



What we'd like to share today...





















# HISTORY OF PTS

## **E&P INDUSTRY LEADERS**

Specialized services for oil and gas customers

## **TRUSTED LEGACY**

Founded and headquartered in Italy since 1988

## **EXPERTISE & EXPERIENCE**

Strategic knowledge, assets and resources

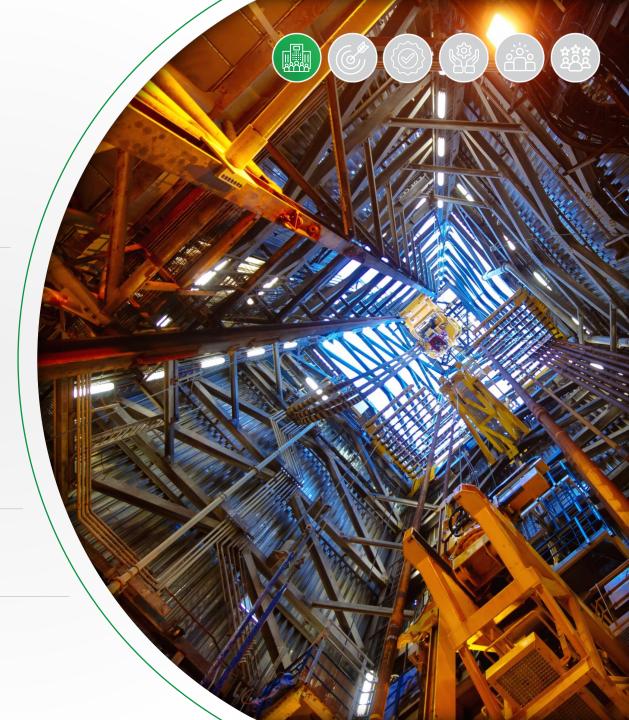
## **SATISFIED CUSTOMERS**

Committed to customer service and innovative solutions



# **KEY FACTS**

- Owning Master TRS Contract within whole Italy with ENI up 2023
- Owning Master TRS Contract within whole Italy with TOTAL up 2025
- Owning Master WT-LPT Contract within whole Italy with Erminio Spa up 2023
- WT-LPT contract with ENI in JV with ENRG MED up 2023
- O5 TRS back-up contract with ENI Congo up 2023
- Of Agency contract with Oil State / Geo Dynamics















# LOCATIONS: GLOBAL REACH















# LOCATIONS: GLOBAL REACH

"From our headquarters in Italy we bring our customers closer to the people, processes and technologies they need to succeed."

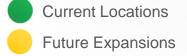
#### **ITALY**

#### **HEADQUATERS**

- Viale Teracati 51/L, Siracusa, 96100, Italy
- +39 0931 442956
- info@pts-med.com - pts-med.sr@pts-med.com

#### **PESCARA BASE**

- Via Aterno, 147 66020 San Giovanni Teatino (CH)
- +39 085 4464777
- pts-med.sgt@pts-med.com





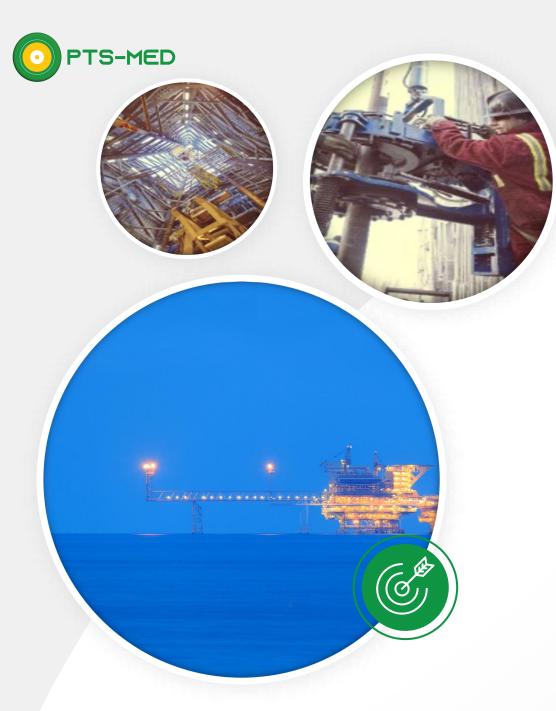


#### MAIN OFFICE AND OPERATIONAL BASE

- Rue 28 Tchistere Tchicaya Zone industrielle de Pointe Noire, Republic Of The Congo
- +242 05 3791812
- nfo@pts-med.com

















# MISSION & VALUES

"PTS seeks to make our customers more successful through delivery of technology, technical expertise and outstanding services for well construction, well completion and well performance evaluation."

