UNOLS
East Coast
WINCH POOL

Woods Hole Oceanographic Institution

DATE

East Coast Winch Pool Team

Jamie Haley
System Maintenance

Josh Eaton
Engineering

Sean Whelan
Oversight & Coordination

East Coast Winch Pool Mission

The East Coast Winch Pool (ECWP) provides overboard handling systems, wire spooling, wire lubrication assistance, consulting, and engineering solutions as part of the NSF UNOLS Equipment Pool Program.

By pooling large value assets with subject matter experts, efficiencies are achieved to provide safe and reliable equipment to the whole UNOLS fleet.

Equipment Requests

ECWP has met over 35 requests for equipment and services in the past year. These included:

- Mooring work
- Hydrography
- Trace metal sampling
- Towed systems
- Sheaves
- Wire spooling

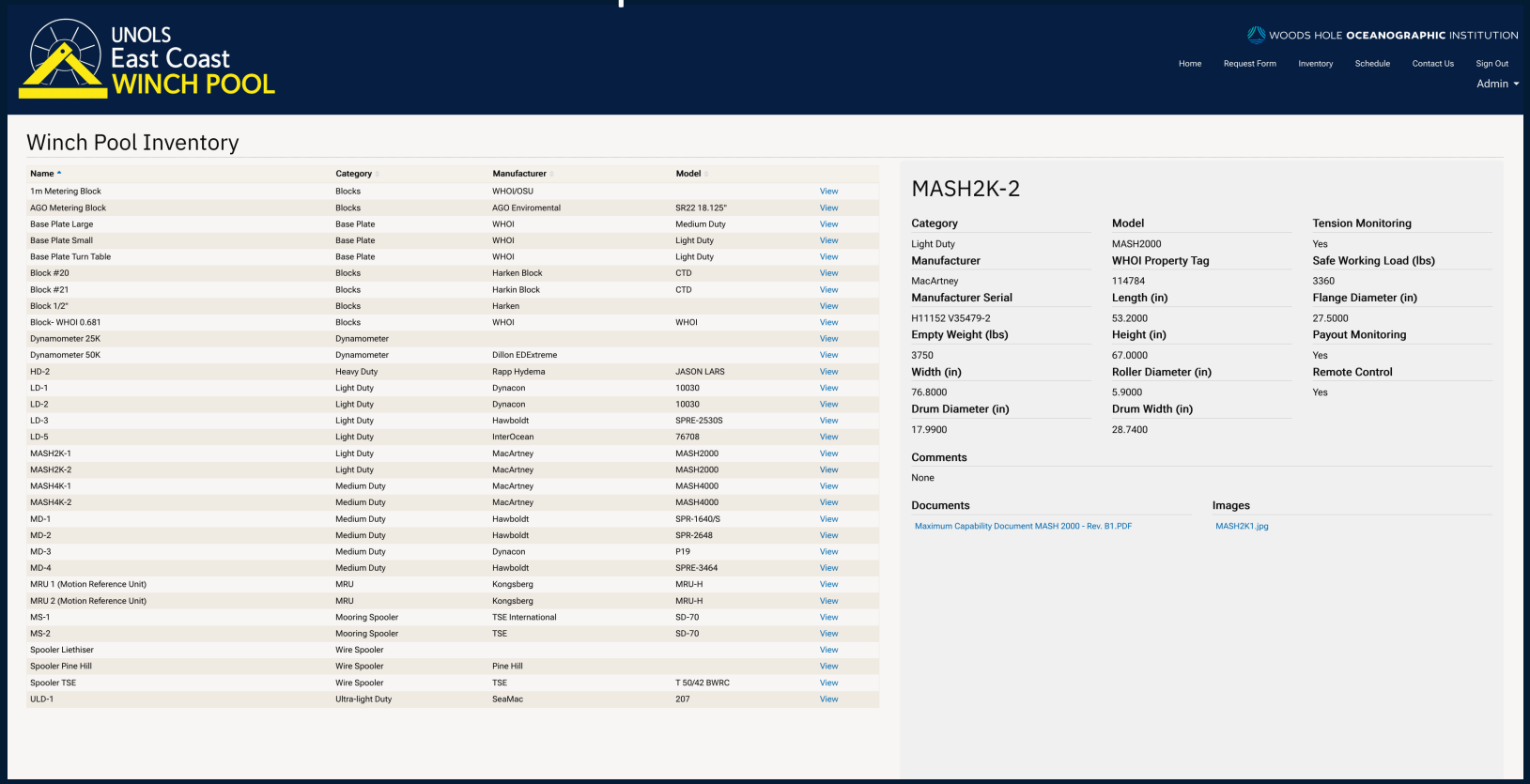
ECWP Website Upgrade

- Rajesh Mishra – Director of IS, Science and Engineering Information Services | WHOI
- Mike Chagnon President & CTO | Kaimika Technology LLC

Many changes are under the hood- removing bugs and enhancing security, but there are significant enhancements to help tracking and NSF reporting, while easing the process for prospective users to view documentation and request equipment.

