



VALIDATE WELL INTEGRITY WITH ABSOLUTE CERTAINTY

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CURRENT STATE OF TUBULAR RUNNING OPERATIONS

SAFETY HAZARDS

- Highly dependent on process and procedures
- Labor intensive
- Red-zone exposure

INEFFICIENT PERFORMANCE

- Manual operations
- Quality standards affected by human judgment
- Work subject to human fallibility

POOR RELIABILITY

- More than 1% tolerance for laid-down joints
- Manual data entry
- Multiple components

DATED TECHNOLOGY

- Not integrated
- Not smart



VERO™

**BUILDING WELLS
THAT LAST A LIFETIME**

**ELIMINATE CATASTROPHIC WELL
FAILURES AND MITIGATE SAFETY RISKS**

**REDUCE TOTAL WELL
CONSTRUCTION COSTS**

**PROTECT YOUR CORPORATE
REPUTATION AND PROFITABILITY**

MECHANIZATION VS AUTOMATION

Mechanization
replaces the use of
human muscles.



Automation
replaces the use of
human judgment.





REAL EXAMPLES OF CATASTROPHIC WELL INTEGRITY LOSSES

IOC #1 **\$300M** IN COST INCLUSIVE OF LOST PRODUCTION

IOC #2 **\$40M** SPENT TO PULL AND RECOMPLETE

IOC #3 **\$15M** WASTED ON COSTLY INTERVENTION

IOC #4 **\$10M** LOST IN FAILED PRESSURE TEST

LEAKING CONNECTION CAUSED BY HUMAN JUDGMENT AND / OR INATTENTION



VALIDATE CONNECTION INTEGRITY WITH ABSOLUTE CERTAINTY

