

## Serial Report

### Terminologies in Press-in Engineering (Part 4)

IPA Editorial Committee

Following Terminologies Press-in Engineering (Part 3) in Volume 3, Issue 3, Part 4 presents "Press-in system" as follows:

#### Press-in system

<b>Press-in system</b>	general term for pile/sheet pile installation procedures by static load and systemized machines specially devised to reduce noise and ground vibration and also to cope with spatial construction constraints at a construction site, such as narrow space, headroom restriction and construction in the close proximity of adjacent structures
<b>Narrow space clear system</b>	A press-in system to overcome spatial constraints on the site. A system suitable for narrow spaces in dense urban areas, and narrow areas where a crane cannot be brought in.
<b>Headroom restriction clear system</b>	A press-in system to overcome spatial construction constraints. The piles/sheet piles installation can be carried out by "Clear Piler" under headroom restrictions.
<b>Adjacent press-in system to railway</b>	a press-in system to be used for areas adjacent to railway track without disrupting train service
<b>Ultra-adjacent press-in system</b>	a press-in system to be used for areas very close to adjacent building(s)/structure(s), even with zero clearance
<b>Skip lock system</b>	system to install steel tubular piles with a constant center-to-center spacing of 2.5 times the pile diameter
<b>Gyropress Method</b>	Press-in Method with rotary press-in with cutting bits to install steel tubular piles using the Gyro Piler
<b>Gyro Piler</b>	one of Silent Piler variations to install steel tubular piles with rotary cutting
<b>Rotary press-in with cutting bits</b>	Torque and axial force are applied simultaneously to install tubular piles by rotating them into the ground. This method is used for the hard ground with gravels, boulders, rocks, and even for existing concrete structures.
<b>Non-staging system</b>	a press-in system that enables all the piling machineries necessary for the press-in operation to move by itself (self-walking) on the previously installed piles/sheet piles
<b>Self-walking</b>	forward movement or reaction of Silent Piler during the installation of continuous wall/structure without the use of crane, made possible by a sequence of gripping a new pile, installing the pile to sufficient depth, releasing clams, lifting and sliding the Silent Piler a new location
<b>Self-walking backward</b>	backward movement of Silent Piler on the continuous wall/structure without the use of crane, made possible by the use of special attachment for self-walking backward
<b>Water lubrication system</b>	The system to discharge a small amount of water at the toe of steel tubular pile to reduce frictional resistance between a pile and the ground. It does not use a large volume of water as compared to a water jetting system.

(to be continued on Part 5)