

PILER JET™



PJ4	
Water Flow	60-600 L/min (adjustable via rpm)
Pressure	0.1-10 MPa (adjustable via rpm)
Power Source*	SILENT PILER Power Unit (EU300 J4 / K4 / G3 / I3)
Buffer Water Tank Capacity	2100 L
Generator for Water Pump (optional)**	25KVA
Moving Speed	1.4km/h (Remote Control)
Mass	4500 kg (including generator) 3800 kg (excluding generator)

*Piler Jet power supply must be from SILENT PILER™ Power Unit.
**When generator is not installed, another water pump power source is required.
Panel mounted socket for screw terminals (63A/125A, 5P, 9h, 50-60Hz) is equipped.

PILER JET REEL™



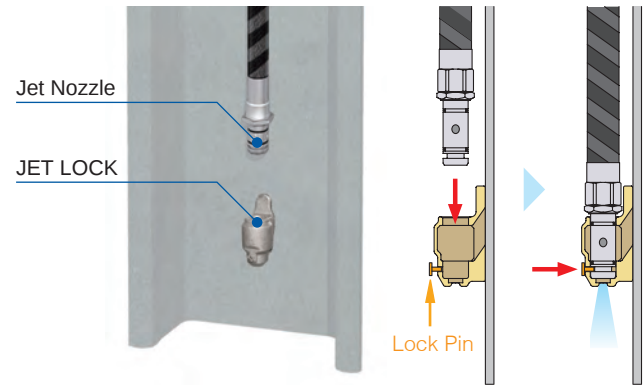
JR28		JR29	
Water Flow	Max. 700 L/min	Water Flow	Max. 700 L/min
Water Pressure	Max. 14.7 MPa	Water Pressure	Max. 14.7 MPa
Mass	820 kg	Mass	1250 kg



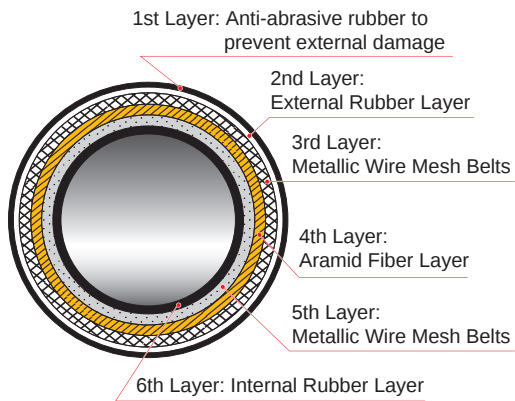
The Jet Reel is mounted atop the SILENT PILER to feed the Jet Hose to the sheet pile.

JET LOCK™ & Jet Nozzle

If the Jet Nozzle is accidentally detached from the JET LOCK or the JET LOCK is accidentally detached from the sheet pile, the design prevents uncontrollable hose reaction.



