

AUTO PILER

Model AT-90 & AT-150 / Certified by Japanese Ministry of Construction as an ultra-low noise construction equipment .



 **GIKEN**



Aggregating long term know-how and site experience of GIKEN into the single IC card.

The GIKEN's Automatic Driving System leads the environmentally-friendly construction method.

Evolution at Piling Site.

Now, the New Press-in Industry Begins.

```
while (!( count1 >= 10) )
{
  input_stage();
  interLock_auto();
  if ( !autol )
  { return;
  }
  chuck_LR[1] = 0;
  output_stage();
}
```

```
= (count chuckLR
ckLR >= 10 )
```

```
chuckUD()
{ count1 =
while (!(
```

```
count1
while (!(
{ input
interLock_auto
if ( !autol )
{ return;
}
clump_OC[1] = 0;
output_stage();
}
```

```
while (1)
{ while ( !(count chuckUD >= 8 ) )
{ count1 = 0;
while ( !chuckU LS )
{ input_stage();
interLock_auto();
if ( !autol )
{ return;
}
chuckUD[0] = 1;
output_stage();
}
count1 = 0;
while ( !( count1 >=5) )
{ input_stage();
interLock_auto();
if ( !autol )
{ return;
}
chuckUD[0] = 0;
output_stage();
}
count1 = 0;
while ( !( count1 >=5) )
{ input_stage();
interLock_auto();
if ( !autol )
```

Greater Power and Greater Speed

Introduction of the Auto Piler for "Piling Revolution"

GIKEN's AD System (Automatic Driving System) becomes the master trend of operation system in the latest Press-in Method.



To the sky, to the underground, to the ocean and to the universe, the prospects of constructions and human futures extend unlimitedly. Now, the time greatly shifts to "The New Globe Age" which pursues true sustainability and true satisfaction rather than materialism. Such trend makes people desperate environmentally-friendly construction methods which care about our lives and the Earth.

Close to Human - Since the company establishment, GIKEN has kept developing new technologies as the pioneer of the Press-in Method. Auto Piler is the GIKEN's answer to the new age.



Model AT-90

Model AT-150

Great Changes & Great Abilities

1 Automatic Driving System

Press-in and extraction operations are automated by computerised control system with IC card. It improves operation efficiency.

2 Lightweight and Compact

Since the machine main body is light and compact, it is easy to handle in loading and unloading for transportation. The exterior design has completely changed to elegant-rounded shape and dynamic shape as well.

3 Fast and Powerful

The greatly improved press-in speed and maximum press-in force can provide greater working latitude on Silent Piler for more efficient operations.

4 New Radio Controller

The output from transmitter and the reception sensitivity are greatly improved, and the anti-jamming wave function as well. Moreover, the switch buttons are changed to the push type so as to improve its durability. The transmitter gets lighter and more compact.

5 User-Friendly Designs

1. Lighting devices for night work.
2. Pouring water device for smooth press-in work.
3. The new exterior designs provide easier working conditions for sheet pile setting activities.

6 Engine Type Power Unit

The hydraulic source and electric power source are integrated to the Power Unit, which has an ultra-low noise engine. The integration of the both sources is a great advantage in terms of easy handlings, energy saving and labour saving. In addition, the Power Unit has a storage space, so called "Multi-Box", where you can store necessary tools for sheet piling activities, such as welding devices, cutting devices, and basic maintenance tools. The new Power Unit has valuable triple functions.



A water hose can be connected on the back of the Silent Piler to spray water to sheet pile being pressed-in. It is effective to reduce press-in resistance and prevent soil from adhering to the sheet pile.



The top of Chuck position is designed at lower position, and the new design is applied to the shape of inside the Chuck. These new designs make hoisted sheet pile setting work into the Chuck much easier.



The core part of automatic driving. The know-how of the Silent Piler operations are consolidated in the small IC card.



Since the radio control channel can be automatically selected, multiple units of Silent Piler can be used safely at the same site. Moreover, when the transmitter inclines by 90° or more, it automatically stops the operation. The safety aspect is also greatly improved.

* Radio Controller is an Optional Item



There are totally 6 spot lights at the both sides of the Leader Mast, Saddle and Chuck. It makes night work much safer.

Great Triple Functions Multi-Power Unit

Certified as Ultra-Low Noise Type Construction Machinery

The 3 functions, hydraulic source, electric power source and the tool box, are integrated together in this Power Unit.