- **Safety**
- Respect
- Integrity
- Excellence
- Innovation
- **Performance**
- **Collaboration**

















# QUALITY, HEALTH, SAFETY & ENVIRONMENT

WE FOCUS ON



**Safety Zero** accidents

since 2000



Personnel with appropriate certifications

Year	No. of Accidents	Number of Tongs and WT Operators	Worked Hours	Personnel Not being at work due to Accidents	Accident Security Index	Accident Frequency Index	Absence from Work Index	No. Of Near Miss	Near Miss Accident Index
					(UNI 7249)	(UNI 7249)	(UNI 7249)		(no. near miss*10,000/Worked Hours)
2022	0	24	50,776	0	0.00	0.00	0.00	0	0
2021	0	26	27,820	0	0.00	0.00	0.00	0	0
2020	0	28	27,800	0	0.00	0.00	0.00	0	0





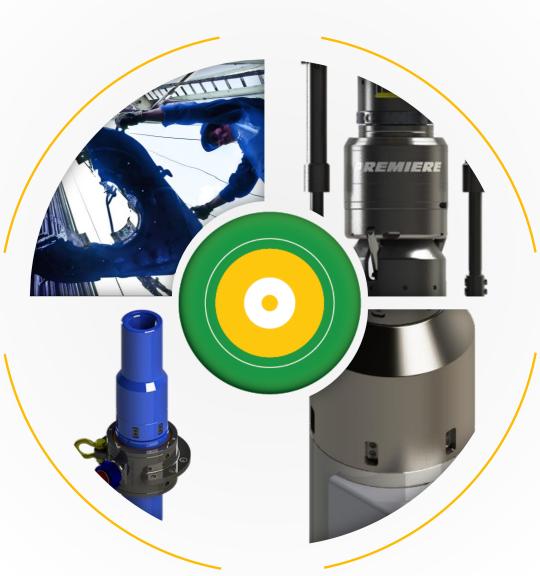




Running/pullout (casing & tubing
Computerized torque
Preassembling
Fill-up, elevators & handling tools

# CEMENT SWIVEL – MAGNUM MANUFACTURING

Able to tie into CRT or top drive on-site at a moment's notice. Customizable Top & Bottom Connections. Compatible with all CRT and top drive systems.













### CRT



Designed and manufactured to meet and exceed the API BC specifications, the PRT™ can handle more weight and rotational torque, allowing us to perform more critical movements without having to stop the casing run. You may also **Drill** 

# ROTATING CEMENT HEAD PREMIERE

The Premiere Rotating Cement Head (RCH) will execute your reciprocating and

rotating cementing process while conditioning your well during the cement job.













# PREMIERE TORQUE RING (PTR)

Our partner GeoDynamics technology **Connex** ® delivers clean, open tunnels independent of rock type.



### **DRILLING TOOLS**

Kush-Drive anti-Vibration (PAV), Cuttings Bed Agitator (CBA), Torque & Casing-wear Reduction (TCR)

# **PERFORATION**

Our partner **GeoDynamics** technology Connex <sup>®</sup> delivers clean, open tunnels independent of rock type.

# HAMMERING, **CONDUCTORS, RISERS**

In collaboration Premier Inc we can offer from the smallest D-19 to the largest D-100 hammer. We can also supply new generation of conductor pipes from Oil States.





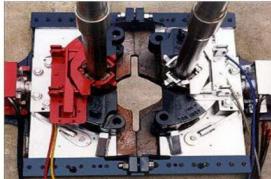












### **CONVENTIONAL TRS**

- Full suite of tubular running services
- Improve safety and efficiency of both onshore and offshore gas and oil operations
- Integrity and safety
- Proven industry experience with the latest technology
- Engineered solution that delivers cost effective operation for your unique needs

- Casings Steel and Carbon Steel from 4 1/2" to 30"
- Casings Steel and Chrome Steel from 4 1/2" to 13 3/8"
- Tubing Steel and Carbon Steel from 1.6" to 4 1/2"
- Tubing Steel and Chrome Steel from 1.6" to 4 1/2"
- Conventional and remote radio controlled equipment
- Torque turn computer service
- Centralizers



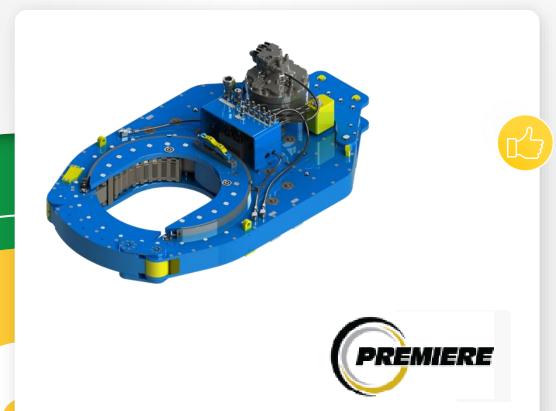












### **PREMIERE CASING TONGS**

Automated, WIFI capabilities, Highest Torque-to-Weight Ratio in the World

- Up to 150,000 ft-lbs
- Highest Torque-to-Weight Ratio in the World
- Remote Operation/WIFI Capabilities
- Standard with Safety Features
- Automatic Shutdown (ADS)
- Throttle Lockout Device (TLD)

