ECWP Equipment

winchpool.whoi.edu



ECWP Schedule

winchpool.whoi.edu

ECWP Request Form

winchpool.whoi.edu

Request Form

Requestor First Name*: Tom
Requestor Last Name*: Crean
Email Address*: Tom@endurance.edu
Telephone Number(s): n/a
PI First Name: Ernest
PI Last Name: Shackleton
Institution Name: Imperial Trans-Antarctic Expedition
Agency: Other
Other Agency: Antarctic Exploration
Grant Number: OCE-2024123
Ship: Endurance
Cruise: Imperial Trans-Antarctic Expedition
WHOI Project Number: N/A

Mobilization Date: 08/08/1914
Mobilization Port: Plymouth. England
Demobilization Date: 05/21/1916
Demobilization Port: South Georgia Island
Weight of Gear (lbs): 500
Expected Tension (lbs): 1400
Wire Used: Hemp
Wire Length (m): 1000
Submitter Comments: Hazardous journey. Small wages, bitter cold, long months of complete darkness, constant danger, safe return doubtful. Honour and recognition in case of success.

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Submit

ECWP- Tension & Spooling

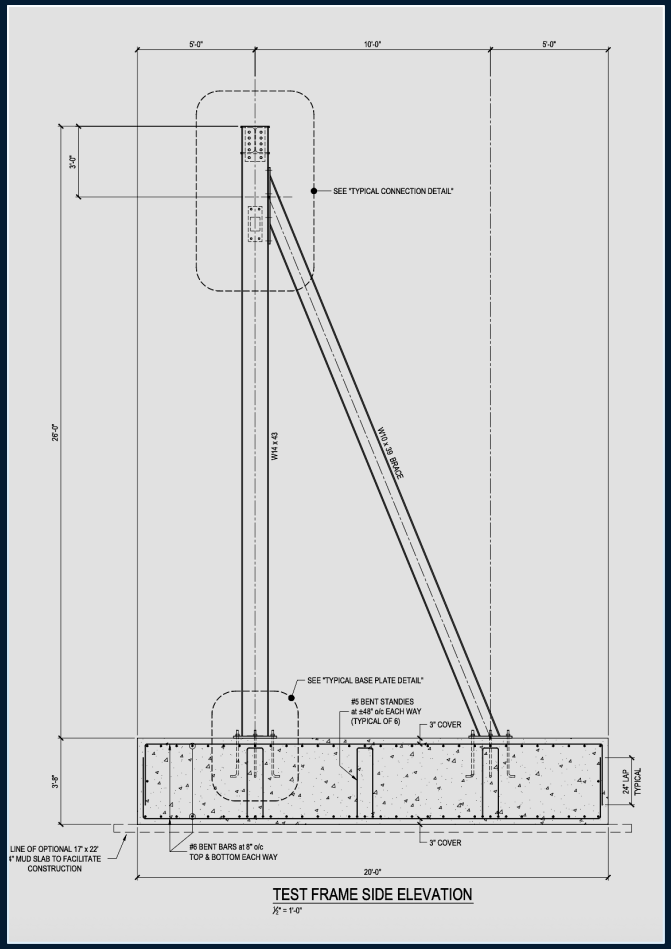
TSE

Leitheiser

Pine Hill

ECWP Test Frame

- On site dynamic testing for generating Maximum Capability Documents
- Online Nov 2025

