

1,000-4,500 MT Carousels

Deep Down, Inc. has designed an extraordinary fully scalable carousel system that can be manufactured to handle 1,000 MT or up to 4,500 MT for the largest carousel, depending on customer requirements. The carousels can be used for land-based storage or offshore deployment of product from an installation vessel. Manufacturing began in 2010 and a 3,400 MT carousel system has been delivered to Core Industries in Theodore, Alabama 2Q 2011.

Utilizing the latest technology available, our engineers designed this unit with safety in mind by including an automatic speed control and shut down between the tensioner and carousel, safety controls to protect product from vessel to land communication shut downs and dedicated hardwired communications with headsets between stations for safer spooling via wireless link to vessel carousel operator. Supplying teams with the crucial information required, the carousel monitoring system records critical readings such as speed, length marks, weight, and tension providing safe and efficient project completions.

This sophisticated sectioned carousel design is highly flexible allowing storage and deployment of various cables and umbilicals with modular sections that provide more compliance and relief against tolerance issues, yet remains easy to ship offering bulk transportation of standardized umbilical cross-sections thus reducing delivery cost. Featuring removable and movable termination porches that offer more flexibility in termination placement and handling, you can cut and terminate umbilicals in the Gulf of Mexico closer to the termination assembly supplier and reduce shipping costs.

Our carousel system can be configured to provide ample space to store and install the largest umbilicals on the market while saving you money, thus continuing the Deep Down tradition of exceeding industry standards and providing customers with a safe, cost-effective solution.

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Base

- Constructed in modular sections
- Centralized Hub Design
- Integrated light tower
- Integrated fluid containment
- Stable on semi-improved grade

Turn Table

- Constructed of compliant modular sections
- Wheel Mounts w/sealed bearings, inner and outer diameter
- Stanchion design for various applications
- Drive motors strategically located at perimeter of turn table
- Motors may be isolated for longer motor life or redundancy

Levelwind Assembly

- Davit Arm design
- Hydraulic operated from Control Tower

Tensioner

- Horizontal track design
- Top loader for easy pass thru of terminations
- 2" to 8" O.D. capacity
- 12 Ton load capacity
- 100,000lbs of compression
- 3,000 psi operating pressure
- ESD

Roller Guide Tower

- Control Tower
- Cabin equipped w/ air conditioning, 115v power
- Product entry to Tensioner and Levelwind Assembly

Roller Guides

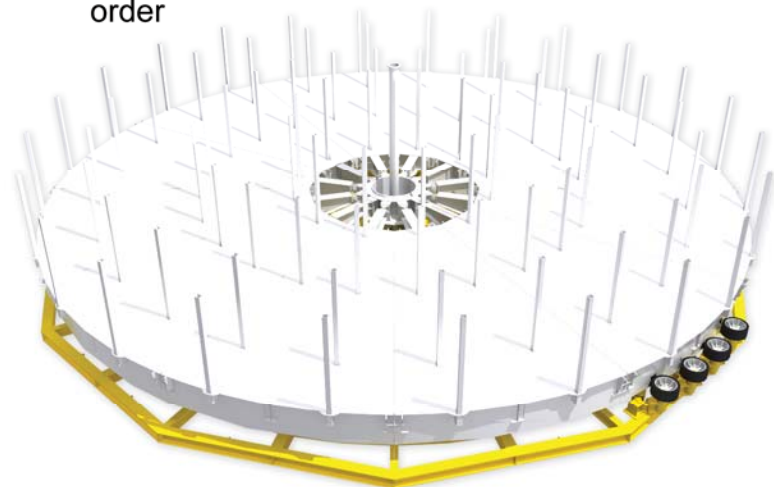
- Transitions umbilical from ground level to elevation of Tensioner
- Top rollers are removable for loading and unloading
- Sized for up to 10" umbilical

