LET'S BUILD IQIP

PULSE®

REDUCING ENVIRONMENTAL IMPACT BOTH ON AND OFFSHORE

PULSE, a modular addition to the Hydrohammer®, minimises noise during pile driving to deliver an environmentally-friendly foundation installation. The elongated blow of PULSE is twice the duration of the blow of a conventional hammer, increasing piling efficiency while reducing pile fatigue and impact noise. PULSE can be adapted for different conditions and is able to perform at maximum peak force.

Whether your project is in the Coastal & Civil or Offshore Wind market, PULSE is available to be used for noise mitigation on both onshore and offshore pile driving projects. Combine PULSE with the Hydrohammer for an efficient and environmentally-friendly installation with reduced noise, pile fatigue and operating costs.

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UNIQUE FEATURES

- Reduced piling driving noise levels in water and air during installation which allows contractors to meet legislation regardless of pile sizes and installation energy levels
- Reduced installation pile fatigue, enabling engineers to optimize structure designs and contribute to the need to lower the LCoE
- Reduced installation time by efficient penetration per blow
- Fall back scenario

Note

Values (SEL reduction 6 - 10 dB and SPL reduction 5 - 12 dB) are based on calculations by a third party, and proven by prototype measurements. Values may differ based on project specific pile design, water depth, hammer choice, etc.

Please contact IQIP for a detailed project specific calculation of the estimated sound reduction.

	PULSE RESULTS		PULSE EXPECTATIONS	
	S-90	IQ2	IQ4	IQ6
Weight PULSE	1 ton	125 ton	125 ton	125 ton
Height PULSE (add)	1 m	3.6 m	3.6 m	3.6 m
Noise reduction (SEL)*	6 - 10 dB	6 - 10 dB	6 - 10 dB	6 - 10 dB
Noise reduction (SPL)	10 - 12 dB	5 - 12 dB	5 - 12 dB	5 - 12 dB
Fatigue*	up to -60% improvement**	up to -60 % improvement**	up to -60 % improvement**	up to -60 % improvement**
Installation efficiency / blow	up to 10 % (depending on soil/pile)	up to 10% (depending on soil/pile)	up to 10% (depending on soil/pile)	up to 10% (depending on soil/pile)

* *Compared on an installed Monopile and soil with actual noise prognoses*

** *Improvement decreasing in last half of the pile (less critical)*