

Shore power solutions ...

for shipping terminals & vessels



plastics for longer life®

flexible & direct

... www.igus.com/cranes

ECS-B23

Shore power solutions for shipping ...

igus® movable shore connection



igus® rol e-chain® guided in a trench

▶ The optimum solution for greenfield terminals



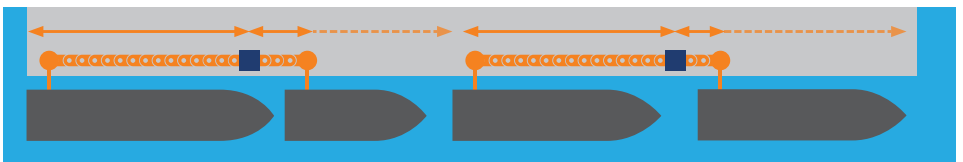
igus® rol e-chain® guided on support column construction

▶ The solution for brownfield terminals to maintain quay access

Stationary shore connection

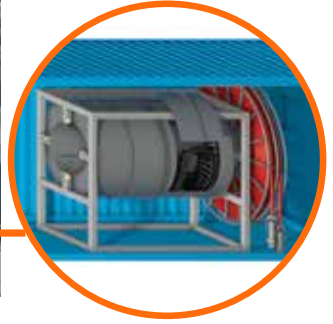
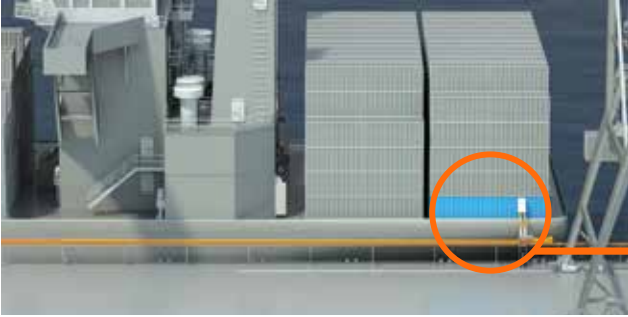


igus® mobile shore supply



- ▶ Maximize berthing area by aligning shore power connections to ships — not ships to shore power connections
- ▶ Automated movements and connections are safer, more reliable and require less manpower to operate
- ▶ igus® quay connections use proven e-chain® technology

terminals & vessels ... flexible & direct igus® shore power solutions

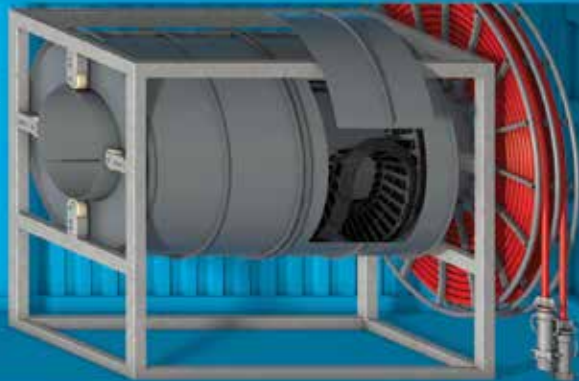


igus® e-spool shore power

- ▶ Elimination of slip rings with twisterchain® technology

The slip ring free cable reel for shore power containers

- ▶ Direct uninterrupted cable routing from the cabinet to the connector
- ▶ Low maintenance and service friendly
- ▶ Containerized solution with 35 m or 55 m deployment
- ▶ Stand alone solution with 55 m and more deployment
- ▶ According to IEC 80005-1



igus® products and systems

Developed, tested and built for moving applications

Advantages of motion plastics products

- ▶ Eliminate slip rings
- ▶ No rotary transmitter
- ▶ Lubrication and maintenance free
- ▶ Heavy duty, corrosion-resistant construction
- ▶ Seawater, oil, and weather resistant

Advantages of igus® systems

- ▶ Standard cables instead of expensive custom versions
- ▶ Safely guided in igus® e-chains® and trough systems
- ▶ Easy to install and maintain
- ▶ Industry certified and with an igus® factory warranty
- ▶ Customized, turnkey solutions from a single supplier

igus® motion plastics

Guidance of energy, data, fluid and air



Cables for motion ...

igus® chainflex®

- ▶ 36 month or 10 million cycle* guarantee
- ▶ Over 1,000 cable types available from stock
- ▶ Developed for use in e-chains®
- ▶ Flexible at low temperatures, UV and oil resistant
- ▶ More information at www.igus.com/chainflex



Secure energy supply system ...

igus® e-chain system®

- ▶ Corrosion: Seawater, oil, and weather resistance
- ▶ Travel distance up to 800 m and speeds up to 600 m/min
- ▶ Additional load up to 600 kg/m
- ▶ Lighter and less expensive than steel
- ▶ More information at www.igus.com/e-chain



Tested in the igus® laboratory ...

Largest test-lab in our industry with more than 29,600 ft² floor area ...

- ▶ More than 4,000 tests for energy supply systems per year
- ▶ Thousands of findings added to the electronic database each year
- ▶ More than 650 cable tests per year
- ▶ 2 billion test cycles per year
- ▶ More information at www.igus.com/testlab



Reliable in use ...

igus® projects worldwide

- ▶ More than 5,153** RTGs / RMGs cranes
- ▶ More than 845** STS cranes
- ▶ More than 15,500** spreader applications
- ▶ More than 30,000** indoor, gantry, bulk handling, shipyard & special cranes
- ▶ More information at: www.igus.com/cranes



plastics for longer life® ...

Solutions from the world market leader for cable carriers and plain bearings made of high-performance plastics

- ▶ More than 100,000 motion plastics products
- ▶ 36 subsidiaries and 52 distributors worldwide
- ▶ More information at www.igus.com



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* Up to 5 million cycles for chainflex® M cables. Cycles depend on installation and cable quality. Find more information about this in our current catalog, in chainflex® data sheets, or via the chainflex® service life calculator, available at www.igus.com/chainflexlife.

** As of January 2015

igus® the-chain ... Moving energy made easy

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