	Standard	Metric		
Top Drive Connection	As Per Customer Request	As Per Customer Request 680 Metric Tons		
Max Hoisting Capacity	750 Tons			
Casing Sizes	4 1/2" to 36"	114.3 MM to 914.4 MM		
Max Rotating Speed	150 RPMs	150 RPMs		
Max Pressure Rating	10,000 psi	68.9 MPa 115,245 Newton Meter		
Max Torque	85,000 ft-lbs			
Length (with fill-up tool)	176.5"	4.483 Meters		
Width	45.375"	1.15 Meters		
Weight (dressed)	12,540 lbs	5,688 kgs		



### CRT (350-500-750-1100-1250 TONS)

Designed and manufactured to meet and exceed the API BC specifications, the PRT™ can handle more weight and rotational torque, allowing us to perform more critical movements without having to stop the casing run. Rotational torque remains consistent regardless of any increases in string weight or pump pressure.

- **ID & OD Tools Available**
- 350T, 500T, 750T, 1100T, & 1250T
- 4-1/2" 30"
- Up to 36" has been designed
- Designed to run up to 150 RPMs
- 50,000 ft/lbs & 85,000 ft/lbs
- Dependent on tool size
- Compatible with JAM/Torque Turn Units
- Designed to Prevent Dropped Pipe
- Eliminates Need for TRS Equipment & Personnel
- No need for: Power Tongs, Stabber, Elevator, Bails
- Most Versatile Tool on the Market

















MAGNUM



Able to tie into CRT or top drive on-site at a moment's notice. Customizable Top & Bottom Connections. Compatible with all CRT and top drive systems.

#### Standard Metric Top Drive Connection As Per Customer Request As Per Customer Request Max Hoisting Capacity 551 Tons 500 Metric Tons **Tool Weight** 1,000 lb 453 kg 53" 1.3 m Tool Length 5,000 psi 34.47 Mpa Max Pressure Rating Max Torque 50,000 ft/lbs 67,790 Nm 80 rpm Rotating Section Swing Diameter 22.86" 0.58 m Flow Rating 15 bbl/m 629 m3/min 1502 WECO Cement Connections 1502 WECO

### The Benefits **No-Leak Swivel Design**

- Rotate at high RPM for extended periods of time with no decrease in reliability
- Maximum rotating speed of 80 RPM
- Safe working pressure of 5,000 psi

#### **Quick Connects**

- Designed for ease of maintenance
- No-Torque Connections- Assembled by Hand
- On-site break down and assembly in one hour

#### **Additional Features & Benefits**

- Meets DNV GL's Offshore Standard DNVGL-OS-E101
- Built to exceed API 8C
- Significantly faster rig-up/rig-down time for decreased NPT
- All iron assembly from rig floor















### **ROTATING CEMENT HEAD**

The Premiere Rotating Cement Head (RCH) will execute your reciprocating and rotating cementing process while conditioning your well during the cement job. Designed for longevity, the RCH features a no-leak swivel design that allows for continuous rotation over extended periods of time, resulting in a better cement job. Modular in design, the RCH can be built to address your unique cementing needs.

### **The Benefits**

#### **No-Leak Swivel Design**

- Rotate at high RPM for extended periods of time with no decrease in reliability (maximum rotating speed of 80 RPM)
- Safe working pressure of 10,000 psi

#### **Modular Configuration**

- Quarter turn plug release system
- Drop multiple plugs/balls in varying lengths/sizes
- On-site or facility plug installation with customer/cementer witness
- Compact in comparison to the competition

#### **Quick Connects**

- Designed for ease of maintenance
- On-site break down and assembly in one hour

#### **Additional Features & Benefits**

- 350 ton API 8C certified
- Significantly faster rig-up/rig-down time for decreased NPT
- All iron assembly from rig floor
- Broken down, rebuilt, and pressure tested prior to each job
- Multiple safety features
- Reported substantial increases in production

















### PREMIERE TORQUE RINGS

Enhance standard API connectors to semi-premium performance capabilities

- Transforms Non-Rotatable API to Rotatable Semi-Premium
- API Thread Compatible
- · Hand Installed at Rig or Yard
- Patented in 2011
- Over 30,000,000' Ran
- 20+ Countries
- \$100,000,000 + Saved



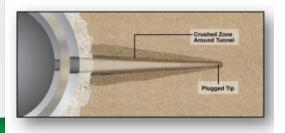








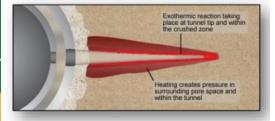






### **PERFORATION Connex ® TECHNOLOGY**

ConneX® Perforating delivers unmatched flow and injectivity performance in the formation. Every tunnel receives its own cleaning action, independent of other perforations, resulting in clean tunnels and an ideal flow path between undamaged formation and the wellbore.

