

HYDROSTATIC WIRE CUTTER

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Purpose

Losing wire

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- The Cost of Surface Cutting
- Dangerous
- Risk Exceeding Yield Point





Design Requirement

What it Needs to Do

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- ❑ Safe on Deck
- ❑ Only Actuates at Depth
- ❑ Consistent
- ❑ Reliable
- ❑ Reach Depth



Method Of Operation

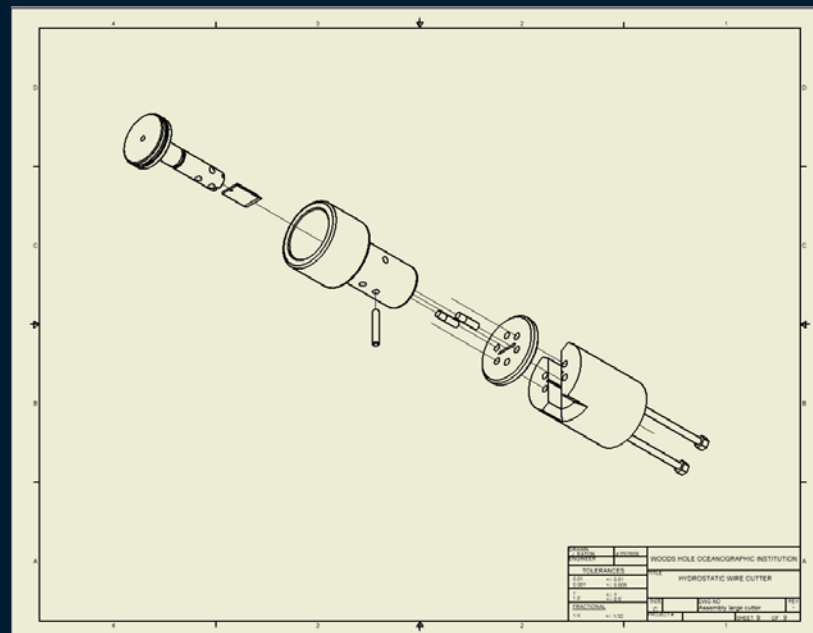
Assembly

7

Geometrically Simple



Preassembly



Pin Selection

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- Depth
- Error
- Easy to Modify
- Repeatable
- 3/8 Free Machine Brass



Concept

9





Testing

Pressure Chamber

11

$\frac{1}{4}$ Inch Nilspin, 5300 PSI

$\frac{3}{4}$ Inch Spectra, 1500 PSI





Results

The Damage it Does

13

- Cuts Cables
 - ¼ Nilspin
 - 0.322
 - 9/16 3 X 19
 - 0.681
- Cuts and Damages Synthetics
- Blade Embeds in Backplane\Counter Weight



It Looks Like It Might Get Stuck

A Real Use

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Coring Cruise



R/V Atlantis





Questions