



DanaEnergy



Well Services



OVERVIEW

Dana Energy's Well Services business unit, established in 2007, delivers comprehensive well services including cementing, stimulation, completion, workover, and engineering. Our success is driven by a proficient workforce, advanced technical expertise, and state-of-the-art equipment. We possess a significant competitive edge through our diverse service lines, enabling us to provide tailored solutions across the entire lifecycle of oil and gas projects. This capability has established us as a trusted partner for both onshore and offshore clients.



CEMENTING SERVICES

Our cementing services are integral to our offerings, having been deployed in over 11 offshore drilling projects in South Pars and various oilfields in the Persian Gulf. Our strategic facilities in Ahwaz, Kish Island, and Bushehr Port support 24/7 offshore operations. We operate three bulk cement plant systems capable of supplying over 550 MT of bulk cement daily, either pure or blended with lightweight additives and weight increasers. Additionally, we maintain over 18 portable bulk cement storage silos, and through contractor partnerships, we ensure the availability of over 1200 MT of various API class well cements.

Moreover, with 7 proprietary cementing pumps rated at 10K psi and 15K psi, both skid and trailer mounted, and equipped with a data acquisition system for real-time monitoring of cement slurry pumping and other fluids during operations, we ensure precision and efficiency. Our inventory includes high-quality subcontractor equipment and a comprehensive range of wellhead equipment, such as cementing swedge and cementing heads in various sizes. We also utilize air compressors, 500-barrel solution tanks, and an ample supply of high-pressure iron lines and valves. This robust infrastructure enables us to support more than 10 separate cementing drilling projects simultaneously across various regions.

In most liner cementing operations, we deploy two batch mixer units with capacities of 100 and 150 barrels, respectively, to provide homogeneous and high-quality cement slurries tailored to our clients' specific requirements. A distinctive feature of our cementing services is our ability to source and utilize high-quality additives from reputable domestic and international suppliers. We maintain standard inventories of these additives, referred to as Safe Stock, sufficient for drilling 10 complete wells both onshore and offshore, thus preventing operational disruptions.

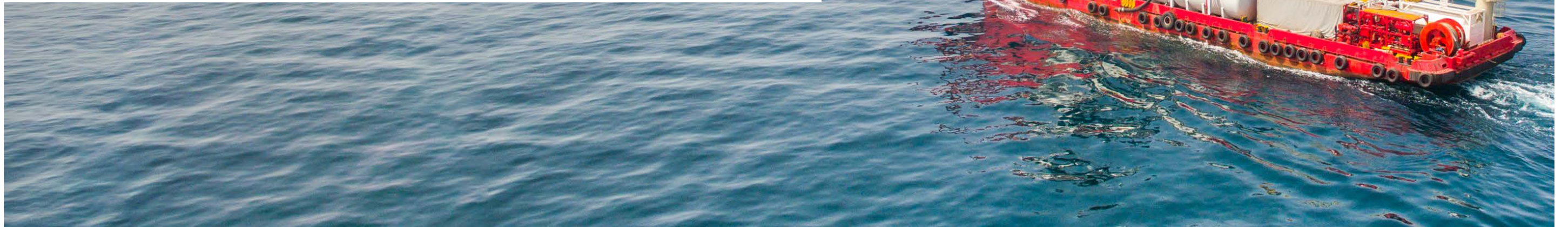
The diversity of our products and cement additives allows us to design and construct various types of cement slurries, ranging from lightweight to heavyweight, effectively addressing challenges encountered during drilling operations and remedial jobs in the oil and gas fields.

STIMULATION SERVICES

Parallel to our cementing services, our stimulation services began in 2009 with operations in South Pars gas projects and oil wells in the Persian Gulf. Utilizing proprietary equipment like on-platform mixing and pumping systems, we have significantly contributed to the industry. Our bases in Kish Island and Ahwaz, along with our Pars Asaluyeh Port facility, provide 24/7 support for acidizing and well stimulation projects onshore and offshore.

A distinguishing feature is our proprietary well stimulation vessel with an Acid on the Fly (AOF) automation system, offering precise, real-time mixing and pumping. This technology positions us competitively alongside top-tier stimulation vessels.

We own the only well recovery vessel in the Middle East with capabilities including high-pressure and rate pumping units, acid and chemical storage and handling, a clean-up burner system, a 180K skid mounted nitrogen pump, and a 7000-gallon N₂ tank, demonstrating our commitment to advanced well stimulation solutions.



FLUIDS AND WASTE MANAGEMENT SERVICES

Since the inception of our drilling fluids services in late 2022, coinciding with the launch of the South Azadegan project, we have optimized Dana Energy's internal drilling operations with our skilled professionals. As we expanded to include the West Paydar 3 project and other E&P activities, our team has been committed to delivering comprehensive drilling fluid and waste management solutions.

Successfully completing drilling fluid services for 7 wells in South Azadegan, 3 workover wells, and 6 wells in West Paydar 3, our team continues to provide engineering, design, and implementation expertise in drilling fluid management, ensuring client satisfaction.



In parallel, we have designed and implemented our own waste management packages, featuring:

- A 900-barrel buffer tank for mixing, aerating, and sedimentation-based solid particle separation.
- A fully automatic dewatering unit for chemical separation and wastewater purification.
- A high-pressure automatic filtration system using particle size separation technology.
- A versatile pump array, including centrifugal, AODD, cavity screw, dosing, submersible, and sewage pumps, handling rates from 1 to 100 gallons per minute.
- A workshop container with maintenance equipment for on-site rig support.

This equipment enables the Zero Discharge method, initiated with onshore drilling projects.

At our Ahwaz base, we have optimized warehouse services, ensured timely material delivery, and established a quality control laboratory for drilling fluids, ensuring high-quality service delivery. Our engineering unit, fortified by knowledgeable professionals, has significantly contributed to project objectives, employing specialized methods to minimize material usage in drilling fluid construction, wastewater treatment, and drilling log stabilization, enhancing drilling quality while reducing time and costs.

We are also developing operational and laboratory infrastructures at our Kish base to extend our service capabilities to offshore projects effectively.



WELL INTERVENTION SERVICES

Dana Energy's Well Services is dedicated to enhancing the production, integrity, and maintenance of oil and gas wells. Whether dealing with newly completed wells or conducting repairs on existing ones, our team employs advanced correction and stimulation techniques to optimize well performance. We currently hold the contract for supplying the 460K snubbing unit for workover projects with IOOC.

A core strength of our services is our comprehensive selection of downhole tools, tailored to meet client-specific requirements. These tools are critical for operations such as plugging, fracture stimulation, casing part test, and workover operation. By leveraging modern, high-quality equipment that adheres to international market standards, we ensure superior service delivery.

Our inventory includes various sizes of cement retainers and bridge plugs, ranging from 13 3/8" for casing pipe applications to 5" for tubing installations. These devices, available at our support bases in Kish, Bushehr, and Ahwaz, are versatile for use in both vertical and horizontal wells. They can be installed at various depths using different methods, including mechanical, hydraulic, and wireline.



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