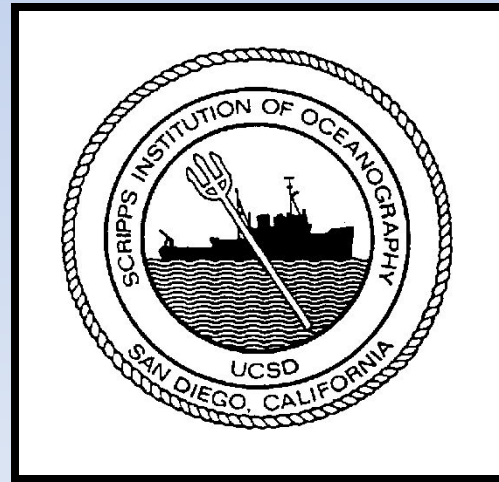


2020 UNOLS Annual Meeting

NSF West Coast Winch Pool
operated by
Scripps Institution of Oceanography



Our Mission

- To provide an inventory of oceanographic winches (etc.) for shared use.
- To keep our inventory in good repair and in compliance with applicable standards (CFR, RVSS).
- To modify our inventory to better serve our community.
- To provide technical support: cable/wire rope spooling, training, maintenance, repairs, engineering, fabrication, advice...

How the Winch Pool Works

- Science parties (and others) communicate their needs to us.
- We match their needs to available machinery and personnel.
- Those conducting NSF-funded research generally incur no costs to use machinery.
- Others ***generally*** pay a “day rate” and the cost of freight.

How the Winch Pool Works

- Spooling services:
 - Spooling services for NSF-funded projects done at no additional cost to the project (exc. block-funded programs like OOI)
 - Spooling jobs are generally scheduled on a first-come-first-served basis with NSF-funded projects taking priority.
 - Most pooling jobs are within the Winch Pool's budget. We seek approval from our program manager for projects >\$15k.
 - Plan large spooling jobs with us 6-12 months in advance.
 - Non-NSF-funded projects should include the cost(s) of spooling in their proposals. Contact us for an estimate.

Personnel

- Management and Quality Control
 - Pool Manager: Capt. Eric Buck (part time, 20 %)
 - Winch/Wire Engineer: A. Davis, PE (full time)
- Mechanical
 - WP Technician: Lorenzo McCoy (as required)
 - Attends vessels for mob/de-mob of Dynacon deep sea traction winch
 - Occasional travel supporting other winches
 - Spooling services

Funding



- Logistics—shipping, etc.
 - Estimated annually, included in our annual NSF proposal
- Engineering Services—design, analysis, etc.
 - NSF-funded projects included in our annual NSF proposal
 - Others pay an hourly rate
- Major Repairs, Capital Equipment Purchases –big ticket items
 - Requested in separate NSF proposals
- Routine Maintenance
 - Covered by the day rate for each winch (non-NSF funds)

Inventory

- 2 light-duty winches
- 4 TSE mooring spoolers
- 1 Mooring winch
- 1 Dynacon spooling winch (DSW)
- 1 Lebus mooring capstan
- 1 Dynacon traction winch (DTW)
- 1 Markey tensioning spooler
- 3 line tensioners
- 3 sets fiber optic slip rings



Light-Duty Winches



Hawboldt SPR-2036/S

Up to 3,500 lbs pull.
Holds 3,000 m of .322 cable.



Mooring Spoolers



TSE SD-70 / SDP-70 Mooring *Spoolers* (not winches)

Up to 7,500 lbs pull.
Holds 2,800 m of 1" line.

Mooring Winch



Hawboldt SPRE-3464 Mooring Winch

Provides up to 10,000 lbs pull.

Withstands up to 20,000 lbs pull.

Tension and Scope Display

Holds 2,800 m of 1" line.

Footprint similar to TSE Spooler.



Mooring Spooler



Dynacon Mooring Spooler

Up to 7,500 lbs pull.
Holds 5,300 m of 1" cable.

(Remote operating station, HPU not shown)

Mooring Spooler



Dynacon Mooring Spooler

Mooring Capstan

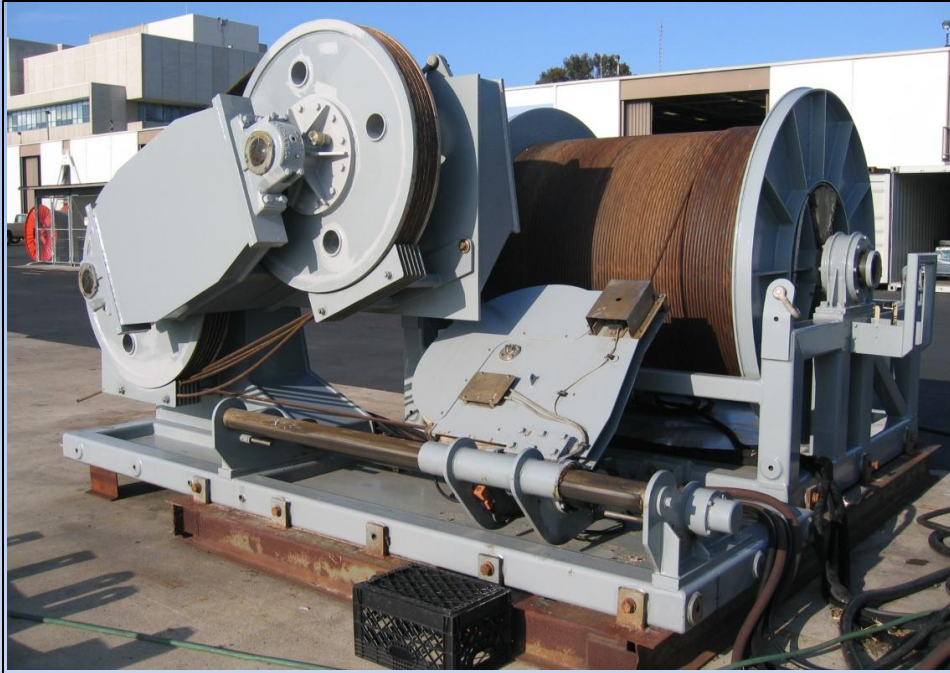


Lebus Mooring Capstan

Also for spooling moorings.

