Teledyne Marine encompasses over 20 brands that offer innovative, highly reliable technology spanning the life cycle of an oil field, from exploration to production and field expansion.

Global field support teams, field-proven products, and a close partnership with Teledyne Scientific, a world-renowned research and development center, have positioned Teledyne Marine as a market leader in the energy industry.

From seismic solutions to seafloor surveys, subsea power and data networking to corrosion monitoring — the Teledyne Marine team is ready to take on your toughest challenges — all from a single supplier.

Teledyne Technologies has an innovative heritage that dates back to the 1960s. From deep space, where Teledyne provides infrared imagers for space telescopes, hydrogen generators for space probes, and thermal tiles for the space shuttle, to the deep sea, where Teledyne provides navigation and imaging sonar, unmanned underwater vehicles, and high-power communications interconnect, Teledyne delivers results.
A range of highly reliable wet-mate, dry-mate, and splash mate electrical and fiber optic interconnect used in subsea power and data transmission. Expertise in material selection for harsh environments to minimize risk and downtime for subsea projects.

A series of core technologies to address the needs of the offshore seismic industry. Streamer cables, hydrophones, sound sources, synchronizations systems, and harsh environment interconnect systems round out the product offerings.

Subsea and surface sensors used for a wide array of offshore applications. Technologies range from acoustic communications to current profiling and wave measurement, to positioning and navigation, to corrosion and erosion monitoring packages.

A wide range of acoustic and digital imaging systems from high-resolution underwater cameras to advanced multibeam echosounder and 2D/3D sonar solutions suited for seafloor and equipment surveys, visual inspections, and pipe tracking applications.

Reliable and versatile unmanned underwater vehicles operating throughout the water column, suited for surveying, tracking, and inspection purposes. Gliders, Autonomous Unmanned Vehicles (AUVs), and inspection-class ROVs can be quickly configured to meet application-specific requirements.
Teledyne Marine
Innovative Technology for the Life of the Field

Exploration
- Acoustic sound sources
- Seismic Interconnect
- Seismic Streamers
- Node connectors and cables
- Controllers and synchronizers

Evaluation and Design
- Subsea vehicle platforms
- Navigation and station-keeping solutions
- Acoustic survey equipment

Drilling
- Environment and sea state monitoring
- Ruggedized interconnect for deepwater
- Acoustic locating and communication

Production
- Subsea jumpers, harnesses, and distribution
- Wellhead feedthroughs
- Pressure, temperature, erosion, and corrosion sensing
- Subsea power solutions
- Cables and assemblies

Inspection, Maintenance, and Repair
- Asset integrity monitoring
- Visual inspection
- Pipeline Tracking and Inspection Solutions
Capabilities

1. Acoustic Communication
2. Autonomous Underwater Gliders
3. Autonomous Unmanned Vehicles (AUVs)
4. Cable Terminations
5. Corrosion and Erosion Monitoring Packages
6. Environmental Monitoring Instrumentation
7. Harsh Environment Interconnect
8. High Pressure/High Temperature Wellhead Connections
9. Long Range LIDAR
10. Multibeam Echosounders
11. Pipeline Tracking and Inspection
12. Profiling Floats
13. Remotely Operated Vehicles (ROVs)
14. Seismic Survey Solutions
15. Sub-Bottom Profilers
16. Subsea Data and Power Transmission
17. Subsea Distribution and Networking
18. Subsea Navigation and Positioning
19. Subsea Pumping and Boosting Connectivity
20. Surface Positioning and Navigation
21. 3D Multibeam Scanning Sonar
Teledyne Marine

Advantages

- Best-in-class products, engineered solutions, and services
- One-stop shopping options for innovative technology solutions
- Global frame agreements where desired
- One P.O., set of terms, and warranty
- Continuous focus on Health, Safety, and Environment (HSE)
- On-time performance and security of supply
- Field-proven product/system reliability
- New product development and qualification programs

Innovation and Product Development

The combined resources of the Teledyne Marine product lines leverage a broad range of technical expertise and continue to lead to advances in subsea technology. The core of these capabilities is Teledyne Scientific Corporation, a world class research laboratory with the technical depth to develop technologies designed for demanding offshore applications. Combined with our staged-gate new product development approach and rigorous reliability and qualification testing, these capabilities result in dependable operational performance validated through science.

Reliability & Engineering Science

Teledyne Marine uses a scientific approach to reliability engineering in the design and manufacture of complete technology solutions for the oil and gas industry.

Physics

Analyzing molecular structure for understanding aging effects under harsh environmental stresses

Metallurgy

Microstructure examination to optimize material processing

Ceramic Solutions for Differential Pressure Applications

Electrical penetrators power boosting or submersible pumps at the seabed. An operator approached Teledyne Marine to design and qualify an innovative penetrator solution that fit a specific application with high differential pressure, harsh pump fluids, temperatures up to 250°F (121°C), and voltage of 10 kV U during operation. Connection systems using traditional materials would not have provided the required pump reliability under these extreme conditions.

The Teledyne Marine team leveraged a cross-functional team with members from both Teledyne ODI and Teledyne Scientific and Imaging (TS&I) to design and develop an
Successful Pipeline Inspections Using Acoustic Imaging

In the Caspian Sea, BP’s pipeline assets are located 12 to 25 meters below the surface. Poor water clarity makes General Visual Inspection (GVI) pipeline inspections via ROV difficult, leading to delays and rising costs. Typical pipeline inspection involves a rigidly mounted sonar system and requires the survey vessel to maintain a specific bearing to keep the pipeline within the detection envelope. The water conditions, along with restricted vessel availability made it difficult to meet annual inspection targets. After investigating other options, the customer selected two RESON SeaBat 7125 Multibeam Echosounders, installed as a dual head configuration to gain ultra-high resolution. The SeaBat 7125 was furthermore operated in FlexMode, which generates a narrow sector with very high sounding density, exactly on top of the pipe. The multibeam sonar delivers a complete 3D isometric model of the surveyed area. In less than seven days, 740 kilometers of pipeline were fully surveyed. The frequency of pipeline inspections have now been increased to become an annual event, leading to a reduction in costly ROV inspections.

innovative ceramic solution. TS&I provided industry-leading material experts to identify and qualify the precise ceramic compound that fit the specifications. The resulting penetrator was designed to handle the thermal expansion of the copper conductor, while the ceramic material withstood the extreme pressures.

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Teledyne Marine Worldwide

Beginning as a small collection of unique marine solution providers and expanding to a powerhouse of highly engineered, high performance solutions for a broad range of markets, Teledyne Marine now offers the largest breadth of marine technology in the industry. Our goal is to provide one-stop purchasing capability, world-wide customer support, and the technical expertise to solve your toughest challenges.

Field Service

Teledyne Marine has a global support team of certified field technicians on call 24 hours a day, 7 days a week. These technicians are located around the world for fast deployment to on site locations.

Regional support centers in Daytona Beach, FL, Houston, TX, Aberdeen, UK, Johor Bahru, Malaysia, and Rio de Janeiro, Brazil are staffed with certified field technicians cross-trained to perform cable terminations, dry fit-ups, site integration testing (SIT), project consulting and installation support, equipment testing, and many other functions.