

SILENTPIER

ECO 400S

New **Standard** of Silent Piling Technologies

Silent Piler ECO 400S



GIKEN

Change the old standard of the Press-in Method

Introduction of New Crush Piler in Silent Piler ECO Series

Silent Piler ECO 400S has been developed with the design concept of ECO Series. By the introduction of ECO400S, GIKEN enables to define past hard ground conditions, which are the most common condition in the world, as "Standard" ground condition from "Special" condition. ECO 400S is specialised in installing sheet piles in highly demanded ground conditions and moderately easy hard ground which is difficult for the Water Jetting Press-in Method.

New Standard of Silent Piling Technologies

Exponentially expanding the standard range, the Press-in Method will lead the new progressive era.

Standard Mode

Water Jetting Mode

Super Crush Mode

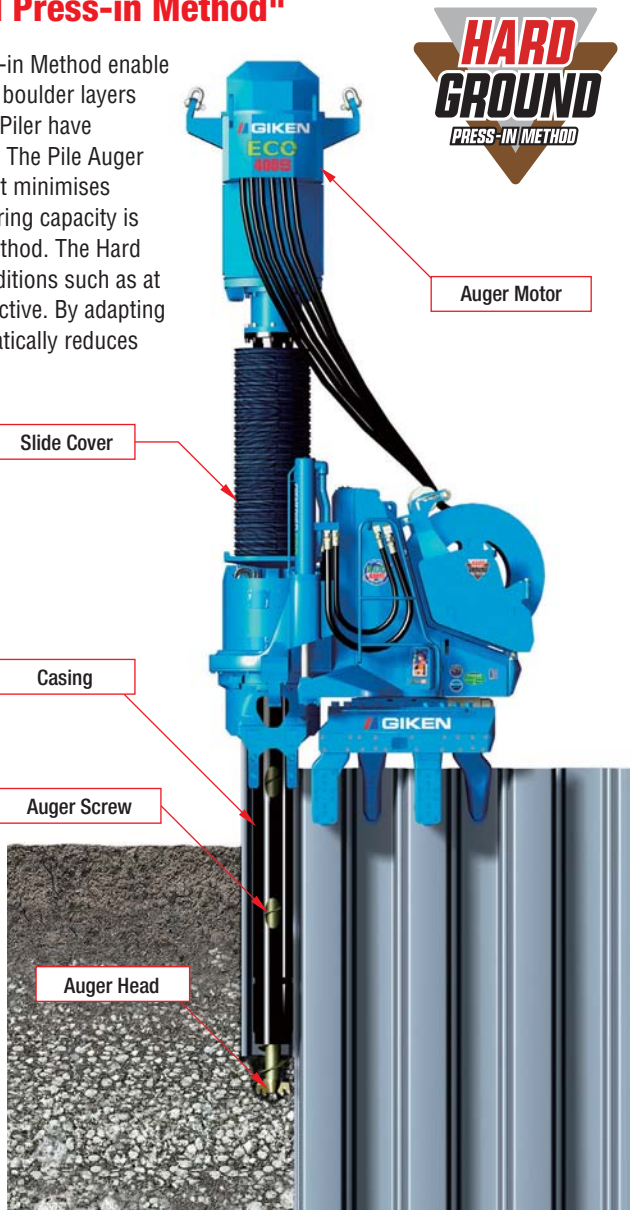
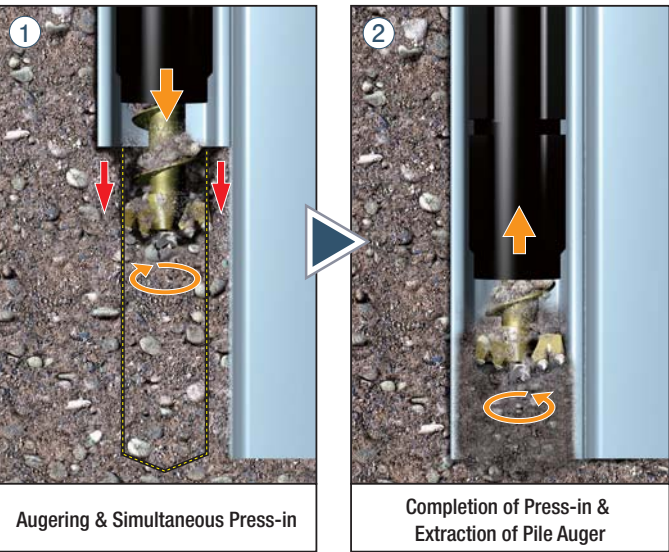
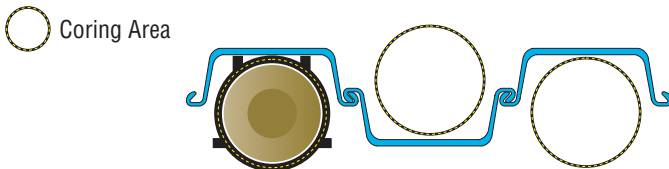
***New
Standard***

