



## ROCK BREAKER

### HIGH IMPACT AND VERSATILE ROCK BREAKING WITHOUT EXPLOSIVES

Equipped with a chisel set, the Hydrohammer® becomes a highly effective and powerful rock breaker. It is able to produce the high impact force necessary for breaking rock, cemented layers, concrete floors and slabs. The Chisel set is applicable to the Hydrohammer S30 to S90.

If cutter dredging is no longer possible because the rock is too hard, or dredging is not justified because the project is

small scale, IQIP's rock breaker is an excellent solution. And when removal of hard rock by explosives is not permitted for safety or environmental reasons, the use of IQIP's Hydrohammer rock breaker may be the only solution.



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### CHISEL WITH HOUSING

The Hydrohammer can be used as a rock breaker both on land and underwater. It is fitted with a special sleeve that features an internal anvil and a chisel. After being driven into the rock, the hammer and chisel are lifted and moved to the next spot. Delivering upward blows and lifting the hammer at the same time strongly facilitates the retraction of jammed chisels.

### ROCK BREAKER SYSTEM

The rock breaker set exists of a leader with integrated cylinder, manifold and measuring devices. To withstand heavy resistance, the Hydrohammer must be properly guided in a leader-guide profile. This operating criterion secures the central alignment of the chisel and hammer for optimum energy transfer between ram/anvil and chisel. The position of this leader profile should be fixed during breaking and extracting.

### OPERATING METHODS

The Hydrohammer has proven its reliability for rock breaking projects, and IQIP offers other equally reliable handling equipment which can be used to lift and position the rock breaker and leader profile, including a piling rig, excavator or

backhoe, or a cutter dredger. The choice depends predominantly on the equipment available for the project, and on water depth.

### ROCK HARDNESS

The average compressive strength that a normal cutter dredger can handle is 40MPa. To date, rocks with a hardness up to 230MPa have been successfully broken using an S-70 Hydrohammer to punch vertical holes in a relatively level surface.

### FEATURES

- Standard connection to connect to excavator stick.
- Integrated flexibility which allows drifting of the chisel, including measuring and monitoring of allowable drift.
- Integrated cylinder to extract chisel in case it is jammed in the rock. By means of an integrated manifold the powerpack of the Hydrohammer can be used to drive the cylinder.
- Inclino meter to control position of the leader during driving.
- Penetration depth of the chisel measured by liner mounted on the leader with read out on the control system.

### TECHNICAL DATA (WITH S-70 HYDROHAMMER)

Length (incl. Rock breaker)	mm	11803
Center of gravity	mm	3654
Length chisel	mm	1575
Diameter chisel	mm	250
Length mounting frame (incl. lifting eye)	mm	3305
Chisel maximum energy	kJ	70
Weight Rock breaker (in air)	tons	5.25
Weight Leader base frame (in air)	tons	3.6
Weight Excavator mounting frame (in air)	tons	4.8
Weight Rock breaker with S-70 hydrohammer (in air)	tons	25.5

