Pile Spacing	for 1000mm	1050 ~ 1320 mm
	for 1200mm	1250 ~ 1505 mm
Control System	Radio Control	
Mass	for 800mm	31850 kg
	for 1000mm	32600 kg
	for 1200mm	33600 kg

*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)

Power Unit	EU500C3	
Power Source	Diesel Engine	
Rated Output	Power Mode	377 kW(513 ps) /1800 min ⁻¹
	Eco Mode	335 kW(456 ps) /1600 min ⁻¹
	Super Eco Mode	293 kW(399 ps) /1400 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	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)	410 kg

The above specifications are subject to alteration without prior notice.

GIKEN

Construction Solutions Company

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