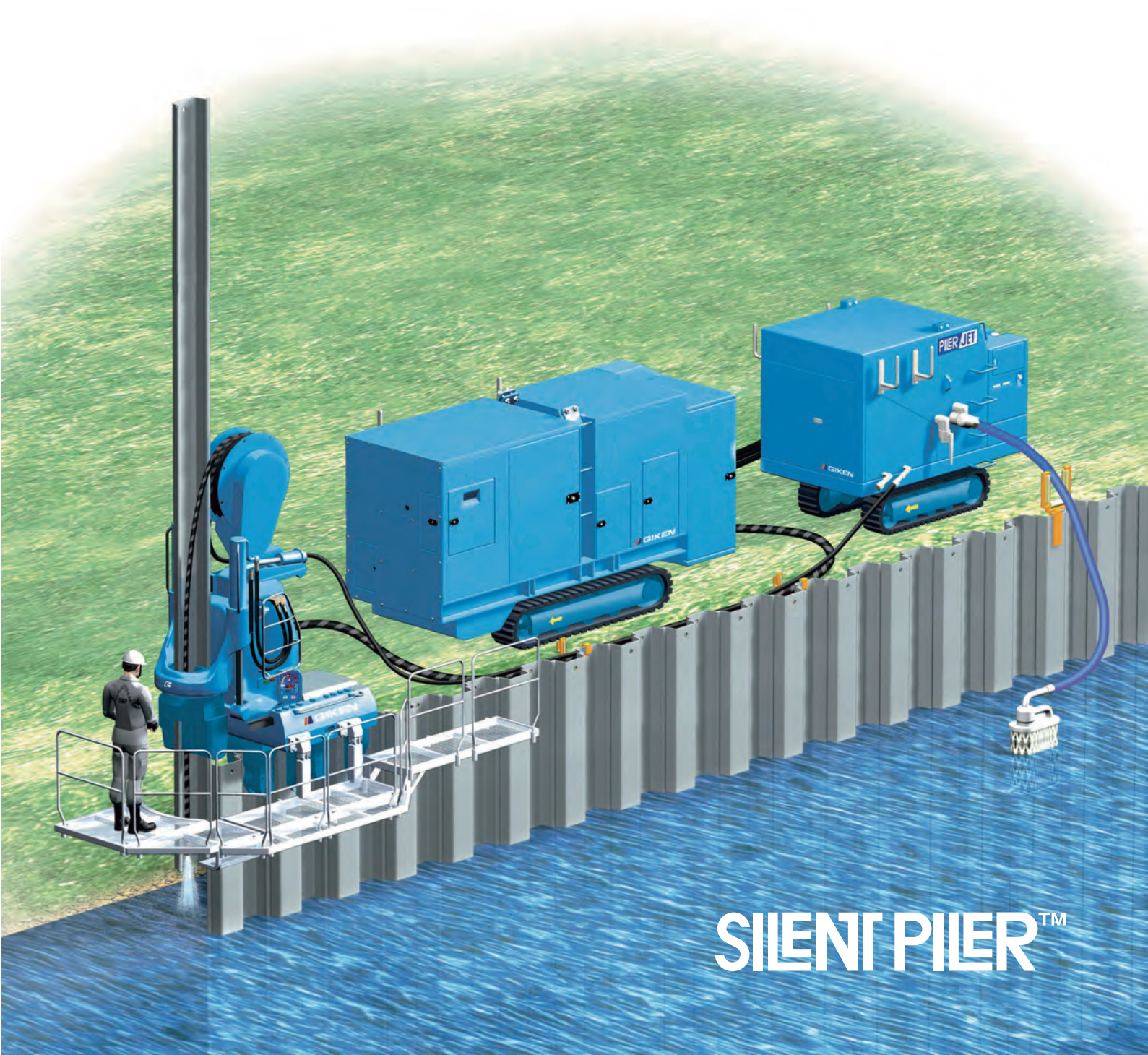
PILER ECO™ Hose (for Jet)



The above specifications are subject to alteration without prior notice.