Change the Old Standard by Adaptation to Hard Ground

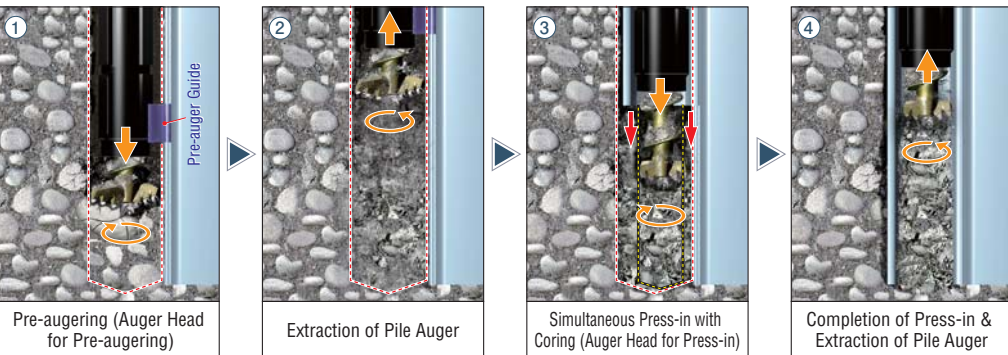
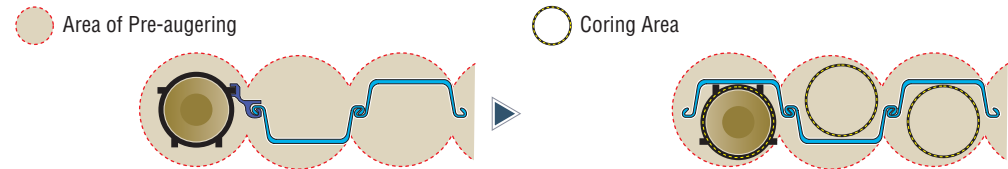
Adaptation of vastly-experienced "Hard Ground Press-in Method"

The "Coring Theory", a GIKEN's original theory, makes the Hard Ground Press-in Method enable to install sheet piles into difficult ground conditions such as sandy gravel and boulder layers without losing advantages of the Press-in Method. Previous models of Crush Piler have approved the superiorities of the Hard Ground Press-in Method in the market. The Pile Auger loosens the minimum area of ground as a driving assistance of the Press-in. It minimises discharging volume of soil 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 at slopes and on the water where conventional piling techniques would be ineffective. By adapting the GRB System, temporary work platforms are no longer necessary. It dramatically reduces environmental burden.

