



UNA EMPRESA DEL GRUPO





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Project Proven

Processes and Project Integration that have given clients optimized solutions in asset development.

About Us

Maren Marine Energy is a North American company founded in 2016 as a member of CEMZA Group, one of the 100 largest organizations in Mexico's Energy Industry, with more than 50 years helping customers to develop their Energy Assets in the region.

Our main solutions portfolio includes Integrated Project Management for Asset Development, Oil and Gas Infrastructure solutions in various environments, land and offshore operations, our strength lies in customizing clients solutions with leading technology and working with Global HSEQ Industry Standards. We offer:

- Well Construction
- Well Completions
- Well Repairs
- Well / Platform Decommissioning
- Reservoir Characterization
- Production forecast Analysis by Well and Type of Reservoir
- In all type of Global Basins

Mission

Be a leader in presenting optimized solutions for Asset Development, focusing in our Clients global standards processes in HSEQ, Environmental issues, Regulatory Compliance, and respecting all personnel work rights.

Vision

To be the preferred project management team in supplying optimized solutions to our clients in their Asset Development.

Integrated Policy

Quality of Energy, Health, Safety and Environment

Our value system is based on providing our Clients the solutions for their projects to be a combined Team Integration in being Leaders in Health, Safety, Environmental and Quality Control for all Global Processes.

Compliance with international standards of QHSE Management System

We are focused on maintaining safe operations free of incidents through: identification, evaluation and operational risk management, administrative processes and environmental conscious, through the implementation of proper tools for operational standardization, helping to achieve efficient and safety processes.

Process Model Delivery

What do we do?

We provide project management development in integrated services, turnkey model and full asset development for our clients for both onshore and offshore fields.

How do we do it?

Through an innovative business model, agile processes, excellent operational performance and people highly committed to the value proposal we offer to our clients.



Compliance with international standards of Quality, Environmental, Occupational Health and Safety Management



Achilles Certificate #215938, Compliance with PEMEX standards of QHSE Management System



ERS Certificate 2020 compliance with mexican standards of Socially Responsible Company

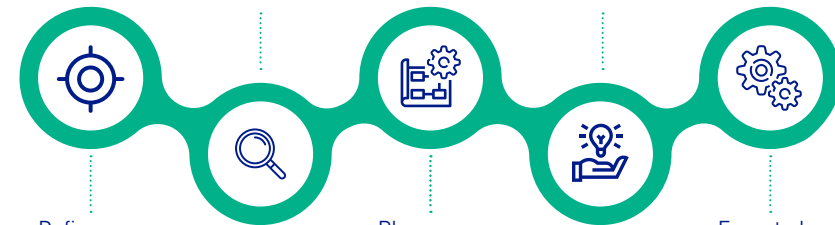


Evaluate

Propose the best technical - operational solution for client

Proposal

Present client with optimized solutions, accord and sign off plans



Define

Define technical - operational client asset needs

Plan

Develop the technical - economical plans

Executed

Start operations and retro-feed project and continue with lean - sigma processes



Experience, Milestones and Way Forward

We have the experience and resources to execute very complex global basins problems, with our company engineering and operational teams. Our management team has more than 100 years worth of Global basin development in oil, HTHP gas, heavy crude and geo-thermal and coalbed methane projects in green and brown fields with various clients.

We have a track record of more than 26 wells drilled, 75 wells completed and have performed over 170 well workover interventions, some of these wells being deviated wells, in harsh HPHT environments.



Fulfilled Projects

Contract	Shallow Waters Contract 641007802	Turkney Contract Cluster 1 641009800	Chemical Injection Contract 648819810
Description	Integrated services for the drilling, completion and workover of shallow waters well	Commissioning of production units with support of intervention to wells in the Gulf of Mexico "Provision of jack up and services for drilling and completion wells"	Integral service for the injection of chemical products to wells of SPBAS AS01
Contract Period	Mar, 2017 - Oct, 2021	Feb, 2019 - Mar, 2021	Feb, 2019 - Mar, 2021



General Capabilities



Integrated project management:

- Asset development
- Well design, reservoir characterization, economical budget profiles
- Production, forecast and reservoir drainage models



Rig selection, well engineering and operations



Land / Offshore drilling and downhole equipment supply, PPE supply, import and export broker



Integral Services:

- Helicopter services
- Offshore facilities
- Catering services
- Shorebase locations
- Land camps installation



Well stimulation (offshore) and workovers, plug and abandon services

Our innovative business model integrates state of the art technologies



Business Model

Our innovative business model integrates state of the art technologies from our business partners with well-known local services providers to deliver tailored solutions that suit our clients technical, commercial and schedule requirements.

