

# Crown Mounted Compensators



## CMC II

**MHWirth's new crown mounted compensator, the CMC II, combines market-leading compensation system legacy with innovative design and new active compensation features.**

MHWirth's new CMC II has been designed based on our extensive knowledge of compensating systems for harsh offshore environments.

The fully reworked design has reduced the height of the CMC II by relocating the two cylinders and piston accumulator. In addition, high class steel technology is utilized, reducing weight and center of gravity (COG), thus improving rig payload and stability while still maintaining key characteristics.

A design with market-proven passive weight on bit (WOB) performance is attained through advanced system simulations, implementing among other measures, force equalizer cylinders and optimized hydraulic systems with large piping and piping bends.

Our CMC II is equipped with an user selectable integrated active heave compensating (AHC) system. The active system is designed for use during e.g. drilling and landing operations, greatly improving operational windows and efficiency. As the active system supplements and

not replaces the passive system, the operational integrity is always ensured, including in the event of a rig power failure.

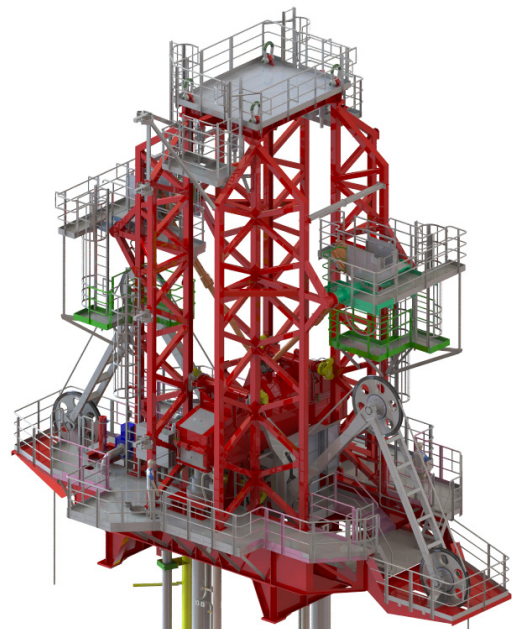
Our new CMC II is delivered as one tested unit, simplifying installation considerably, as it eliminates the need to assemble various components on the rig. The modular design also simplifies component handling and, combined with the operational performance, keep your operational costs at a minimum.

### Additional Options

- Condition monitoring
- Extended compensating range (from standard 25 ft to 30 ft)
- Single web wire sheaves in the crown block and rocker arms
- Cladding around the CMC II unit
- Access platforms for easy maintenance of snatch blocks
- CMC II hydraulic power unit (HPU) combined with the riser tensioning system
- Interface to derrick elevator

## Benefits

- Improved WOB performance in both passive and active mode
- Lightweight design with low center of gravity (COG)
- Superior power consumption to performance ratio
- Optimal geometry of the compensator minimizes wire wear and tear
- Active heave compensating functionality while drilling (AHC-WD) for up to 75% better WOB performance
- Full compliance with rules and regulations with regards to operational integrity, including during use of active heave compensation
- Easy and safe access for optimized maintenance with increased uptime
- Modular design simplifies component handling
- Fully assembled and tested for easy installation and commissioning



## Technical Specifications

Our CMC II compensators are available with compensating capacities from 1 000 to 1 500 kips (454 to 680 mT) with corresponding static capacity. The typical variants shown in the table below can be selected according to your rig requirements. Other capacities are available upon request.

	CMC II 1000/1500-25	CMC II 1000/2000-25	CMC II 1000/2500-25	CMC II 1500/2000-25	CMC II 1500/2500-25	CMC II 1500/2800-25
Dynamic capacity	1 000 kips (454 mT)			1 500 kips (680 mT)		
Static capacity	1 500 kips (680 mT)	2 000 kips (907 mT)	2 500 kips (1 134 mT)	2 000 kips (907 mT)	2 500 kips (1 134 mT)	2 800 kips (1 270 mT)
Cylinder stroke	25 ft (7.62 m)					
Working pressure, max.	3 002 psi (207 bar)					
Drill line diameter	1 ¾ in (44 mm)	2 in (52 mm)	2 in (52 mm) 2 1/8 in (54 mm)	2 in (52 mm)	2 in (52 mm) 2 1/8 in (54 mm)	2.2 in (56 mm)
AHC capacity	88 kips (40 mT)					

Data is subject to confirmation by the manufacturer.