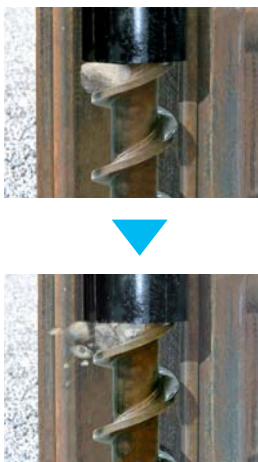
Simultaneous Press-in with Coring



Pre-augering Press-in



Crushing boulders by Wedge Effect



Integrated Functions for High Quality Performance

Locking Function for Higher Piling Quality

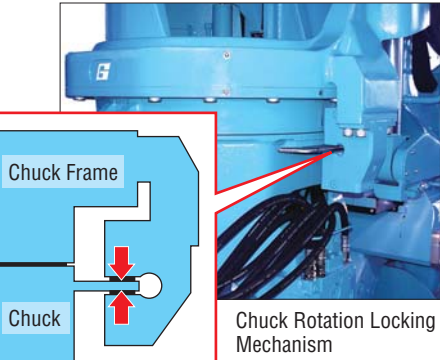
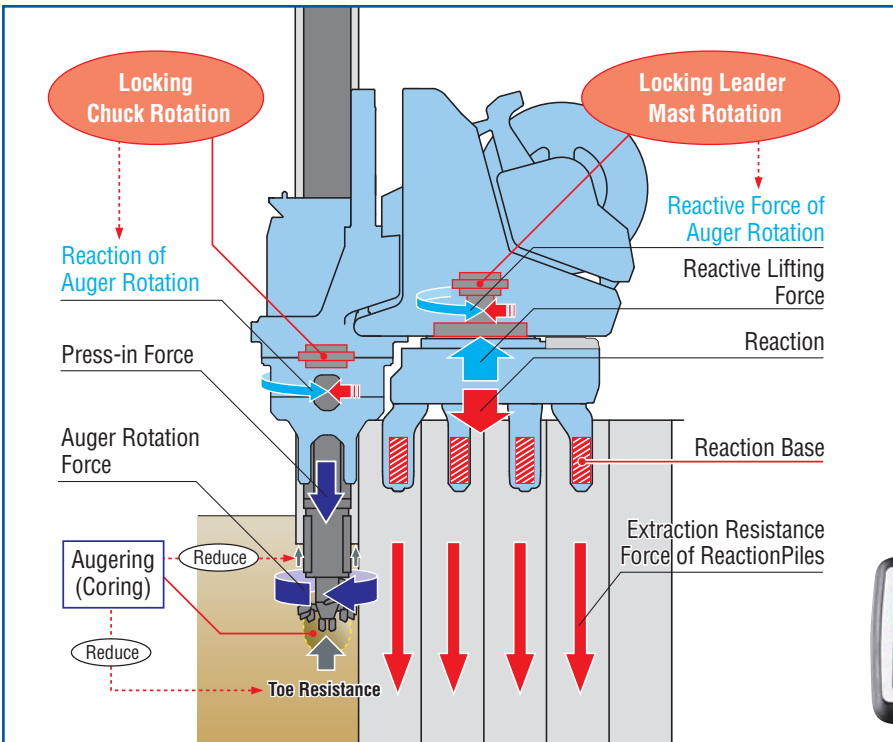
During augering work, Chuck is fixed by the chuck rotation locking function and Leader Mast is fixed by the leader mast rotation locking function as well. These locking systems can generate more efficient load transfer from auger motor to auger bits. It greatly improves sheet piling quality.

Flexible Speed Setting Function for Different Ground Conditions

The speeds of Chuck Up & Down and Auger Rotation can be adjusted flexibly in accordance with hardness and characteristics of soil condition. It increases augering efficiency and minimises volume of soil discharge.

Lightweighted & Compact Machine for Easy Handlings

The weight of ECO400S is much lighter than conventional piling rigs. Environmental burden can be greatly reduced in transportation. Moreover, the compactness has brought safe and smooth works for erection work and self-moving operation.



Radio Controller & Multi-Function Monitor

All operations of Pile Auger, Piler Jet and IT System are controlled by a single radio controller. Operator can check real time information such as press-in force and auger torque force from Multi-Function Monitor.



The Best Press-in Mode is Available for Different Piling Conditions

All driving modes, Standard Mode, Water Jetting Mode and Super Crush Mode, are integrated into ECO400S. The best driving mode is available in accordance with ground conditions and site restrictions.