Our in-house project management department has delivered superior performance and added value to our customers by drilling wells faster than our competitors in the Gulf of Mexico, therefore enabling earlier production.

Integrated Drilling Services

- Subsurface and drilling engineering
- Directional drilling, MWD, LWD
- Drilling fluids
- Drill bits – coring service
- Casing & tubing running services
- Managed pressure drilling services
- Cementing services & accessories
- N2 pumping services – coiled tubing
- Stimulation services
- Slickline services
- Wireline services
- Rig maintenance and refurbishment

Integrated Completion Services

- Completion engineering
- Completion fluids
- Completion tools & services
- Liner hanger systems & services
- Service tools
- Wellbore cleanout tools
- Drill stem testing services
- Surface well testing
- Data acquisition services
- Fluid sampling services
- Fluid analysis services
- Perforating services

Integrated Contract Performance Drilling Times

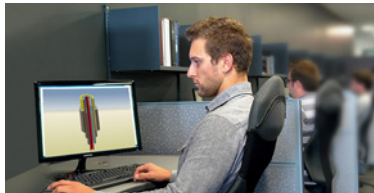
Fields

Field development	Cheek, Hok, Tlacame, Xikin.
Kumaza	Ku, Maloob, Zaap, Bacab
Cantarell	Ek, Balam, Takin, Kambesah
Abkatun	Onel, Abkatun, Ixtal, Batab, Etkal, Kuil, Esah, Homol, Caan, Kanaab.
Litoral	Tsimin, Bolontiku, May, Sinan

Type of Intervention	Years				
	2017	2018	2019	2020	
Drilling	1	5	12	4	22
Completion	4	21	32	18	75
Workover	1	21	36	10	68
Re - entry	2	3	2	2	09
Total	8	50	82	34	174

Integrated Project Management

Data & Project Management



Project development

- Concept Design, Study & Field Development
- Front End Loading (FEL) Analysis
- Feasibility & concept development
- Field development planning & options
- Advance processes/technology
- Design, review and technical audits



Pre - planning & Engineering

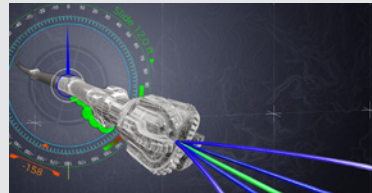
- Offset well reviews and recommendations
- Technical and commercial Risk assessments
- Project planning and tracking
- Logistics planning and execution
- Cost estimation and AFE preparation
- Drill Well On Paper (DWOP)



Operations management

- Execution of operations
- Performance monitoring, feedback and improvement
- Selection of client supply vessels and supply base
- Supply base setup
- Inventory tracking and control

Design Engineering



Directional planning

- BHA design
- Survey data management
- Anticollision analysis



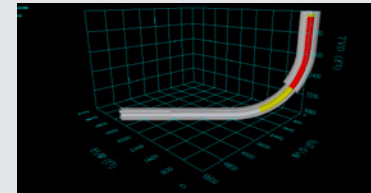
Geopressure and Geomechanics

- Pore, fracture and shear failure pressure prediction and geomechanical data
- Offset well events analysis
- Regional geology evaluation
- Design of the operational geopressures window and develop density profile
- Geopressure calibration while drilling



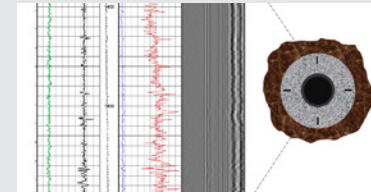
Casing and tubing design

- Casing setting depth analysis
- Optimized casing and wellbore scheme
- Casing Wear analysis
- Cost effective casing and tubing design



Well planning

- Torque & drag modelling
- Specialized hydraulics analysis
- BHA analysis
- BIT analysis and selection



Mud and Cement design

- Fluid Systems analysis and design
- Cement and mud job evaluation
- Cement and mud lab management
- Centralizer and cement plug placement
- Lost circulation analysis



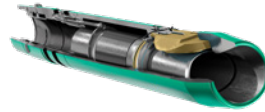
Completion Design

- Open hole and cased completion design
- Integrated temperature design (HPHT and production environments)
- Design and selection of equipment and accessories
- Control surface equipment design and selection



Equipment for Integrated Completion Services

We provide integrated or discrete completion services through the provision and operational services required by specialty and/or equipment to enable the safe, efficient and profitable production of an oil and gas well.