PILER JET SYSTEM

PILER JET / System Equipment

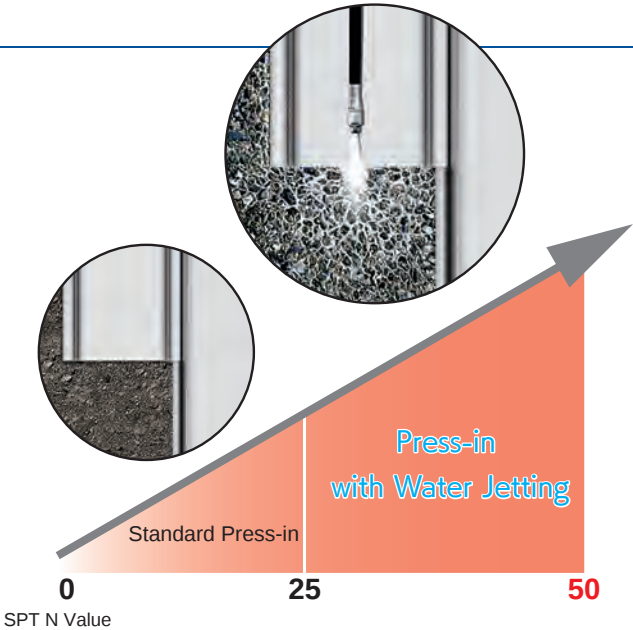


Highly Efficient Integrated Water Jetting System for the Press-in Method

Press-in with Water Jetting

When the pile is statically loaded during pile installation into granular soil, distribution of the soil stresses forms stress isobars called "pressure bulbs" at the pile base area. As the base stiffness of a jacked pile increases with magnitude of the static loading, it may negatively affects the pile installation. Leading interlocks contain soil particles from previous installation, which are compacted during subsequent pile installation resulting in greater interlock resistance.

Water jetting lubricates the pile surface and temporarily and locally loosens and softens the surrounding ground by increasing pore water pressure. Thus, the base resistance, skin friction and interlock resistance are reduced during pile installation. Water jetting is an effective driving assistance method to overcome dense soil conditions.

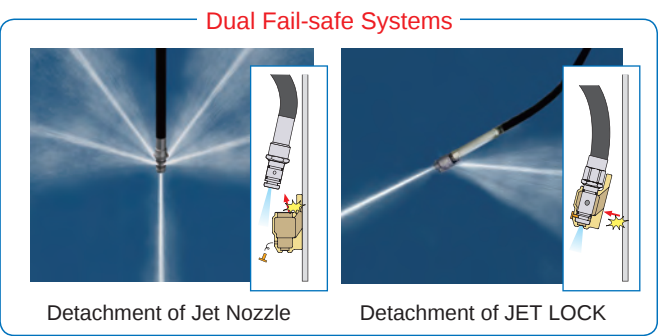


Characteristics of PILER JET System

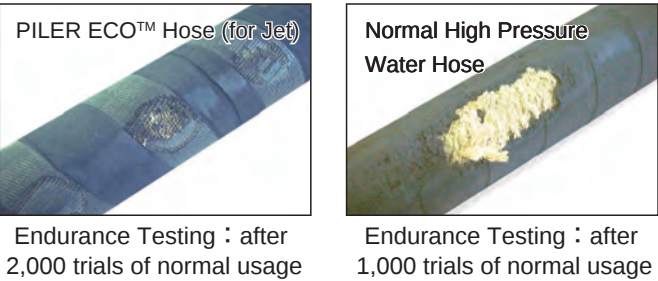
The SILENT PILER and PILER JET are integrated to form a system with a common power unit to optimize the jetting parameters with minimum environmental impact.

Safety

1. Jet Nozzles and JET LOCK are designed with a safety function which allows reverse water flushes in case of detachment from the pile. This fail-safe system prevents the PILER ECO™ Hose from spiraling out of control even if the jet nozzle or JET LOCK detaches from the pile.



2. The PILER ECO™ Hose (for Jet) is developed exclusively as a water hose inserted into the ground with a pile. Therefore, it is extremely durable with high anti-abrasivity and tensile strength.



Functions of PILER JET

PILER JET water jetter is simultaneously operated and powered with the SILENT PILER and is controlled by the radio controller unit.

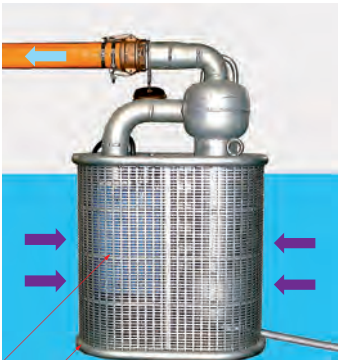
Water discharge pressure and water flow of the PILER JET can be automatically controlled in accordance with the SILENT PILER needs. Thus, the pile installation can be optimized with minimum water usage and disturbance to the surrounding soil.



