

CEMAC Offshore Power Quadrants

Proven technology for safe cable handling



Delivering challenging subsea solutions from concept to completion, MacArtney specialises in the design and manufacture of offshore cable handling systems for the renewable energy industry, in particular the offshore wind sector.

The CEMAC offshore power quadrants represent MacArtney's leading-edge offshore cable handling equipment. These power quadrants belong to the CEMAC product line incorporating both cable carousels, linear cable engines and track tensioners.

Being electrically driven, the CEMAC offshore power quadrants are robust and energy-efficient systems that safely control the installation and recovery of offshore power and telecom cables.

The CEMAC power quadrants feature durability, high performance, and easy integratability. Available in standard and custom configurations, they are easily combined with cable carousels, track tensioners, spooling arms, etc.

The CEMAC design represents compact and modular systems being easily mobilised and cost-effective in terms of transport. All main components are standardised, which facilitates adaptation and upgrading to the required performance and capacity.

The MacArtney power quadrants are fully synchronisable with all MacArtney CEMAC offshore cable handling equipment. The track tensioners are also compliant with third-party equipment. This enables integration into existing and rental cable equipment lay-lines.

The CEMAC power quadrants are available with a remote diagnostics tool which enables MacArtney technicians to remotely monitor and supervise in real time. By eliminating unnecessary offshore engineering support, this unique feature generates substantial cost-savings to owners and operators.

Customised solutions

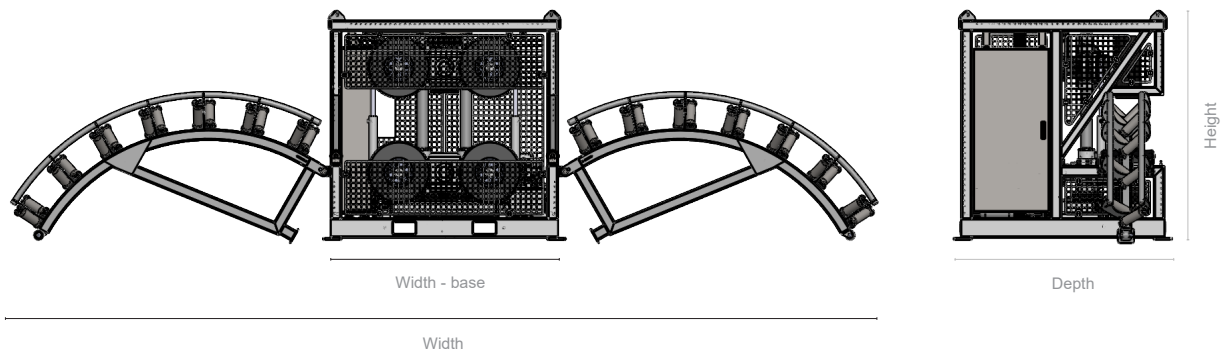
The CEMAC offshore power quadrants come in 1-, 2-, and 3-pair versions and are available for combined operation.

Features and benefits

- Compact and modular design
- Standardised and exchangeable components
- Designed for easy integration
- Optimised efficiency and decreased necessary deck capacity
- All structural components in painted carbon steel
- Integrated control system
- Electrically/hydraulically driven
- Long and proven track record
- Low noise operation
- Fully integrated with vessel control system

Options

- Top-loaded versions
- Wide-opening versions
- Remote diagnostics tool
- Service and maintenance programme
- Spare parts package
- Remote control
- Wireless remote control
- Pinch status
- Extra high speed 6,000 m/hour
- Complete control system monitoring
- Complete control system data log
- Tarpaulin cover
- CE marking
- Certification according to DNVGL-ST-0378 (2.22), DNVGL-E2.7-3, and ILO 152



Specifications

Model	10 kN Power Quadrant	20 kN Power Quadrant	30 kN Power Quadrant
Width - base (mm)	1,660	2,496	3,056
Width - on ground (mm)	7,367	8,223	11,293
Width - lifted (mm)	6,356	7,212	9,585
Height (mm)	2,178	2,108	2,108
Height - lifted (mm)	3,272	3,342	4,086
Depth (mm)	1,715	1,875	2,115
Pull force (kN)	10	20	30
High speed pull force (kN)	1	2,5	3,5
Holding force (kN)	10	20	30
Pinch force (kN)	10	20	30
Speed (m/hour)	900	900	900
High speed (m/hour)	3,000	3,000	3,000
Extra high speed	optional	optional	optional
Wheel diameter (mm)	570	570	570
Coefficient of friction	0.5	0.5	0.5
Opening (mm)	380	380	380
Grip load (kN/m)	135	85	80
Cable capacity (mm ø)	10 - 350	10 - 350	10 - 350
Weight (kg)	TBA	TBA	TBA
Motor size track: E-motor (kW/Hz)	2 x 3/50	4 x 3/50	6 x 3/50
Motor size HPU: E-motor (kW/Hz)	1 x 2,2/50	1 x 2,2/50	1 x 2,2/50
Power supply (V)	3 x 400/440	3 x 400/440	3 x 400/440
Top loaded	optional	optional	optional
Design factor (psi)	1.5	1.5	1.5