Agenda

- Introduction WireCo WorldGroup
- Mooring Rope expertise
- Current Renewable Energy Research Projects
- LankoFirst Fast Rope Connector
Leading Global Producer with Broad Product Offering

**Wire Rope**

- 46% of Sales
- Large diameter, highly engineered rope used in mining, oil and gas, and infrastructure end markets

**Synthetic Products**

- 24% of Sales
- Highly engineered, made-to-order synthetic ropes and technical products that have strength characteristics of steel but weigh significantly less

**EM Cable**

- 5% of Sales
- Special type of highly engineered wire rope that has strength characteristics and electrical signal conducting capabilities

**Specialty Wire**

- 17% of Sales
- Array of engineered specialty wire products used in general industrial end markets

**Engineered Products**

- 8% of Sales
- Highly engineered plastic molding from recycled materials used in a variety of industrial, structural and oil and gas applications
Global Manufacturing Footprint

Manufacturing facilities

North America
- United States (7)
- Mexico (2)

South America
- Brazil (1)

Europe
- France (1)
- Germany (2)
- Greece (1) (Joint Venture)
- Netherlands (2)
- Poland (1)
- Portugal (6)

Asia
- China (1) (Joint Venture)
- India (1) (Joint Venture)

Global Manufacturing Capacity

Wire
- U.S.: 75,000
- China: 50,000
- Mexico: 163,000
- Poland: 120,000
- Global Capacity: 408,000 Tons

Rope and Engineered Products
- U.S.: 89,000
- China: 26,000
- Mexico: 30,000
- Eastern Europe: 30,000
- Southern Europe: 75,000
- Northern Europe: 76,000
- Brazil: 4,000
- Global Capacity: 330,000 Tons
Mooring Systems for FPSO’s/ SPAR’s, Semi-Submersibles & FDPSO
Multi-functional thethers for airborne wind energy converters

- HAWE: High Altitude Wind Energy
- Airborne module (lifted by Magnus-effect) driving ground-based generator through rope
- Goal: development of high strength, low weight multi-functional rope tether
- Status: finalization mid 2014
- Royal Lankhorst Euronete Group full project participant
Mooring ropes for wave energy converters

- MARINET Marine Renewables Infrastructure Network
- EU FP-7 sponsored network to enhance integration and utilisation of marine renewable energy research infrastructures and expertise
- Lankhorst-Euronete awarded access to:
  - South West Mooring Test Facility
  - Dynamic Marine Component Tester
- Aim: research and development of fiber mooring ropes for wave energy converters
- Completion: mid 2014
LankoFirst: Fast Rope Connector

- Patent pending rope connector offering:
  - Significant decreases in installation time
  - Smaller & lighter connector than plate links and thimbles
  - Safer & ergonomic working conditions for crew on deck

- Integrated with the spliced rope during rope manufacture, ensuring the quality of the splice

- Available for rope-to-rope and rope-to-chain
Thank you for your attention