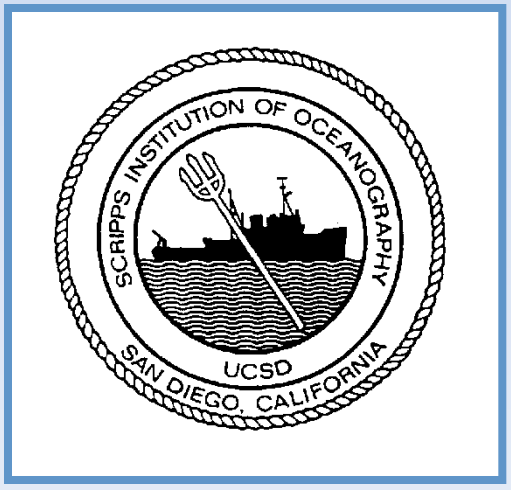
RVOC 2017

NSF West Coast Winch Pool
operated by
Scripps Institution of Oceanography



Winch Pool Mission

- To provide an inventory of oceanographic winches (etc.) for shared use.
- To keep the inventory in good repair, in compliance with applicable standards (CFR, RVSS).
- To modify the composition of the inventory to reflect the needs of end-users.
- To provide technical support: maintenance, repairs, design, engineering, fabrication, Q&A.

How the Winch Pool Works

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

Funding

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

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

SIO Inventory

- 1 TSE mooring spooler
- 2 Light-duty winches (SeaMac, Poseidon)
- 3 Line Tensioners

SIO Inventory

TSE SD-70 Spooler

A mooring spooler.
Up to 7,500 lbs pull.
Holds 2,500 m of 1” cable.

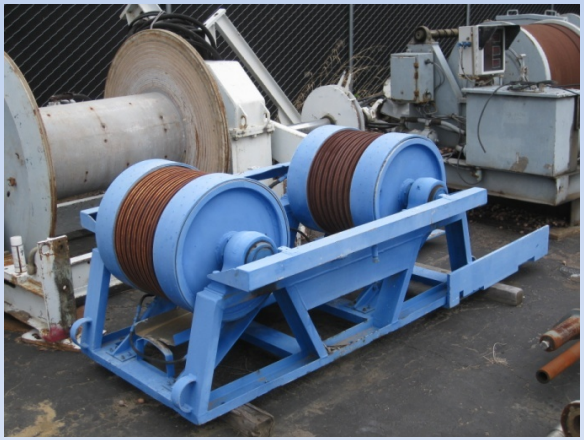
SIO Inventory

SeaMac, Poseidon

Light-duty oceanographic winches.
Up to 2,600 lbs pull.
Holds 3,000 m of .322” cable.

SIO Inventory

Line Spoolers & Tensioners



Blue

¼”
.322”

Pengo

9/16”
.680”
.681”
.842”