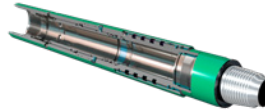
Subsurface Safety Valves (SSV)

Are critical components of well completions, preventing uncontrolled flow in the case of catastrophic damage to wellhead equipment. However, this is not the only function in which it must be reliable—the valve must remain open to produce the well.



Gas-Lift Mandrels

This tool provides communication between the lift-gas supply in the tubing annulus and the production-tubing conduit. The position or depth of the gas lift valves is crucial to the efficient operation of the entire system.



Sliding Side-Door

Designed for safe and efficient circulation of completion fluids after landing the completion and setting the completion packer, eliminates need to circulate across packer element, reducing risk of damage to element.



Service Packers

Created for well testing, cementing, fracturing or acidizing with reliable annular isolation



Remediation Packers

The best solution for create an effective barrier in cased hole well abandonment or remedial cementing



Reservoir Monitoring

Incorporate downhole sensors enabling you to monitor, evaluate, and manage production in real time. Data is transmitted to surface for local or remote monitoring in your digital well platform

We provide casing running services,
introduction and pulling of tubulars)

Casing & Tubing Running Services

- Our Casing & tubing running services has more than 4 years of experience with operations offshore and onshore.
- We have specialized personnel with extensive experience in casing running services.
- Since 2017 we have performed more than 100 operations.

Performance

Total interventions by type of work

Years	2018	2019	2020
Total Interventions	18	44	41
Drilling	9	3	4
Completions	3	3	0
Workovers	6	38	37

Equipment for Casing & Tubing Running Services



Diesel Power Unit

- Deuz, Mod. F6L914

The hydraulic power units are designed to deliver maximum power, it is a compact and robust design. The F6L914 model consists of a Deuz 6 cylinder diesel combustion engine, manufactured with a reserve of hydraulic oil with enough space for heat dissipation. They are equipped with pneumatic and manual stop, it has a cooling by means of air.

Main Engine	HP	Pressure	Weight	Width	Long	Height
Tipo de Motor	80	2,500 psi	3,670 lbs	58 in	80 in	53 in



Neumatic Spider Oil Country

Diameter	Weight	Capacity
3 1/2" - 7 5/8"	350 lbs	175 ton



Drill Pipe Slip

Diameter	Weight	Capacity
3 1/2" - 7 5/8"	150 lbs	150 ton



Slip Type Elevator™ HYC.

Diameter	Weight	Capacity
3 1/2" - 7 5/8"	982 lbs	200 ton



Slip Type Elevator™ HYT

Diameter	Weight	Capacity
3 1/2" - 2 3/8"	750 lbs	150 ton



Drag Collar

Diameter	Weight	Capacity
3 1/2" - 7 5/8"	982 lbs	200 ton



Safety Clamp

Diameter	Weight	Capacity
3 1/2" - 7 5/8"	70 lbs	5 ton

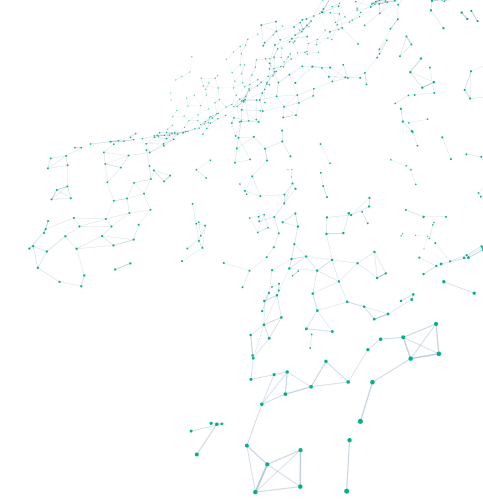


Computer Torque Control

- Nerum

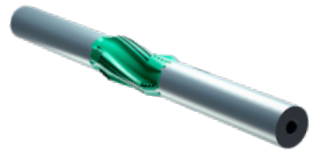
Hardware built to handle rig floor environment / Most load cells / Battery backup failsafe hardware design. All data is encrypted for security and integrity.