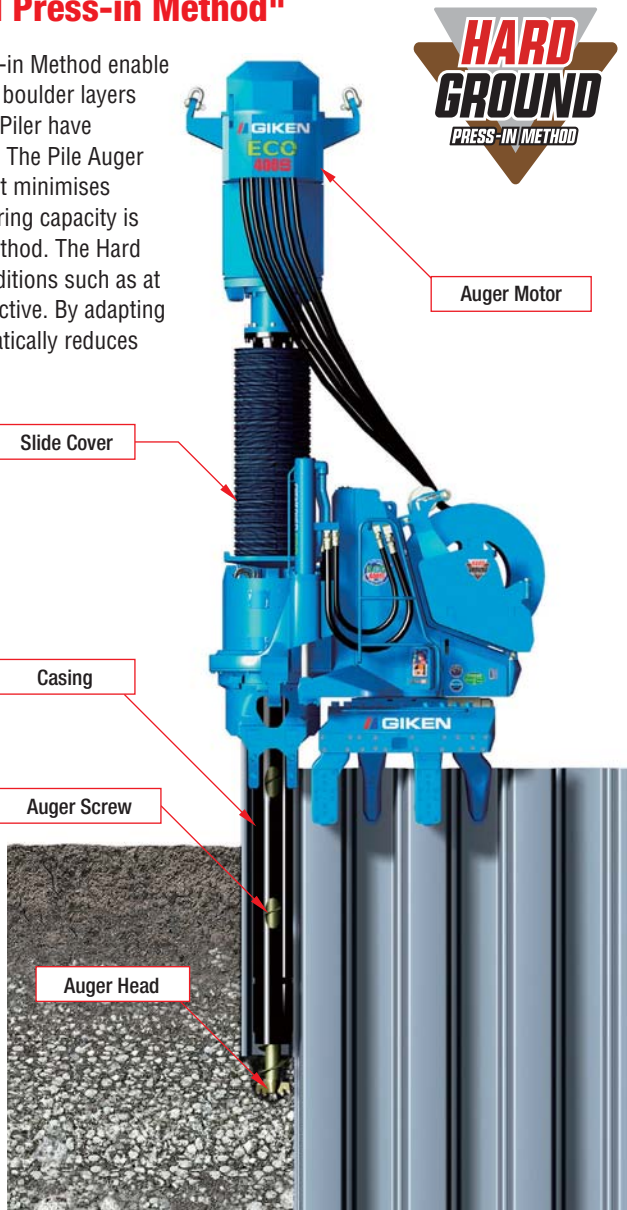
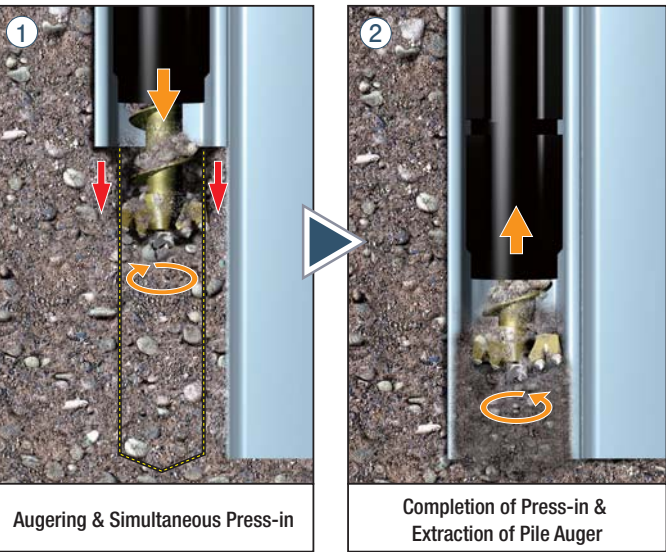
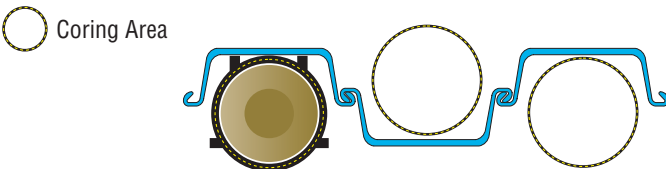