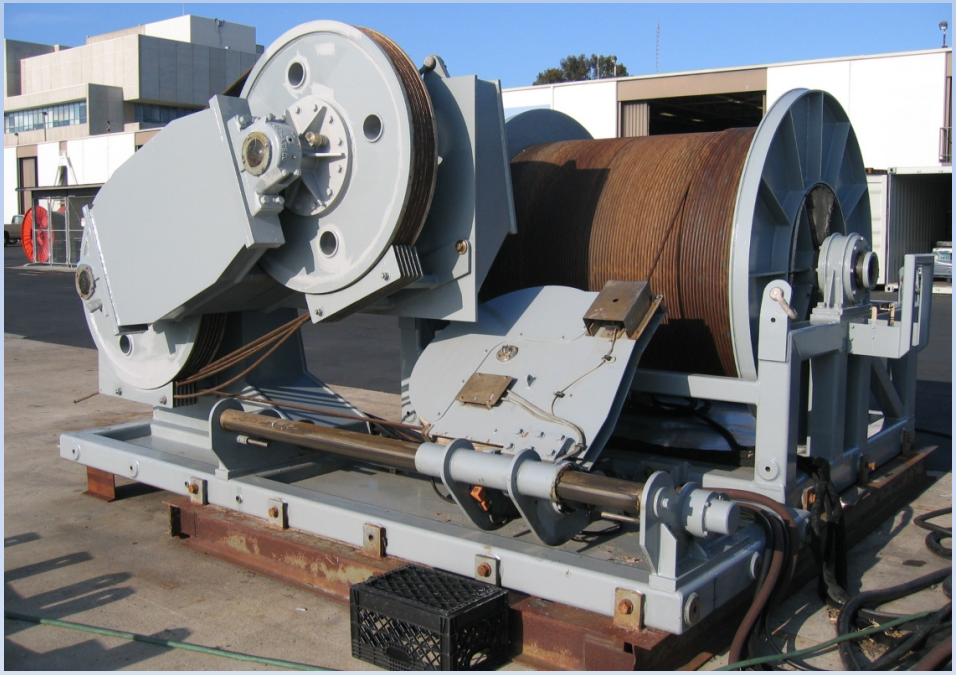
Gearhart

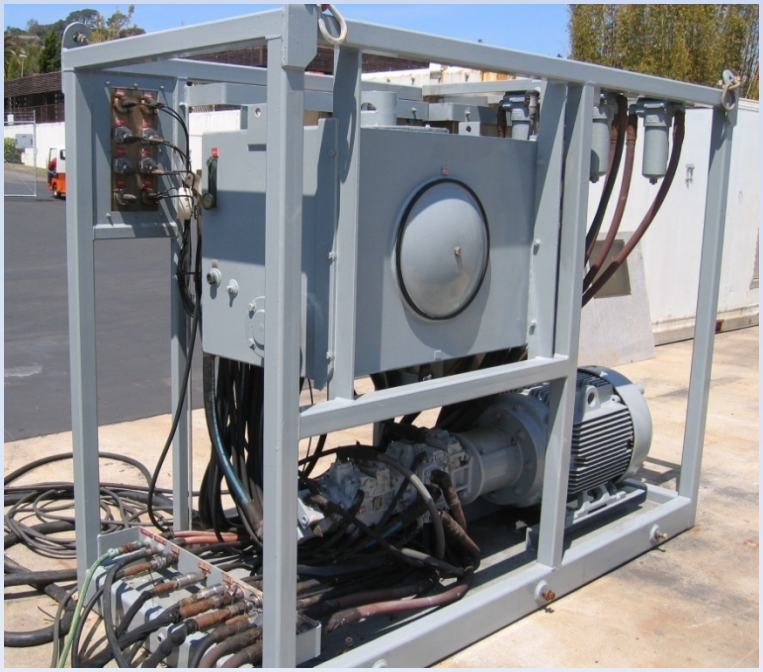
¼”
.322”

Winch Pool Inventory

- 1 Dynacon traction winch (DTW)
- 3 TSE mooring spoolers
- 1 Dynacon spooling winch (DSW)
- 1 Lebus mooring capstan
- 1 Hawboldt light-duty winch
- 1 Tensioning Spooler
- 3 sets fiber optic slip rings

Winch Pool Inventory





Dynacon Traction Winch

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

(Remote operating station not shown.)

Winch Pool Inventory

TSE SD-70 / SDP-70 Spoolers (3)

Mooring spoolers.
Up to 7,500 lbs pull.
Holds 2,500 m of 1” cable.

Winch Pool Inventory

Dynacon Spooling Winch

A mooring spooler.
Up to 7,500 lbs pull.
Holds 5,300 m of 1” cable.

(Remote operating station, HPU not shown)