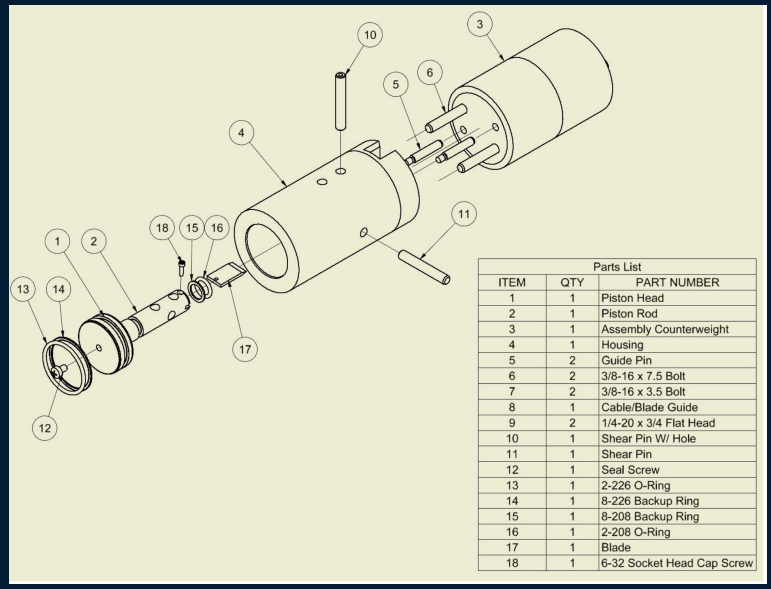


ECWP Hydrostatic Cutter

The Hydrostatic Cutter is a device developed to cut a tension member at depth.

When a tension member
becomes fouled or anchored at the bottom, instead of cutting it at the surface, the device is deployed to cut and release it near bottom.

A portion of the expensive tension member is saved reducing economic loss.



Parts List

ITEM	QTY	PART NUMBER
1	1	Piston Head
2	1	Piston Rod
3	1	Assembly Counterweight
4	1	Housing
5	2	Guide Pin
6	2	3/8-16 x 7.5 Bolt
7	2	3/8-16 x 3.5 Bolt
8	1	Cable/Blade Guide
9	2	1/4-20 x 3/4 Flat Head
10	1	Shear Pin W/ Hole
11	1	Shear Pin
12	1	Seal Screw
13	1	2-226 O-Ring
14	1	8-226 Backup Ring
15	1	8-208 Backup Ring
16	1	2-208 O-Ring
17	1	Blade
18	1	6-32 Socket Head Cap Screw

(26) wire cutters fabricated and delivered by Josh Eaton to ECWP OCT 2025

East Coast Winch Pool

Leveraging resources at WHOI, the ECWP subject matter expert provides the fleet with reliable overboard handling systems, wire winding, engineering support, training, and the logistics for delivery anywhere in the world.

winchpool.whoi.edu

Thank You

UNOLS East Coast WINCH POOL

Sarah Fuller, David Fisichella, Rob Munier- Shipboard Scientific Services and Marine Operations

Isaura Weddige Welch and Isabella Costa Marcondes- WHOI Finance/Administrative Services

Brian Guest- WHOI Oceanographer Emeritus

John Brinckerhoff- WHOI International & Domestic Shipper

Eric Trotto, Barbara Callahan, Andrea Harvey- NSF Wire Pool

Tim McGovern- NSF Program Director