

# **Future-proof your Rig**

Riggvedlikehold 2024





# **125 Years Legacy of Excellence**

Manufacturing industry-leading drilling equipment for more than 125 years.





# **Innovating for the Rigs of the Future**



# **Electric BOP & Riserless Drilling**

Opex savings by removing hydraulics

## Opex savings per year for the DRILLING CONTRACTOR

UP TO

~ 5 MUSD+



Opex savings per year for the OPERATOR

ир то ~ 22 MUSD+

# **HMH All-Electric BOP**

## нлн

## **Key Benefits**

# Opex Savings ~ 22 MUSD+ from reduced testing

- "Micro-testing" increases availability
- Significantly fewer components = Improved Reliability
- Reduced wellhead fatigue and increased VDL
- Reduced vessel size for P&A/Capping applications
- Depth Independent



## **Carbon Footprint Savings**

## -4300+ tons CO2 per year from reduced Idle & Testing times (30days/~8% reduction)

- Fewer components/Extended life = Fewer replacements
- Less rig idle days while testing per year (-30days)
- Reduced transportation costs/emissions
- Zero emissions subsea:
  - No glycol/fluid mixing/filtration
  - No control fluid venting





EMISSIONS

## Technical Readiness

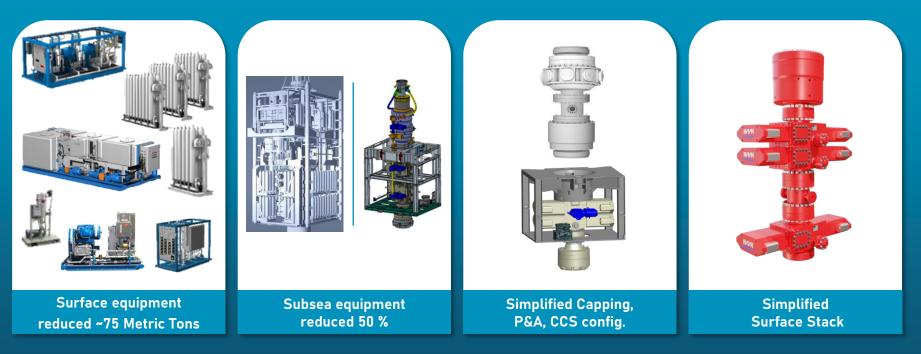
## Wellbore and controls solutions from Legacy Hydril BOPs

- Proven Hydril Bodies & Rams (TRL-9)
- API Qualified Wellbore kit (TRL-9)
- Convert HMH controls to electric (TRL-6+)
- Actuator Drive Mechanisms (TRL-4)



# Lighter, More Reliable, Simplified

Cost, Rig Design, Handling, and Wellhead Benefits\*



\* – values are for retrofit of existing rig; P&A stack, newbuild significantly higher reductions

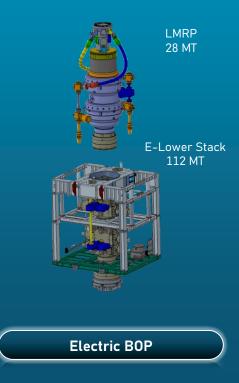
# **BOP Evolution**

#### 453,5 MT 2020 317,5 MT 2010 263 MT 2003 24.8m 1998 19.9m 16.6m -----Projected 10.1m 13.5m 16.5m 3.5m Mud line 4th Gen BOP 5th Gen BOP 6th Gen BOP 20K BOP 1,000 kips, 7 rams 580 kips, 4/5 rams 700 kips, 6 rams 1,500 kips, 7 rams

