

IQ-series

Hydrohammers for
intelligent pile driving



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The IQ Series represents the future of intelligent pile driving. Developed in response to the growth of wind turbines for increased production of renewable energy, the Hydrohammer® IQ Series pushes the boundaries of current technologies to facilitate the installation of the world's largest monopiles.

Meet the IQ-series

Building on the reliable technology of IQIP's world-class S Series of Hydrohammers, the innovative IQ Series delivers IQIP's largest range of hammers for intelligent pile driving on a grand scale. The IQ Series comes in 3 models: The IQ2 and IQ4, which are suitable for the current generation monopiles and the IQ6, which is the world's most powerful hydrohammer and is ready for the future generation of monopiles.

IQ-SERIES	IQ2	IQ4	IQ6
Minimum energy*	150 kJ	200 kJ	275 kJ
100% energy (standard)	3000 kJ	4000 kJ	5500 kJ
120% energy (maximum)	3600 kJ	4800 kJ	6600 kJ

* can be lower upon request for specific project

Intelligent pile driving

By regulating energy during piling operations to match the conditions on site, the IQ Series provides an intelligent approach that optimises pile driving for a more efficient and precise installation that guarantees foundation stability. The IQ series can be used continuously with a 100% capacity. Additionally, it is possible to boost the IQ Series to the maximum range of the Hydrohammer for 120%* power over a certain period of time.

* May vary depending on piling configuration and soil conditions

The right solution for every project

Based on IQIP's geotechnical advice, a decision must be made to select the right Hydrohammer for the project. If slightly more than 100% capacity is required for a selective number of locations, then it is not necessary to use a more powerful Hydrohammer. Using our experience and knowledge, we'll help you find the right solution for your project.

Advantages of the IQ-series

- Efficient pile driving steel to steel
- Proven very low down time rate
- Advanced piling techniques available, such as HiLo (high frequency, low energy) driving in order to minimise fatigue damage and noise emissions
- Verifiable piling records for pre-and post-analysis assessments
- Additional power acceleration of ram weight through gas spring
- Pile Inclination Measurement Equipment (PIME) for measuring the level of inclination. PIME is not something that is directly integrated at the hydrohammer. PIME is an optional equipment
- Full energy at nearly all positions (0 – 90 degrees)

Features of the IQ-series

- All hydraulic functions are electronically controlled and monitored, allowing the optimal blow energy to be set
- Piling data is continuously recorded for real time monitoring on site and stored for detailed analysis of the foundation installation
- Solid piece ram, forged in one piece to avoid risk of parts separating
- Forged alloy steel guarantees durability and allows unlimited piling on steel at full power
- Robust construction absorbs shock and resists the reaction forces from the pile
- Lubricated bearings reduces ram wear to a minimum
- Limited parts lowers risk of failures and need for spare parts
- Current Sleeve available for 8m OD pile top, larger upon request
- Stabbing fingers for usage at floating HLV

Safety and sustainability

- Environmentally friendly using biodegradable oil
- Noise reduction solutions, such as PULSE, can be easily added on
- Signals from the hammer sensors are centrally processed. If the length of the ram stroke is too long or too short, the hammer stops. If the hammer or pile positioning is incorrect, the hammer cannot be started