Hydraulic Power Unit

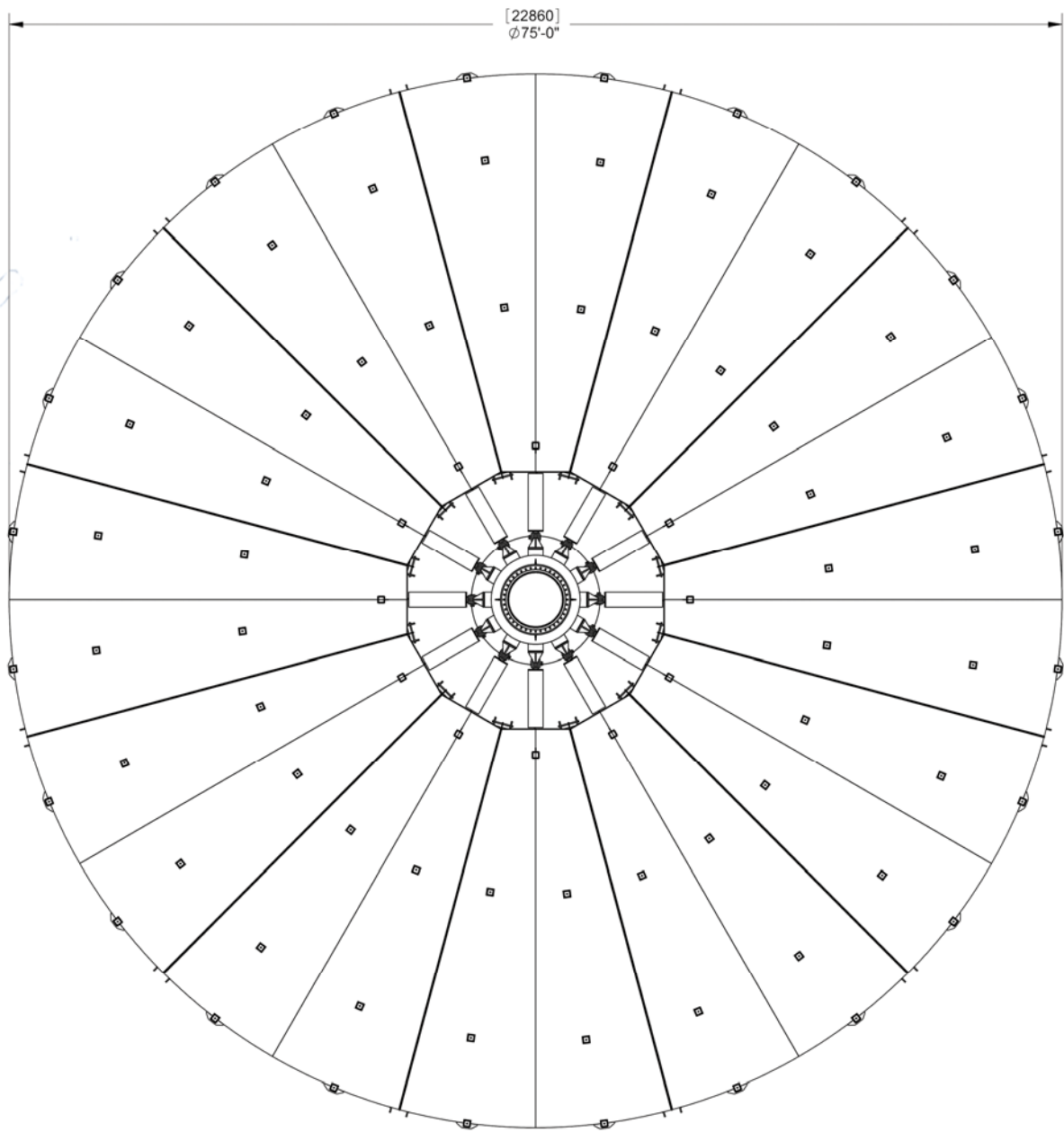
- 250 HP electric motor
- 480V 3 phase 100 amp power requirement
- 3000 psi operating pressure
- Heat exchanger
- Low oil light
- ESD

Benefits:

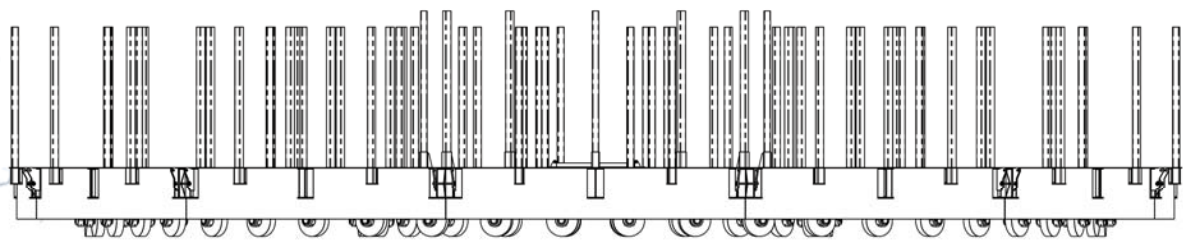
- Large OD and ID carousels provide the least amount of accumulated strain on the umbilical
- Can be used to store umbilicals and cables on land or install from vessel offshore
- Allows for ISUs (Integrated Service Umbilicals) with large center pipe
- Modular sections make it easier to ship and provide more compliance and relief against tolerance issues
- Provides independent storage of umbilical products in the Gulf of Mexico while the installation vessel is away on other projects
- Provides more opportunities for bulk transport of standardized umbilical cross-sections thus reducing delivery cost and allows umbilicals to be cut to length and terminated in the Gulf of Mexico closer to the supplier of the umbilical termination assemblies
- Provides access to entire subsea system and the opportunity for full SITs (System Integration Testing) and system performance testing
- Large enough and partitioned to store multiple umbilicals simultaneously and offload in any order



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PLAN



ELEVATION