Specifications of the Main body of Power Unit

Diesel Engine	100PS	Power Supply	100V 2KW, 220V 20KVA
Fuel Tank Rating Capacity	200L	Battery	NSI50 (2 pieces)
Rating Tank Capacity of Hydraulic Oil	400L	Total Mass	4600kg
		Size (mm)	L 3070 x W 1350 x H 1770

Useful Work Tool Set Multi-Box

Major tools for piling work, such as shovels, spanners, welding machine and cutting gear, are stored in the Multi-Box.



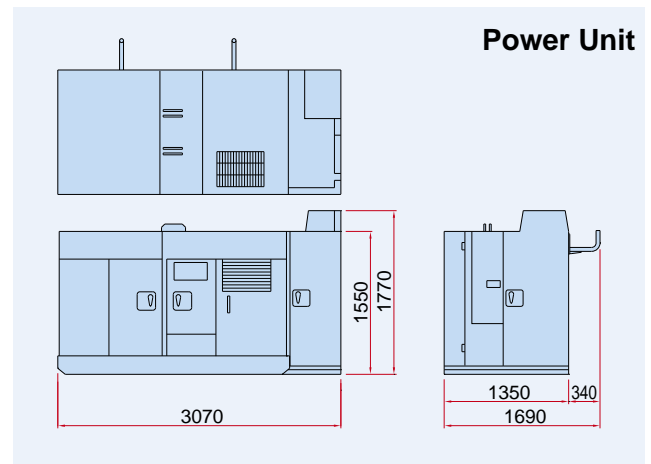
Standard Tools

Site Tool Set / Machine Tool Set / Welding machine (Applicable welding rod: up to D. 4 mm) / Cutting Gear (oxygen and acetylene gas cylinder storage) / Refuelling Pump (with automatic stop function)

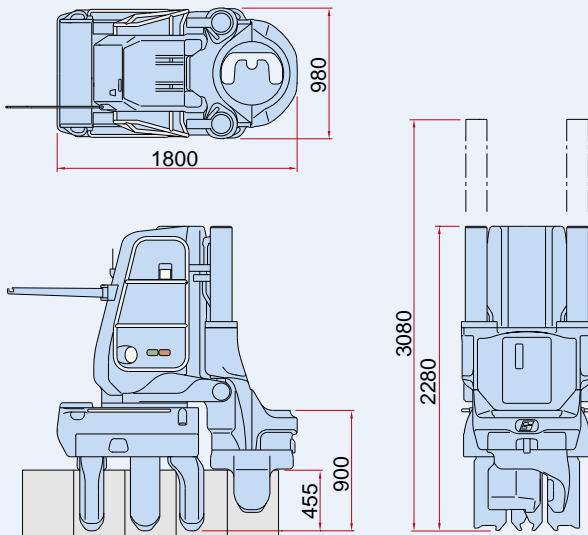
Specifications of Auto Pilers



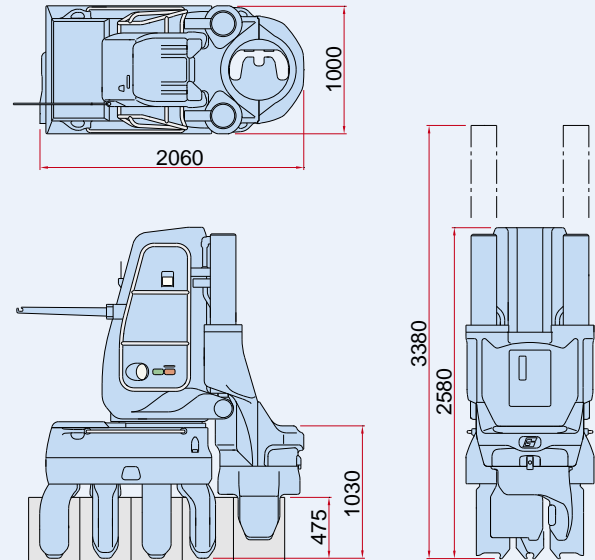
		AT-90	AT-150
Max. Press-in Force		90 t	150 t
Max. Extraction Force		100 t	160 t
Stroke		800 mm	850 mm
Press-in Speed		1.7~16.7 m/min	1.5~11.2 m/min
Extraction Speed		1.1~13.5 m/min	0.7~9.2 m/min
Power Source		100ps (Diesel Engine)	
Applicable sheet piles		Type II, II A, III, III A, IV, IV A	
Movement		Self-Moving	
Control System		Radio Control	
Mass		5,100 kg	7,500 kg
Reaction Stand	Length	3,000 mm	3,000 mm
	Width	2,000 mm	2,000 mm
	Height	470 mm	470 mm
	Mass	1,100 kg	1,300 kg



AT-90



AT-150



* The above specifications are subject to alteration without prior notice.