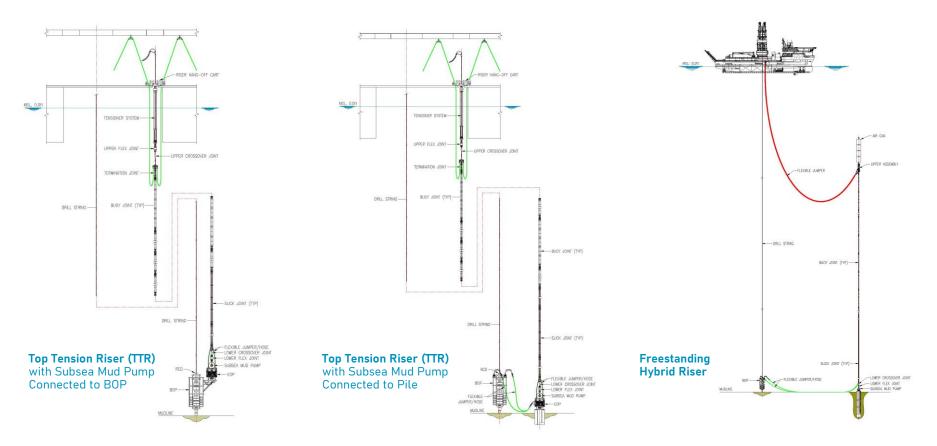
= 680 MT

## н⁄лн

STRIPPED OF HYDRAULICS: = Approx 140 MT



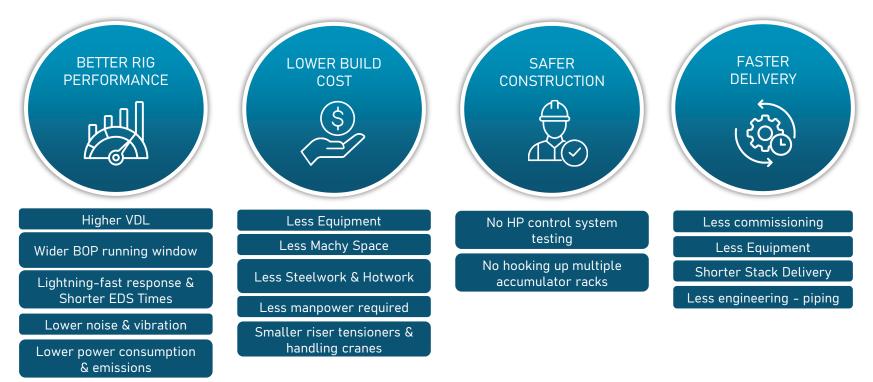
# **Open Water Drilling Solutions**





# **Electric BOP & Riserless Drilling**

Positive impacts on the Rig & Construction



With our technology you can reduce your CO2 emissions by 45 mT per rig, per year

# HMH Compressed Yardstay Model

#### Planning kick-off:

- Establish IBW/ SPS team
- Define strategy
- Engage with certifying body
- Equipment pre-inspection

#### Data review - scope definition:

- Review of maintenance records and operational data
- Structural calculations
- Vibration and oil analysis
- Long lead item definition
- Scope definition
- Ordering of parts
- Work package preparation

#### **Offshore:**

- Re-certification on-board (RA57)
- Overhaul on-board
- Exchange of equipment
- Commissioning

#### **Onshore:**

- Onshore overhaul
- Documentation



# of Months before Class Certificate expiry

# Thank you!

# HVVH

**CONTACT** For questions contact us at marketing@hmhw.com

## HVH

# **Copyright and Disclaimer**

#### Copyright

Copyright of all published material including photographs, drawings and images in this document remains vested in HMH and third-party contributors as appropriate. Accordingly, neither the whole nor any part of this document shall be reproduced in any form nor used in any manner without express prior permission and applicable acknowledgements. No trademark, copyright or other notice shall be altered or removed from any reproduction.

#### Disclaimer

This Presentation includes and is based, inter alia, on forward-looking information and statements that are subject to risks and uncertainties that could cause actual results to differ. These statements and this Presentation are based on current expectations, estimates and projections about global economic conditions, the economic conditions of the regions and industries that are major markets for HMH (including subsidiaries and affiliates) lines of business. These expectations, estimates and projections are generally identifiable by statements containing words such as "expects", "believes", "estimates" or similar expressions. Important factors that could cause actual results to differ materially from those expectations include, among others, economic and market conditions in the geographic areas and industries that are or will be major markets for HMH's businesses, oil prices, market acceptance of new products and services, changes in governmental regulations, interest rates, fluctuations in currency exchange rates and such other factors as may be discussed from time to time in the Presentation. Although HMH believes that its expectations and the Presentation are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved or that the actual results will be as set out in the Presentation. HMH is making no representation or warranty, expressed or implied, as to the accuracy, reliability or completeness of the Presentation, and neither HMH nor any of its directors, officers or employees will have any liability to you or any other persons resulting from your use.

HMH consists of many legally independent entities, constituting their own separate identities. HMH is used as the common brand or trademark for most of these entities.