EXEBENUS
PULSE

REAL-TIME INSIGHT, FULL-TIME CONFIDENCE WITH VALIDATED, DETAILED DIGITAL OPERATING PROCEDURES FOR DRILLING AND COMPLETIONS

EXEBENUS

EXEBENUS PULSE INTRODUCES A NEW ERA OF DIGITALIZED INFORMATION EXCHANGE BETWEEN PLANNING AND EXECUTION.
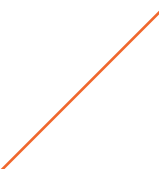
KEY BENEFITS

Exebenus Pulse reduces downtime and lowers operational costs with:

◢ Validated, detailed digital operating procedures

◢ Procedural consistency and confidence

◢ Embedded experience to predict risks and deploy lessons learned

◢ Deviation alerts so you can act in real time

◢ Dynamic, immediate handover between office and rig

A CLOUD SOLUTION

A cloud solution, **Exebenus Pulse**:

◢ Is easily deployed in a hosted or private cloud

◢ Is neutral and easily integrated

◢ Offers an office-only, an office-rig, or a rig-only solution

EXEBENUS PULSE BRIDGES THE FOOTPRINT OF PAST AND CURRENT OPERATIONS. THE APPLICATION INCORPORATES APPROVED TECHNOLOGY OPTIONS AND STANDARDIZED ACTIVITIES, WELL INFORMATION AND BEST PRACTICES IN PLANNING AND EXECUTION. EXEBENUS PULSE DIGITALIZES THE INFORMATION EXCHANGE BETWEEN OFFICE AND RIG, PROVIDING ALL PARTIES WITH REAL-TIME INSIGHT AND FULL-TIME CONFIDENCE.

STAY CURRENT. SAVE TIME AND PLAN EFFICIENTLY

At the heart of **Exebenus Pulse** is a customized, digital product library containing your approved equipment and tools linked to associated tasks, technical functions, operating parameters and insights from past projects.

From here, generating digital operating procedures is quick and automated. There are three ways to make it happen:

- ◢ Start with an existing procedure or template;
- ◢ Assemble a new tool string (the fastest option); or
- ◢ Start from a wellbore.

Exebenus Pulse replaces today's text documents with digital procedures that use standardized language to avoid misinterpretation, speed up communication and eliminate potential nonproductive time caused by misunderstanding or missing information. Updates can be quickly incorporated and communicated before and during execution.

USE YOUR EXPERIENCE. PREDICT RISK

Making informed decisions requires a clear, moment-to-moment understanding of the situation. Important information may be buried in previous experiences or in real-time data.

Exebenus Pulse mines and incorporates your experience and lessons learned. During planning, simulations allow you to evaluate risks and prepare contingency plans that are ready for action. This goes a long way toward eliminating the hesitations that add up to invisible lost time.

During execution, machine learning agents are fed real-time data to recognize deteriorating conditions that may lead to events such as stuck pipe and well control issues. Preapproved mitigation steps can be taken to avoid downtime.
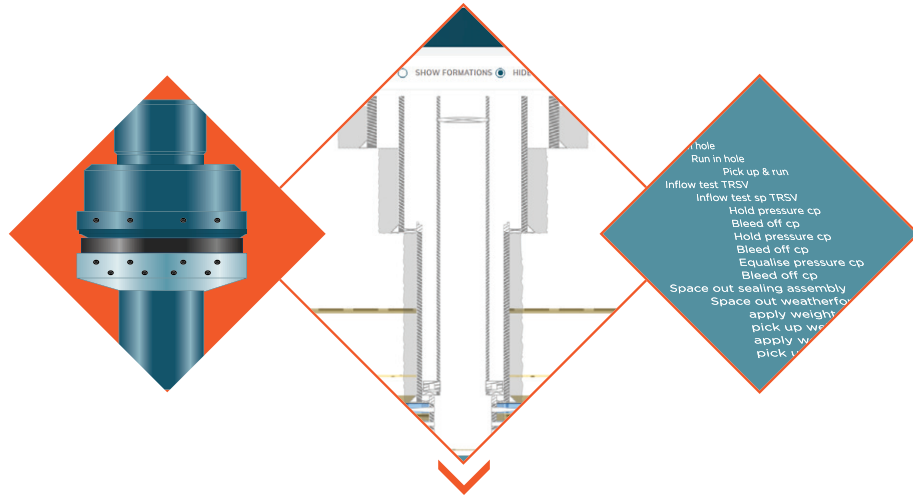
ACT ON DEVIATIONS FROM PLAN IN REAL TIME

