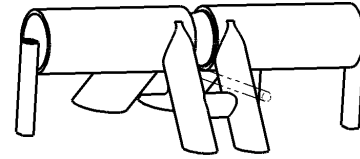
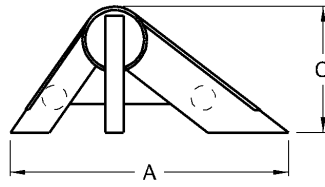
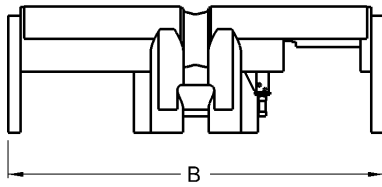




# Change Over Stern Staples



MODEL 16-740 C.O.S.S.

Model Number	Units of Measure	Breaking Strength of Rope	Roller Dia.	A	B	C	Weight
12-650	Inches	616,000 lbs	10.5	61	96	33	2000 lbs
	MM	2541 kN	267	1549	2438	838	907 Kg
16-740	Inches	740,000 lbs	16	89	114	40.75	6700 lbs
	MM	3293 kN	406	2261	2896	1035	3039 Kg

Manufactured by Smith Berger under license to the inventor and patent holder, Voith Hydro GmbH Marine Technology, the Change Over Stern Staple (COSS) is designed for installation on the growing number of tractor tugs around the world. The horizontally acting hourglass roller of the COSS allows for the simple and safe conversion from escort mode to ship assist mode.

Mounted in the bulwarks of the tug, the added mechanical advantage gained by having the towing point further aft greatly increases the arresting capacity of the vessel. Designed for use with modern high performance synthetic ropes, the rope contact surfaces of the COSS are lined with stainless steel to keep abrasion to a minimum.

The installation of the COSS will increase the capacity of the tug and prolong the working life of the tow rope. Contact Smith Berger for the latest in towing technology for your vessel.

## Standard Features

- Designed for breaking strength of rope with 90° upward lead from roller
- Stainless steel roller and rope contact surfaces
- Hydraulically actuated hourglass roller
- Grease lubricated Nylatron bearings
- Fail-safe locking pin
- Smith Berger Quality

## Optional Features

- Custom sizes
- Paint to your specification
- Third party certification

***We will custom engineer any of our products to suit YOUR requirements!***

7915 10th Ave. S., Seattle, WA 98108 USA - Tel: 206-764-4650 - Fax: 206-764-4653 - Website: [www.SmithBerger.com](http://www.SmithBerger.com)