Radio Controller

Environmental Protection

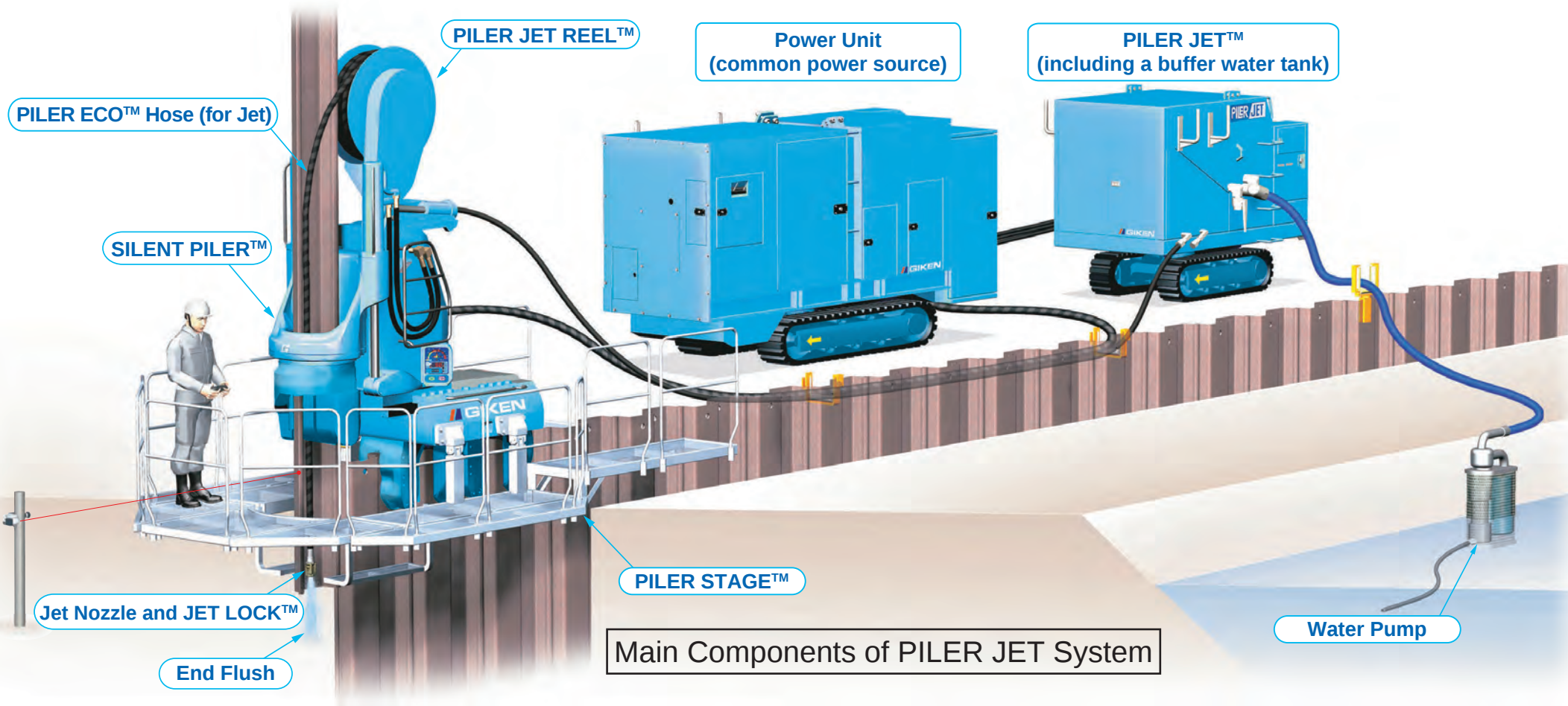
1. The automated system minimizes water usage and disturbance to the surrounding soil.
2. With a particulate matter separator, the water pump allows untreated freshwater for jetting purposes.
3. As the PILER JET is powered by the SILENT PILER Power Unit, it does not require an independent power source. Therefore, environmental burden can be minimized.



Inner Water Pump with a centrifugal separator to remove solid impurities

Water Intake System

External Filter



Main Components of PILER JET System