AUTOMATE WELL CONSTRUCTION

- ASSURED CONNECTION INTEGRITY

AVOID WORKOVER COSTS

- ELIMINATE HUMAN ERRORS

MITIGATE RISKS

- SAFETY, ENVIRONMENTAL, CORPORATE REPUTATION

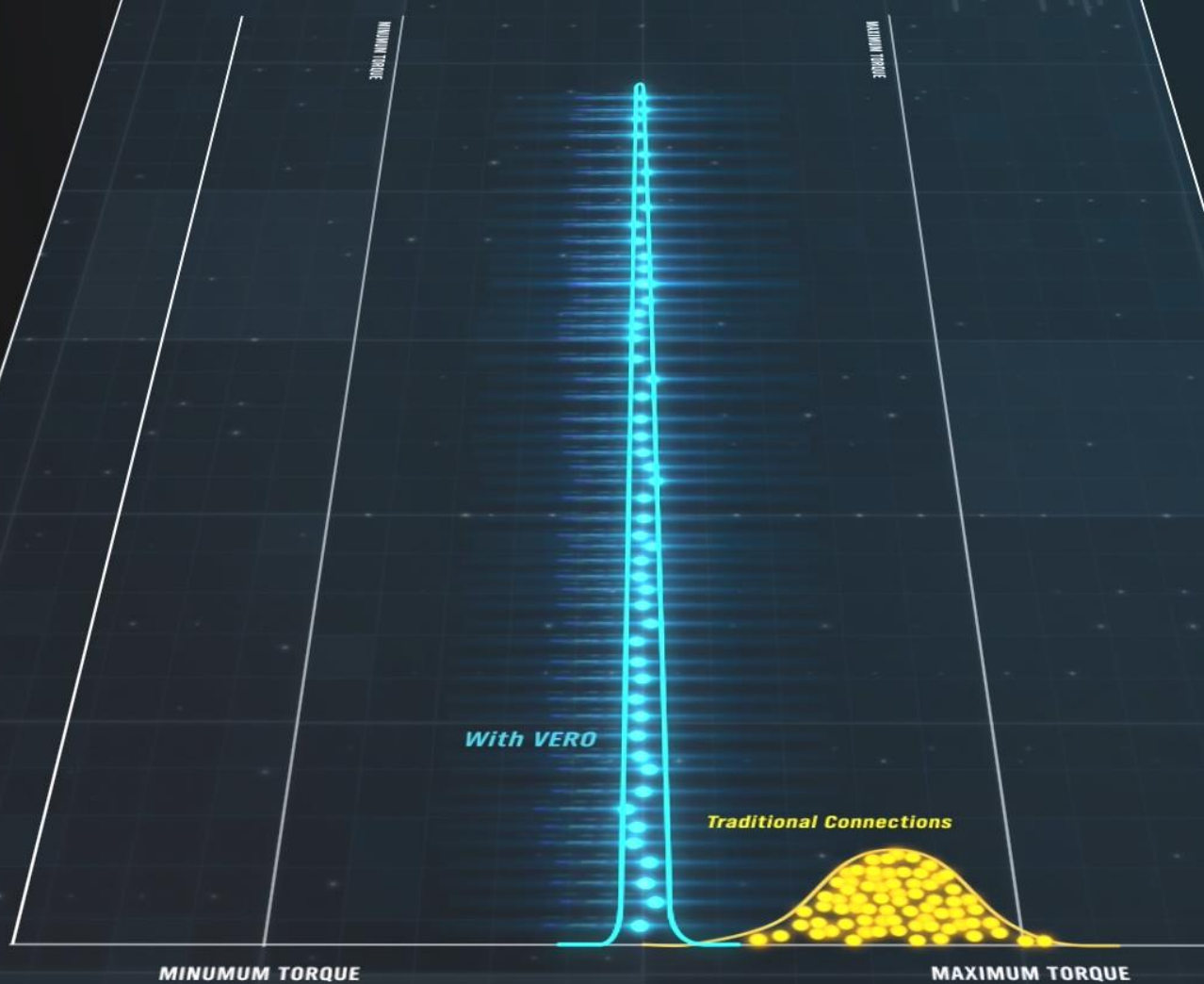
0
LAID-DOWN
JOINTS

0
REJECTED
CONNECTIONS

0
DAMAGED
CONNECTIONS

AVOID
MILLIONS
IN INTERVENTION COSTS

100%
CONFORMANCE
WITH OEM SPECS





VALIDATE WELL INTEGRITY FROM THE WELLHEAD TO TD WITH ABSOLUTE CERTAINTY

END-TO-END AUTOMATED CONNECTION INTEGRITY SOLUTION

APPLY ARTIFICIAL INTELLIGENCE AT EVERY TURN

PIPE-MILL FACILITIES

Validate and trace coupling connections

OFFLINE LOCATIONS

Automate makeup away from the critical path

WELL CENTER

Make up connections without subjective human influences

OFFICES

Visualize all connections remotely and improve performance through analytics



REAL-WORLD CASES OF VERIFIED INTEGRITY



BOLIVIA

LAND RIG, RAN 712 JOINTS OF 3.5"
AND 5.5" CASING WITH

**ZERO DAMAGED
CONNECTIONS**

BRAZIL

OFFSHORE RIG, BUILT STANDS
OFFLINE AND RAN COMPLETION
CASING IN

DOUBLES

ARGENTINA

LAND RIG, RAN 355 JOINTS OF
5-1/2" CASING

– ZERO NPT



PROVEN - GLOBALLY

- 24+ jobs with zero laid out connections
- Saved 80+ hours of rig time
- Reduced 6,500+ manhours of rig floor operations exposure
- Zero NPT on equipment failures

