



CONTROL SYSTEM C-36

IQIP is proud to present the C-36 control system as successor of the C-34 and C-34V. The innovative C-36 control system is a complete control system both in soft- and hardware. Operated by touch screen, all necessary information is shown in a glance during operation. Physical buttons and rotary knobs are still available to control the most important functions during operation.

OPTION: AUTOMATIC PILING

The C-36 control system opens up a wide range of new possibilities in the control of the Hydrohammer® and power packs. One of the most new outstanding key functions is the option of automatic piling, where blow energy and blow rate control are automated for optimal operation. The C-36 control system is available for purchase as well as rental.

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PILING CONTROL

The main new feature is the possibility to automatically control the blow rate and blow energy. The parameters for this are set by the operator using the rotary knobs.

The power pack flow and valve timing is subsequently automatically controlled by the C-36 control system. This makes it much easier to achieve the desired energy level and blow rate. The system assists in preventing trips by giving timely notifications and by its selfregulating functions.

TROUBLE SHOOTING

Via self-diagnosis the key functions of the hammer such as the solenoids and sensors can be automatically checked. The C-36 control system has a special feature for a horizontal function test. By performing the horizontal function test, both the hydraulic and electric functions of the hammer can be tested. By simply selecting the horizontal test function, the C-36 control unit will automatically control the hammer during the test. The system subsequently is able assist the operator with trouble shooting in case any detected malfunctions must be resolved.

INTEGRATED DATA LOGGING

Manual penetration registration is integrated in the operation unit. The piling data is automatically stored in the C-36 control system. This data can be exported by USB and GPRS. Standard reports can be generated locally, customised piling records can be composed by a dedicated, web-based*, program. Pre-defined pile plans can be uploaded to the C-36 control system in advance. It is also possible to pre-define a piling plan into the C-36 at the start of the project.

* web-based content will be available from mid 2018.

IMPROVED HAMMER- AND POWER PACK CONTROL

- Automatic control for blow rate and blow energy
- High frequency piling (high blow rate and low blow energy) is integrated in the automatic control mode. This option enables pile driving with blow rates up to 200 blows/min
- Manual control of flow and lifting time is still possible (C-34 control method)
- Dedicated operation modes for extracting, single blows, rock breaking and application of water electrodes on the sleeve

SAFETY BY INNOVATION

- Different operator access levels (special hammer settings can be blocked)
- Different languages possible
- Correct equipment settings automatically set
- The system detects unsafe situations and will automatically stop the driving process.
- Automatic valve current control with cable length compensation up to 200 m cable length
- Possibility for additional features due to the flexibility of the software and spare I/O's



SYSTEM OVERVIEW

The C-36 system consists of four items: C-36 operation unit, C-36PPCB (red) power pack control box, HHCB36 (blue) Hammer control box and a C-36 antenna (GPS, GPRS, WIFI). Both control boxes are placed inside the power pack.

The C-36 antenna has a magnet base to place it on the roof of the power pack. The C-36 operation unit is connected to the C-36PPCB power pack control box with a control cable but can also be used wireless. The C-36 operation unit can be placed inside the power pack, a cabin or can be used as handheld.

New power packs are already provided with the C-36 control system. But also for existing power packs it is very easy to install the C-36 control system. The C-36 will be delivered with a new mounting plate which will fit on the existing fastening points in the power pack. The C-36 control system connectors are compatible with the connectors of the existing hammer control cable and power pack control cable. Therefore exchanging the C-34 with the C-36 is really just plug & play. In the near future a remote registration unit (B-36) will become available to register the blow count. Also a printer will become available in order to print all the piling data.

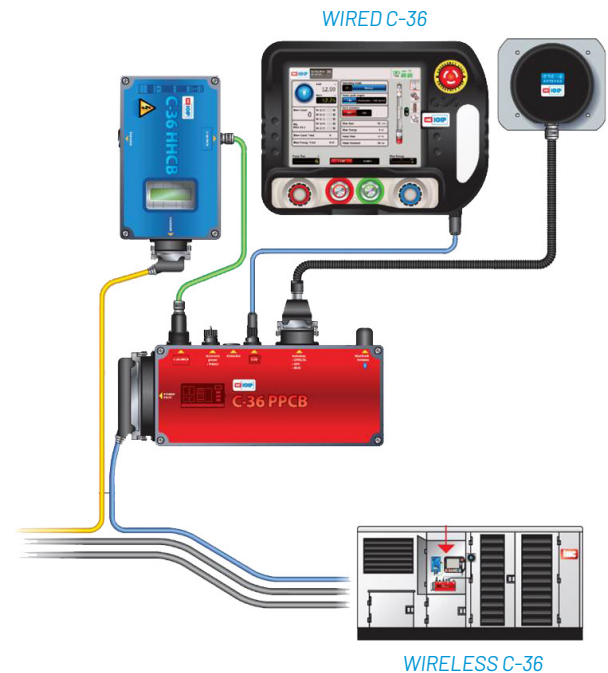
TEST PROCEDURE

Prior to the introduction, the C-36 control system has been through an extensive and successful test program. This included both the testing of the hard- and software. The hardware test included drop tests, temperature tests (-30°C and +50°C). Also the resistance to water has been tested by immersing the C-36 for one minute.

COMPATIBILITY WITH EXISTING POWER PACKS

The C-36 is compatible with power packs up to approximately 10 years old. For power packs aging over 10 years and non power packs, the C-36 control unit can be used with limited operational functions. The below table shows an overview of all power packs produced by IQIP which are directly suitable to be used with the C-36 control system. For the Hydrohammers® there is no limitation regarding the compatibility. For any questions regarding the compatibility of your power pack, you can always contact IQIP via info@iqip.com or reach to your own contact person within IQIP.

POWER PACK TYPE	SERIES
P-175	A
P-250	A, E, F
P-460	D, E, F
P-700	A
P-800	B, C, D



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