As real-time data start to flow, **Exebenus Pulse** recognizes and validates activity execution and flags each point of operational criteria as it is met or not. It recognizes when an activity is completed, and informs the crew of the status to avoid unnecessary waiting time.

The system alerts the crew when operations deviate from plan, and when equipment limits are reached or are near breach, to ensure activities remain within the safe operating window. Procedural updates can be made quickly and put into operation in minutes rather than hours or days.

The activity timeline is recorded and available for analysis, removing the burden of manually recording activities. Similarly, insights such as invisible lost time can be flagged and made available for continuous improvement. The insights can be shared globally or locally, depending on the severity of the situation.
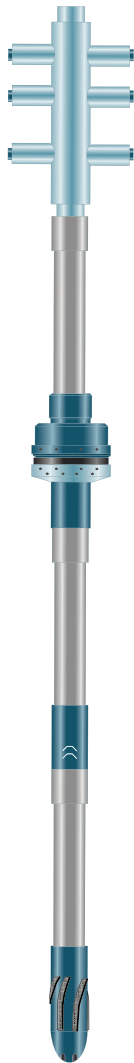
EXEBENUS
◤ PULSE

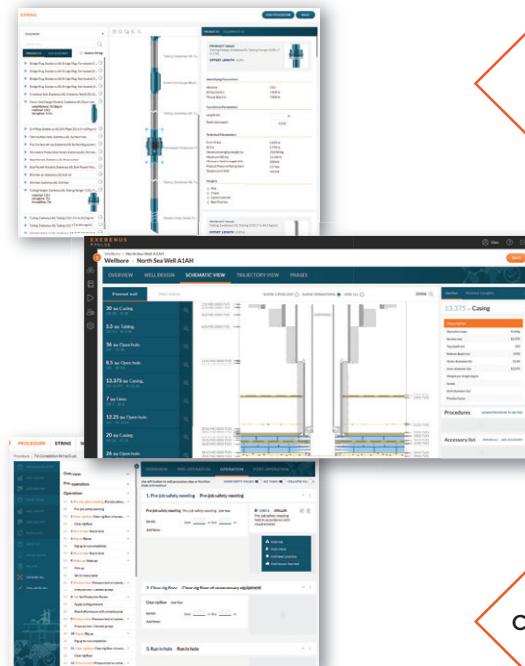# REAL-TIME INSIGHT FULL-TIME CONFIDENCE

Tools, well and activities come together in the detailed digitalized operating procedure

SHOW FORMATIONS   HIDE

hole
Run in hole
Pick up & run
Inflow test TRSV
Inflow test sp TRSV
Hold pressure cp
Bleed off cp
Hold pressure cp
Bleed off cp
Equalise pressure cp
Bleed off cp
Space out sealing assembly
Space out weatherfo
apply weight
pick up weight
apply w
pick u

Reducing time...

...from months...

...to days

Risks

Lessons learned

Best practices

Checklists

Standardization and improved consistency

BUILD   EXCECUTE

From days...   **...to hours**

The digital library contains the approved product options with their respective operating procedures. As the tool string is built a standardized operating procedure is assembled.

After the well schematic is built a tool string with the associated procedures is assigned to its respective phase.

By opening the standardized operating procedure, you can tailor the procedure steps and their parameters as per operational requirements. Insights and lessons learned from previous operations are automatically available in context for the product or operation.

Exebenus AS
Kanalsletta 2,
4033 Stavanger,
Norway

+47 917 63 400
info@exebenus.com

EXEBENUS

www.exebenus.com