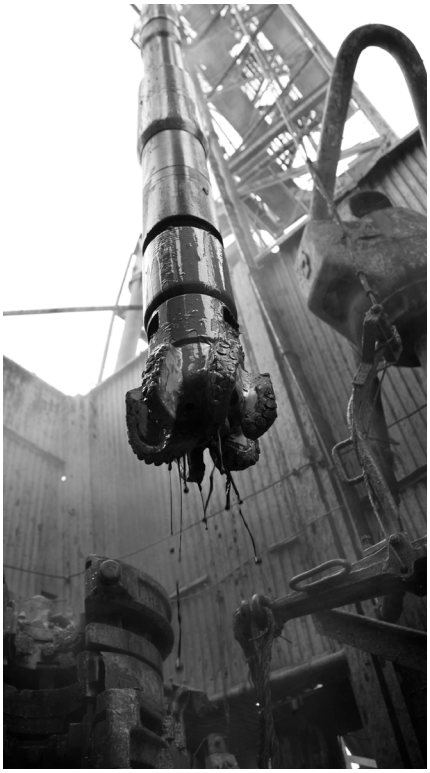
AWES IS MANAGED BY OTM CONSULTING

Advanced Well Equipment Standards (AWES)

Joint Industry Project

AWES
Advanced Well Equipment Standards Group

- Increasing reliability
- Cutting costs
- Fast-tracking standards development



The Advanced Well Equipment Standards (AWES) Joint Industry Project's aim is to improve the reliability of advanced well equipment through the development of published industry standards and recommended practices.

How will AWES add value to your organisation?

Increasing reliability
AWES works towards the improvement of the design and testing of equipment. This will minimise risk and optimise well performance

Cutting costs
Standardisation of testing procedures and methodologies ensures that service companies, vendors and research institutes don't waste time and money re-testing equipment to match varying requirements

Fast-tracked standards development
A significantly shorter timeline for document development (it takes OTM on average 2.5 - 3 years to develop an RP and members of our other JIPs advised that it can take much longer through international standards bodies)

Fast-tracked API certification
On average it takes just two years to API certify an AWES recommended practice

Collaboration and networking
Opportunities to collaborate on the development of standards that are important for your business without having to wait for API/ other certification bodies to proceed

Managed discussion environment
Opportunities to have constructive discussions in a relaxed environment overseen by a qualified project manager

Tangible deliverables against set deadlines
Schedules in place for each work group and the JIP itself to ensure that all documents are published within 2.5 - 3 years

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ADVANCED WELL EQUIPMENT STANDARDS (AWES)

Each AWES meeting comprises three working groups:

Multiphase Flow Testing (MFT)

Our aim is to develop a multiphase flow testing standard for downhole equipment. The key benefits of this will be to:

- Generate consistent performance data regardless of the company performing the tests
- Support industry to understand and interpret test data
- Assist industry to create the correct test equipment set up conditions to replicate actual downhole fluid characterisations and flow regime conditions
- Provide guidance on when to select multiphase testing or single phase testing

Evaluation and Testing of Tubular Encapsulation Materials (ENCAP)

Our aim is to develop a standard for the evaluation and testing of thermoplastic materials used as encapsulations on downhole tubular products. The JIP will complete the following actions:

- Adopt standard tests & procedures that are representative of products' usage
- Establish a set of environmental parameters that mimic a majority of annular environments
- Initiate the testing of the current set of polymers including Polypropylene, TPV, Nylon11, Nylon12, PVDF, Copolyester, ETFE, ECTFE, FEP and PFA
- Collect historic performance data from users
- Develop and publish a Material Selection Guide

Testing Standards for Dissolvable Materials (DM)

Our objectives are to define a qualification testing program for dissolvable materials (DM) and final products in order to reduce associated risk to the end user. Initial discussions determined the performance of materials used for DM and final products may be described as:

- Magnitude of differential pressure (dP) across the DM over time, i.e. how long can the material/design maintain a specific dP
- What mass loss per unit time can be expected for the DM
- Remnants, remaining liquid constituents or gasses released during dissolution may be considered part of the DM's performance

If you would like further information about AWES JIP, please contact OTM Consulting at **networks@otmconsulting.com** or call **+44 1372 631950**

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