Up to 7,000 lbs pull. Unlimited cable-holding capacity.
(Remote operating station, wireless remote not shown)

Heavy-Duty Winch



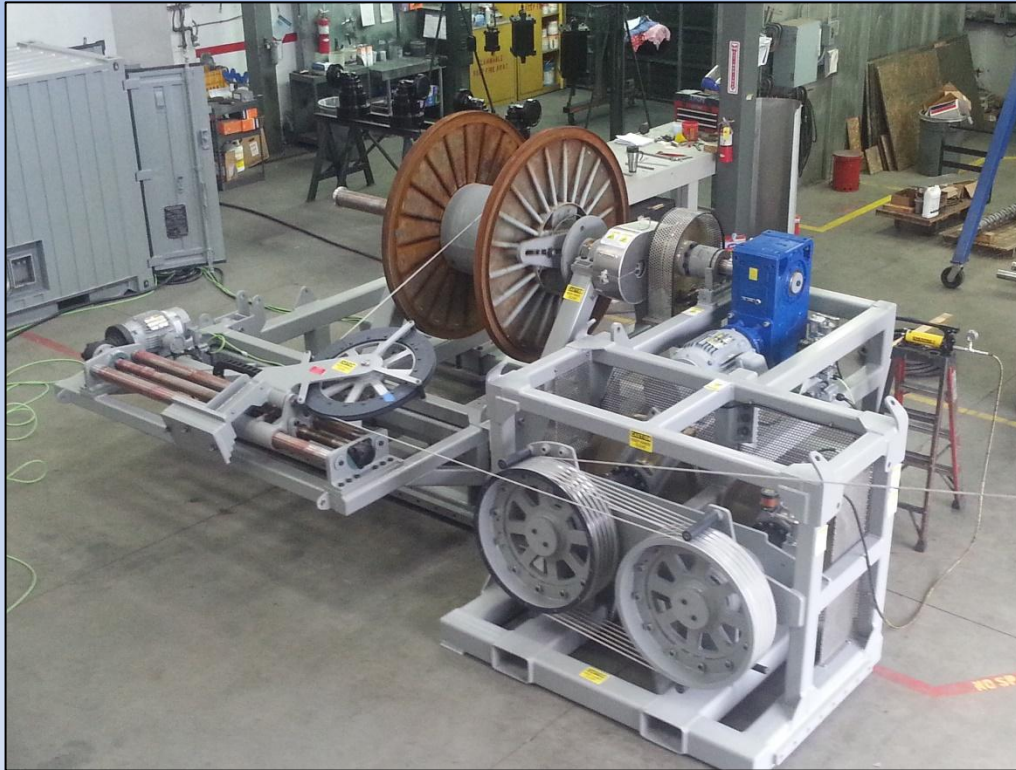
Dynacon Traction Winch

Up to 25,000 lbs pull.
Holds 10,000 m of .681 cable.

(Remote operating station not shown.)



Tensioning Spooler



Markey Tensioning Spooler

Ø.250 " to Ø.681"
cable /wire rope/line
Spools up to 66" wide,
Ø90", and 25,000 lb.

Line Tensioners



Blue

$\frac{1}{4}$ "
.322"



Pengo

$\frac{9}{16}$ "
.680"
.681"
.842"



Gearhart

$\frac{1}{4}$ "
.322"

2019

- Clients: NSF, ONR, OOI, DARPA, UCSD, SOI, GFOE, and SAIC
- Deployed Aboard: SALLY RIDE, ROBERT GORDON SPROUL, OCEANUS, SIKULIAQ, HEALY, ATLANTIS, and KILO MOANA in support of 25 different projects.
- Spooling Services Provided to: SIKULIAQ, ATLANTIS, and REUBEN LASKER

2020

- A drop in deployments due to COVID-19 pandemic
- The WCWP's biggest negative impact from the pandemic was the cancellation of the Beinart/THOMPSON cruise just as the DTW arrived in Fiji in February/March; this resulted in a lengthy and costly process to have the equipment repatriated to home base in San Diego.
- Clients: NSF, ONR, OOI, UCSD, SAIC
- Deployed aboard: OCEANUS, THOMAS G. THOMPSON, SIKULIAQ, SALLY RIDE, NEIL ARMSTRONG, ROBERT GORDON SPROUL, REUBEN LASKER, and MARCUS LANGSETH in support of at least 15 different projects
- Spooling services provided to: SIKULIAQ, OCEANUS, THOMAS G. THOMPSON, SALLY RIDE, and ROGER REVELLE

Projects 2019-2020

- Negotiated a group purchase of 5 winches for SIO, BIOS, and WHOI.
- Accepted and tested 4 new winches for SIO, and BIOS.
- Made a new fire plan and hydraulic diagrams for R/V R.G. Sproul.
- Specified and purchased a new winch levelwind and overboarding block for R/V R.G. Sproul.
- Designed and oversaw construction of a new inner section for R/V R. Revelle's squirt boom.
- Specified and purchased new, easily replaced sheave treads for flagging blocks on R/V R. Revelle and R/V S. Ride.
- Researched requirements for portable cranes used onboard vessels.
- Drafted an Amendment to UNOLS RVSS Appendix A.

Contact Us

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#NSF winch pool

