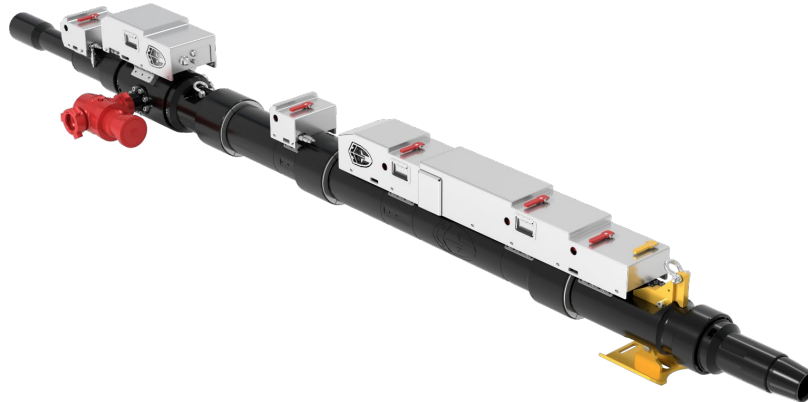


The in-house engineered **MAN-O-WAR™ Top Drive Cement Head** is the most modernized and optimized way to launch cementing darts/plugs and foam/solid balls. Designed to be a reliable, simple, and safer alternative to your typical top drive cement heads and circulating iron manifolds. Rated to an **INDUSTRY FIRST** combined simultaneous load of 10,000 psi at 2,000,000 lbf tensile with 110,000 ft-lb applied torque.



FEATURES AND BENEFITS

Adaptable pin connector facilitates quick and hassle-free field redressing of the bottom connection to accommodate any drill pipe-specific connection/sizes.

5.63-inch chamber I.D. and 5.75-inch chamber I.D. mitigate the compression set of darts prior to the job.

Fully independent electric over hydraulic remote system with safety features that control safety valves, release valves, ball drop, and launch indicators.

Mechanical plug departure indicators.

Modular design: add or remove chambers to accommodate additional plugs or balls, or for extended-length plugs.

Engineered for field loading, redress, and maintenance using the innovative offshore basket with integral skid design.

Contingency manual operation.

Wireless Remote System ATEX Zone 1 & UL Class I Div. II Certified:

- Worldwide Remote Actuation
- Augmented reality for ultimate remote support

DINV Certified

SPECIFICATIONS

Rated Hookload: **3,000,000 lbf**

Rated Hookload (combined): **2,000,000 lbf**

Rated MAWP (combined): **10,000 psi**

Rated Torque (combined): **110,000 ft-lbf**

Swivel Rated RPM: **50 rpm**

Flow Rate (Top Drive): **35 bbl/min**

Flow Rate (Swivel): **16 bbl/min**

Tool Weight: **4,914 lb**

Tool Length: **13.4 feet**