Winch Pool Inventory

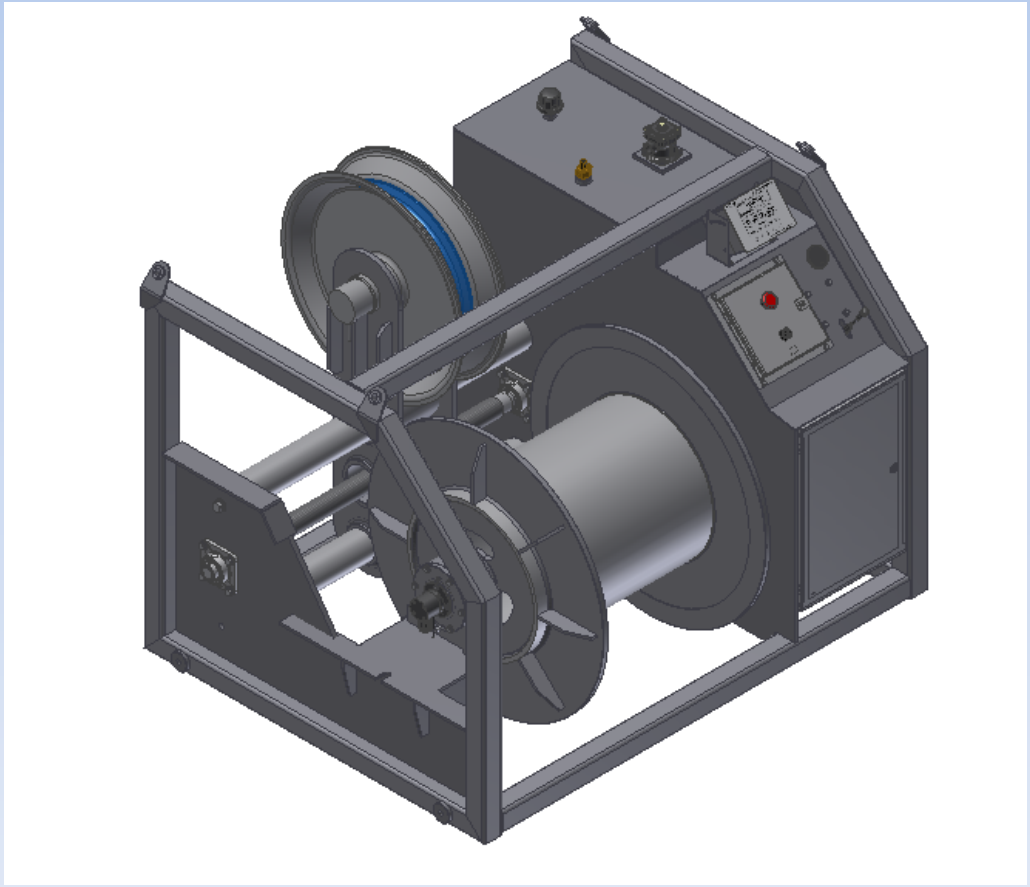
Dynacon Spooling Winch

Winch Pool Inventory

Lebus Mooring Capstan

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

Winch Pool Inventory



NEW!

Hawboldt SPR-2036/S

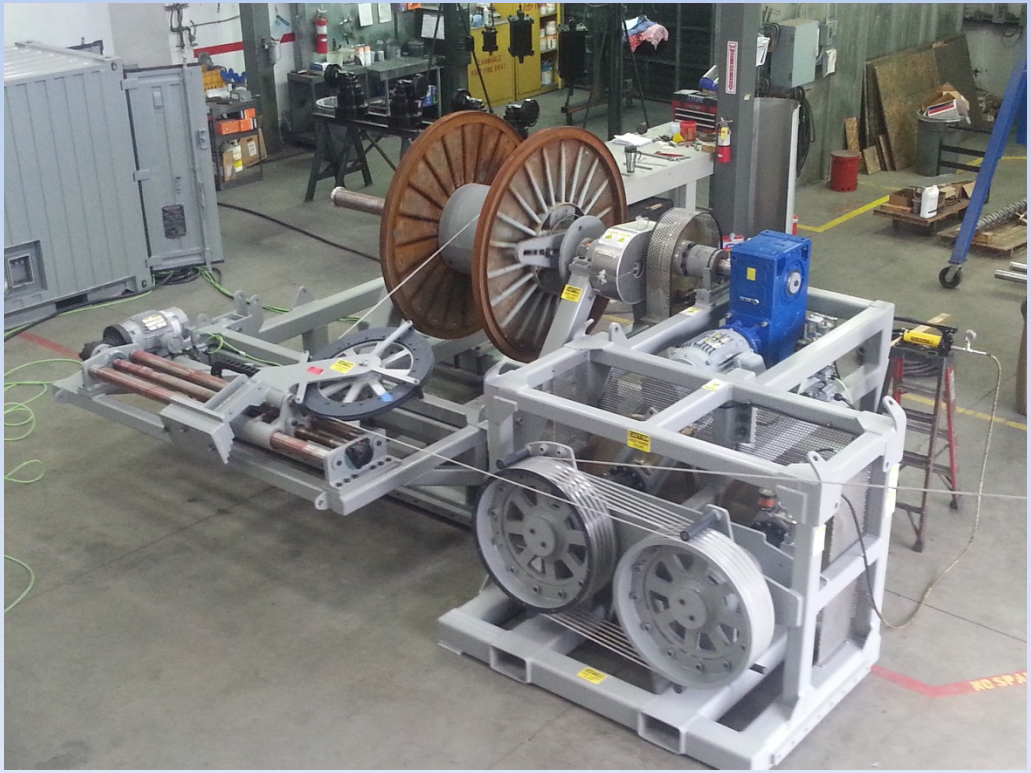
Up to 3,500 lbs pull.
Holds 3,000 m of .322 cable.

- → Same drum capacity and footprint as SeaMac
- → 35% more pull
- → Appendix A compliant

Winch Pool Inventory

Hawboldt SPR-2036/S

Winch Pool Inventory



Markey Tensioning Spooler

Ø.250“ to Ø.681”

cable /wire rope/line

Winch Pool Inventory

Markey Tensioning Spooler

Spooling for USCGC Healy

Winch Pool Inventory

Markey Tensioning Spooler
Spooling for USCGC Healy

Winch Pool Inventory

Markey Tensioning Spooler
Spooling for USCGC Healy

Winch Pool Inventory

Markey Tensioning Spooler
Spooling for USCGC Healy

Projects 2016-2017

- Assisted with 2 NSF vessel inspections
- Commissioned 1 new winch
- Shook down 1 new spooling rig
- Assisted the fleet with Appendix B compliance
  - MCDs, test procedures, training procedures, OHS operator's manuals, analysis
- Completed two modification to a boom aboard R/P FLIP
- Designed a new appendage for R/V Sally Ride's SSHS-11V handling system.

Challenges 2016-2017

- Restructuring our fee schedule in a way that both covers our costs and makes everyone happy.
  - Rates have been flat for 6 years
  - They will be going up soon

- Training winch operators remotely.

Contact Us

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#NSF winch pool