

CEMAC Bow Cable Engines

Accurate and energy-efficient



The CEMAC Bow Cable Engines (BCEs) represent MacArtney's leading-edge offshore cable handling equipment. These BCEs belong to the CEMAC product line and incorporate cable carousels, linear cable engines, and track tensioners. Being electrically driven, the CEMAC BCEs are accurate and energy-efficient systems that safely control the installation and recovery of offshore power and telecom cables.

The CEMAC BCEs feature durability, high performance, and easy integration. 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, facilitating adaptation and upgrading to the required performance and capacity.

The CEMAC BCEs are fully synchronisable with all CEMAC offshore cable handling equipment. The track tensioners also comply with third-party equipment, enabling integration into existing and rental cable equipment lay-lines.

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

Versatility in all transpooling applications

CEMAC BCEs offer versatile functionality. By removing the bow arms, the BCEs can be operated as a Linear Cable Engine (LCE). This adaptability enables handling

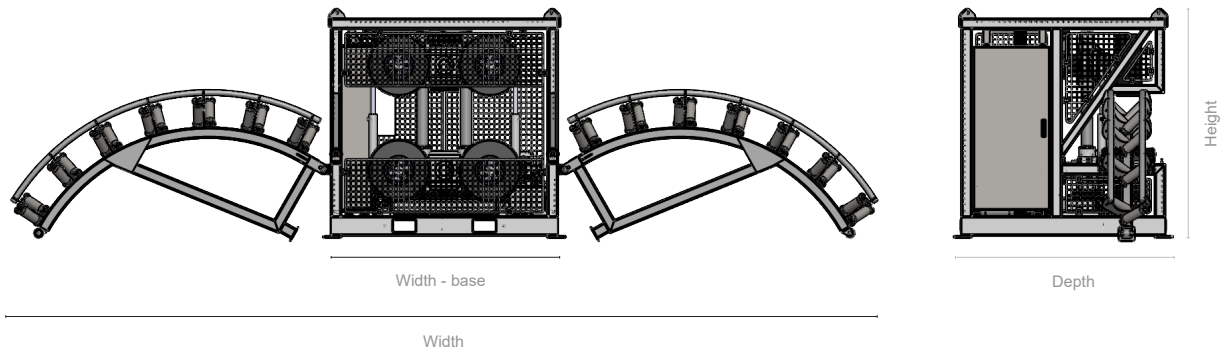
of both vertical and horizontal cable transpooling operations. CEMAC BCEs and LCEs seamlessly integrate with carousels and other third-party equipment. Available in 1-, 2-, and 3-wheel pair configurations, these engines are also suitable for master-slave operations, enhancing flexibility and efficiency.

Features and benefits

- Suitable to deploy as a Linear Cable Engine
- Compact and modular design
- Minimal pressurised oil
- Electrically driven, eliminating the necessity for external HPUs
- Small footprint
- Standardised and exchangeable components
- Optimised energy consumption
- Accurate controllability
- Integrated control system
- Designed for seamless system integration
- Advanced product integrity monitoring system
- Comprehensive data logging
- Low noise operation
- DNV/BV compliant design

Options

- Extra high speed 6000 m/hour
- Remote diagnostics
- Service and maintenance program
- Tailored spare parts philosophy
- Wireless remote control
- Comprehensive data output
- Tarpaulin cover
- CE marking
- Certification according to DNVGL-ST-0378 (2.22), DNVGL-E2.7-3, and ILO 152



Specifications

Model	10 kN	20 kN	30 kN
Width (mm)	1,700	2,500	3,060
Height (mm)	2,110	2,110	2,110
Depth (mm)	1,720	1,875	2,115
Max. pull force (kN)	10	20	30
High speed pull force (kN)	1	2.5	3.5
Max. pinch force (kN)	20	40	60
Speed (m/hour)	0-1,300	0-1,300	0-1,300
High speed (m/hour)	0-3,000	0-3,000	0-3,000
Coefficient of friction	0.25	0.25	0.25
Max. cable pressure (kN/m)	142	143	143
Wheel diameter (mm)	570	570	570
Wheel contact length/pair (mm)*	170	170	170
Max. cable pressure (kN/m)	117	117	117
Opening (mm)	380	380	380
Cable capacity (mm ø)	50-400	50-400	50-400
Weight (kg)	2,210	2,900	3,570
No. wheel pairs	1	2	3
Power supply (VAC - Hz)	3 x 400-440 - 50/60	3 x 400-440 - 50/60	3 x 400-440 - 50/60

*Depends on the tire pressure