Clean user interface that is constantly updated with new features and more user-friendly settings.



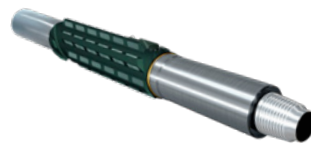
MAREN provides wellbore cleanup services for all type of tubulars

Mechanical Cleaning Services



Reamers

- Removes corrosion crusts, cement layers, mud flakes and any other material stuck to the casing.
- Leaves the surface clean for anchoring packers or special tools.
- The fins are distributed to cover the 360 degrees of the tube without the need to rotate it while it is being lowered, without this being limiting, since the rotary reamer can also be placed on top of a grinding tool to grind cement, accessories, remove a plug or go through sections in the casing with rotation.



Magnets

- Thanks to the large magnetic forces, it attracts and captures iron filings that are stuck inside the casing or suspended in the well fluid.
- A stainless steel and Kevlar resin shield protects the magnets mechanically and chemically.
- The profile of the tool provides a gap between the section of the magnets and the wall of the casing, which prevents trapped material from moving as a result of the movement of the pipe ensuring its cleanliness



Brushes

- The brushing and polishing action produced by this tool effectively removes adhering solids from the surface of the casing, ensuring its cleaning and the introduction of packers.
- The brush area is made of a tightly wound coil that is mounted on a sleeve.
- The rotating design prevents excessive brush wear, while the sleeve prevents side loading, favoring optimal brushing levels.



Mills

- They can be designed to grind any type of scrap or well waste including, but not limited to, bits, cement, packers, drill guns, drill pipe, pipe joints, fillers, plugs, or any body that is fixed, or loose in the hole and whose material allows it to be ground by this tool.
- These mills are lined, in the attack area, with tungsten carbide and inserts of the same material.



Junk Basket

- The collector or scrap basket is a high quality tool manufactured for milling and fishing operations.
- It is a heat-treated, high-strength tool with a reinforced neck.
- Designed to efficiently recover debris and scrap that are too heavy to circulate through the annulus and therefore out of the hole, such as bits from auger cones, wedges, hand tools, iron scraps, etc.

Business Partners




We have strategic allies that increase our operational scope



Marine Solutions

CPT	<ul style="list-style-type: none"> Tugboats Fleet
Marinsa	<ul style="list-style-type: none"> Multipurpose Supply Vessels (MPSV) Platform Supply Vessels (PSV) Anchor Handling Tug Vessels (AHTS) Well Stimulation Vessels (WSV) Drilling Fluids Vessels
Enermar	<ul style="list-style-type: none"> Bunkering Services
Valaren	<ul style="list-style-type: none"> Offshore Logistics Helicopters Jet Charters
Oceamar	<ul style="list-style-type: none"> Shorebase Management Offshore Agency
Drillza	<ul style="list-style-type: none"> Offshore Rigs Land Rigs
Presco	<ul style="list-style-type: none"> Manpower Oilfield Services Supplies







Upstream & Downstream

GIMSA (México & USA)	<ul style="list-style-type: none"> Onshore Development of Gas Fields Offshore Infrastructure Platform Offshore Drilling Rig Manufacturing 
Invepetrol (UK & Colombia)	<ul style="list-style-type: none"> Oilfield Development 
2GT Group (Malaysia & Brunei)	<ul style="list-style-type: none"> Asia Offshore Fields Development 

Capital Investment

Caxxor Group	<ul style="list-style-type: none"> Capital Investment
Bacomex	<ul style="list-style-type: none"> Execution

Oilfield Solutions

Tacrom (Canada & Europe)	<ul style="list-style-type: none"> Fracturing Coiled Tubing Land Rigs 
Drillinketch (USA)	<ul style="list-style-type: none"> Oilfield Supplies LCM 
Alpharetta (UK & Nigeria)	<ul style="list-style-type: none"> Drilling Solutions Completions Solutions 
MPECORP (USA)	<ul style="list-style-type: none"> Pipeline Non-Intrusive Diagnostic Flow Assurance 
Praxis (USA)	<ul style="list-style-type: none"> Completions Tools 
OPECS (Europe)	<ul style="list-style-type: none"> Stimulation Design Rigless Intervention 



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