

XTRM™ Choke Control Console



MHWirth's XTRM™ Choke Control Console (CCC) enables full control during choke and kill operations as well as for line-up of remote operated functions in choke and kill manifolds.

Equipped with a 24" touch screen panel PC the CCC provides full control of all necessary functions for a safe choke and kill operation, including line up, feed back and alarm handling and alarm log. The integrated high pressure unit (HPU) with a 45 litre reservoir feeds hydraulic oil to the chokes by use of proportional valves installed in the CCC. The CCC also features gauges for system and supply pressure, transmitter for reservoir level and temperature, heater and filters.

The MHWirth XTRM™ CCC provides the following power source redundancy:

1. Rig instrument air with shut off valve (SOV)
2. Nozzle for mobile nitrogen bottle bank with SOV
3. Nozzle for rig hydraulic ringline pressure and return with SOV; alternatively this nozzle can be used for optional hydraulic accumulator
4. Manual hand pump installed directly on top of oil reservoir

When integrated with a choke control system, the CCC will on the choke screen provide information such

as high pressure pump stroke counting, standpipe pressures, mud level in mud gas separator (MGS) and liquid seal integrity. Choke position and speed adjustment can either be done from the touch screen or the mechanical levers for choke adjustment. By switching to process screen line up of remote operated valves can be carried out.

The panel PC installed in the XTRM™ CCC is controlling the choke control system. Identical information and control can be provided on a redundant touch screen panel PC in driller's cabin where full choke and kill operation functionality is provided.

The MHWirth XTRM™ CCC allows for easy access for inspection and maintenance, and meets all relevant standards and regulations as Norsok, API 16C and class requirements. Additionally, the CCC coupled with the use of MHWirth's XTRM™ gate valves and compact manifold design will reduce weight, minimize footprint and reduce operating costs.

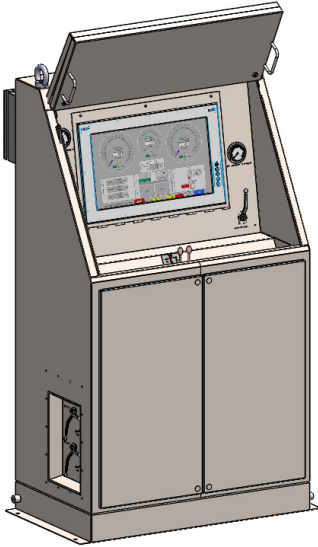
Benefits

- Integrated HPU with market-leading power source redundancy features
- The 24" touch screen PC for full control and maximum safety of choke and kill operation, including line up, position feed back, pressure readings alarm handling and alarm log
- Display provides large analogue pressure gauges for best possible visibility
- Nozzles included for external hydraulic valves
- Thermostat-controlled heater included for safe operations when ambient temperature is below freezing point
- Ergonomic work station with protective and sturdy housing
- Double hinged front cover for full protection of controls and panel PC when not in use
- Designed for hazardous area zone 1

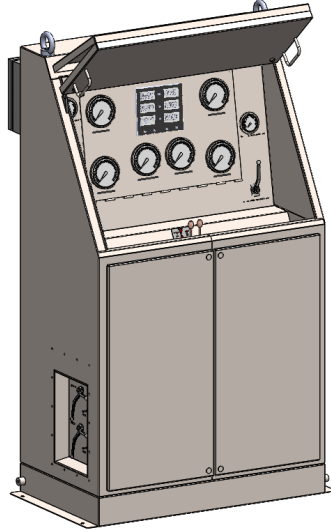


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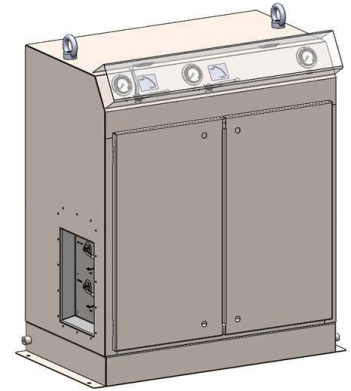
Available Configurations



XTRM™ Integrated CCC with a 24" touch screen PC



XTRM™ Stand-alone CCC with the touch screen replaced with gauges, position indicators and pump stroke counter



XTRM™ Stand-alone HPU specially for critical functions where redundant power source is required

Technical Specifications

	XTRM™ Integrated CCC	XTRM™ Stand-alone CCC	XTRM™ Stand-alone HPU
High pressure unit, pressure and capacity	230 bar design pressure Fluid cap. 2 l/min. @ 200 bar		
Hazardous classification (according to IEC 60079-10-1)	Zone 1		
Material spec. for cabinet	AISI 316		
Choke control console, size requirement (H x L x W)	1 780 x 1 100 x 600 mm (70 x 44 x 24 in)		1 200 x 1 100 x 600 mm (47 x 44 x 24 in)
Proportional valves for chokes with levers for manual operation and solenoids for remote operation	2 off included		N/A
HPU	<ul style="list-style-type: none"> Gauges showing supply pressure, hydraulic system pressure and hydraulic ringline pressure Shut off valves for instrument air nitrogen line and hydraulic system pressure Manual hand pump with extension lever 		
Operation and interface	<ul style="list-style-type: none"> 24" colour touch screen panel PC Manual levers for proportional valves 	<ul style="list-style-type: none"> Gauges, pump stroke counter and choke position indicators Manual levers for proportional valves 	Operation is on/off valves and pressure gauges

Data is subject to confirmation by the manufacturer.