14

CUSTOMERS

44

SUCCESSFUL JOBS COMPLETED

13,000+

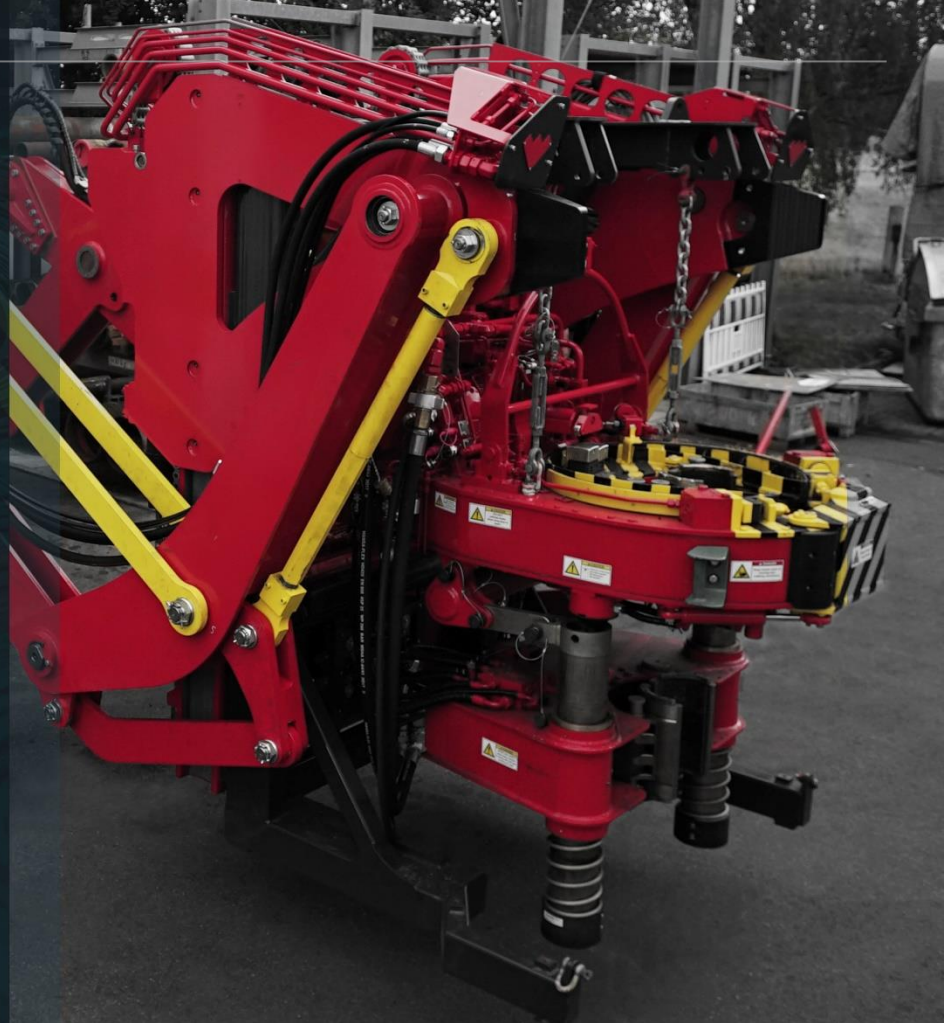
CONNECTIONS



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INDUSTRY LEADERS IN OPEN ARCHITECTURE FOR RIG EQUIPMENT INTEGRATION

PRECISE AUTOMATED POSITIONING



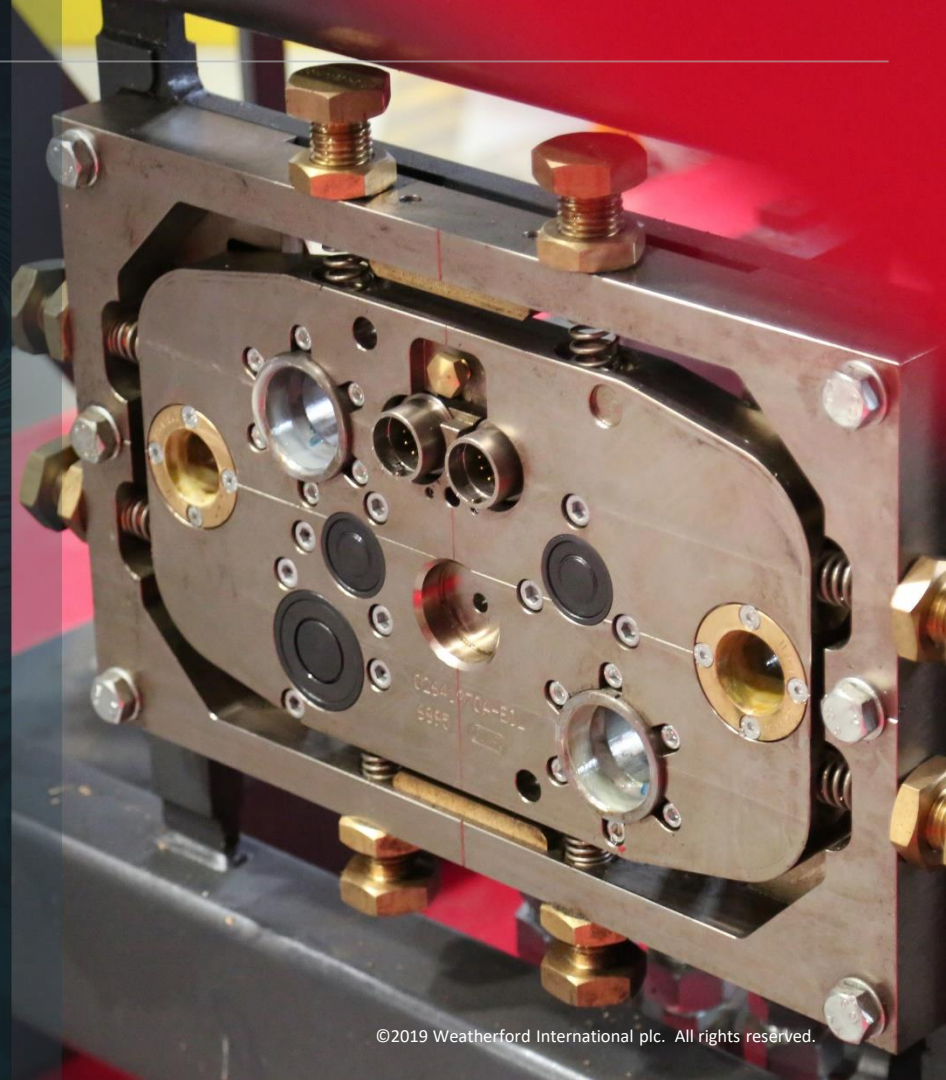
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TRANSITION FROM DRILL PIPE TO CASING RUNNING OPERATIONS

- SAVE MINIMUM **1 HOUR PER CHANGE OUT**
- SAVE MINIMUM **12 HOURS PER WELL**
- **IMPROVE SAFETY**
- **HANDS FREE** OPERATION OF EXCHANGE





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GRACIAS
THANK YOU