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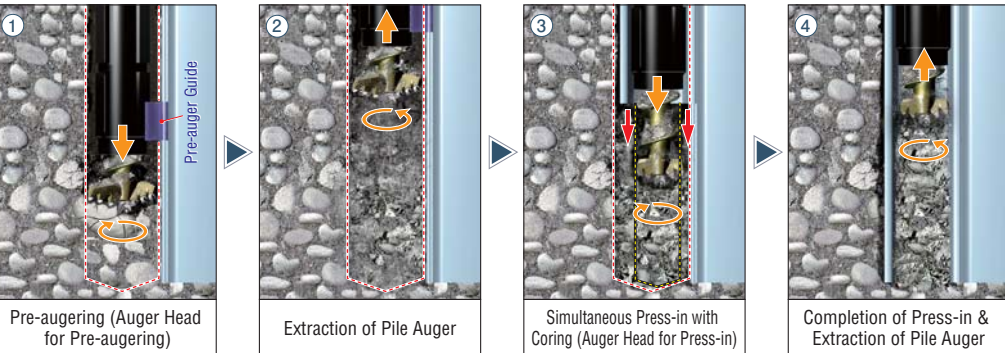
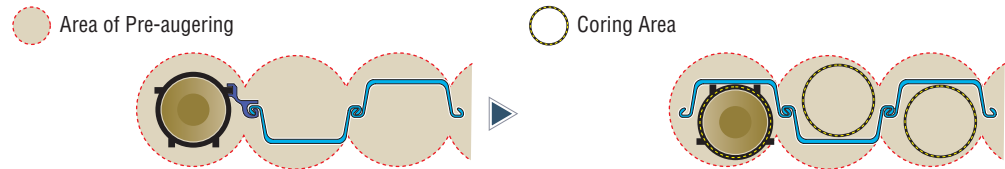
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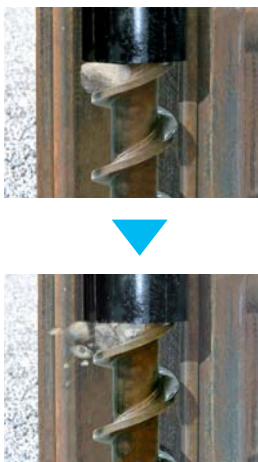
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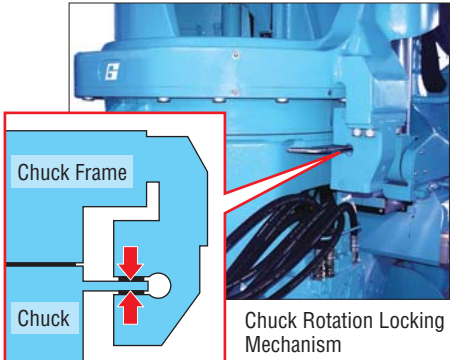
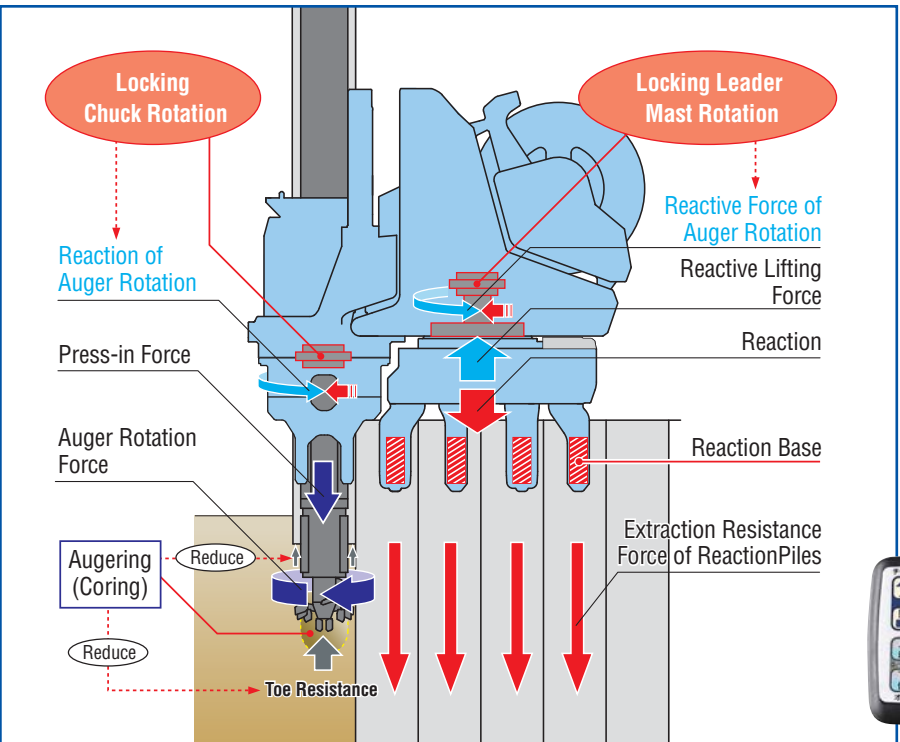
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GIKEN's Original Accessories for Better Work Efficiency

Major Accessories (Full Set Accessories)

Auger Head Replacing Attachment



Auger Head (Detachable Bit Type)



Chuck Stage



Piler Stage

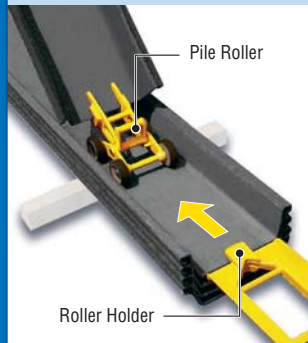


Wireless Pitching Shackle

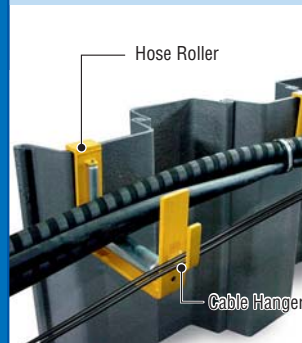
(*Japan only)



Pile Roller



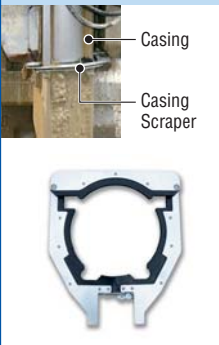
Hose Roller



Pile Laser



Casing Scraper



Washing Apparatus



Chucking Attachment for Standard Mode



Optional Accessories

Piler Jet Reel



Press-in Monitoring System



Auger Head (Detachable Bit Type)



* Details of major accessories depend on purchase mode



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