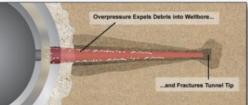




### **The Benefits**

#### **Clean Tunnel Perforating**

- At this stage, the tunnel is entirely similar to that formed by a conventional charge.
- Intermetallic reaction kinetics are such that the liner material (now distributed along the tunnel) reacts 100-200  $\mu$ -sec after detonation
- This exothermic reaction heats up fluids in the tunnel and in the pore space of surrounding rock, creating a tremendous pressure spike
- The created pressure relieves itself to the wellbore, breaking up and expelling the crushed zone and compacted fill.
- In sufficiently competent rocks, fractures are also generated at the tunnel tip.









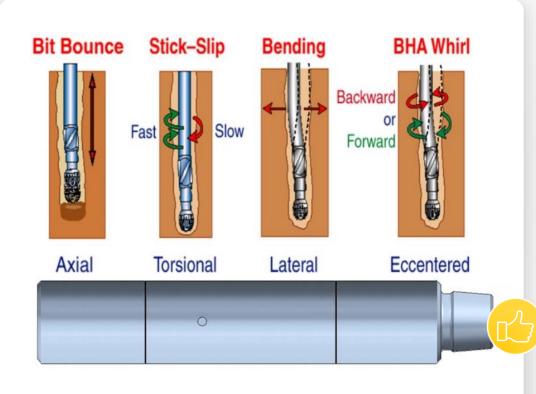












### **PTS Anti-Vibration (PAV)**

- The PAV sub can be deployed directly above the BHA and acts as a de-coupling mechanism, minimizing transmission of harmonics from the string into the BHA or the Bit/RSS interaction.
- The PAV sub acts directly on the greatly reducing the HFTO which is the single most disruptive form of vibration to any complex RSS BHA.
- The PAV sub provides a barrier between the dynamics of the drill string or bit from that of the complex M/LWD equipment thus preventing BHA failures and damage, whilst enabling the transfer of MSE to the BHA giving the most efficient drilling performance.
- At NB position the PAV allows each cutter to do the precise amount of work as intended by the designer, no energy is wasted by drilling into the side of the hole resulting in a positive effect on ROP.
- The PAV Anti-Vibration sub is the result of a multi-year development and takes downhole vibration mitigation to the next level with full 3D (axial, later & tortional/HFTO) compliance.

### The Benefits

There are a number of variables which impact drilling performance especially vibration, finding a straightforward solution to the problems created by the complexities of downhole vibration has been missed – until now.

#### The PAV sub offers you:

- A measurable increase in ROP, and BHA efficiency
- Improved borehole quality with longer bit runs
- Increased drill bit life and MTBF on downhole tools; less damage to BHA components

All of which will dramatically improve the long-term economic effectiveness of your wells.















A full set of torque, drag and hydraulics simulations are provided per application along with recommendations on placement and spacing to achieve an optimum outcome for the client.

### **Torque & Casing-wear Reduction (TCR) sub**

- The advanced TCR (Torque & Casing-wear Reduction) sub is unique and has been specifically developed by Dynamic Drilling Technologies as an enabling solution to the needs of clients with complex, challenging well trajectories. Wells typically defined as ERD, as well as any well where the torque loading is expected to be close to top drive (TDS) or rotary table torque limits.
- The TCR sub introduces is the industry's shortest torque reduction tool length, enabling adequate spacing within the stand of drill pipe, without having to compromise on sub placement or juggle reduction subs on tripping.

### **The Benefits**

The single piece external sleeve and internal ball bearing design improves upon longevity and increases the level of side loads which can be handled.

- String Generated Stick-Slip Reduction: The unique bearing design of the TCR sub tool stops tool joint contact with casing or the wellbore wall and greatly reduces the frictional contact thus impeding the onset of string generated stick-slip.
- Riser Wear: Over an extended drilling program, the cost of riser damage can be prohibitively expensive. Deploying TCR subs alleviates riser wear.
- Casing Wear: As wells get deeper and more complex 3D designs, we then see the side forces increasing, running the risk of casing wear, which will ultimately bring down the productive life of the well. The TCR™ sub effectively keeps the tool joints away from contacting the casing ID thus mitigating casing wear at the same time as giving effective torque reduction.
- Vibration Reduction: The unique design of the TCR means that it withstands much higher side loads (Tested to 30klbf), the sub is short and therefore has no flex allowing constant rotation of the sleeve. The single piece sleeve also cannot move from its position due to a secondary locking system which is locked in place by the TJ below.



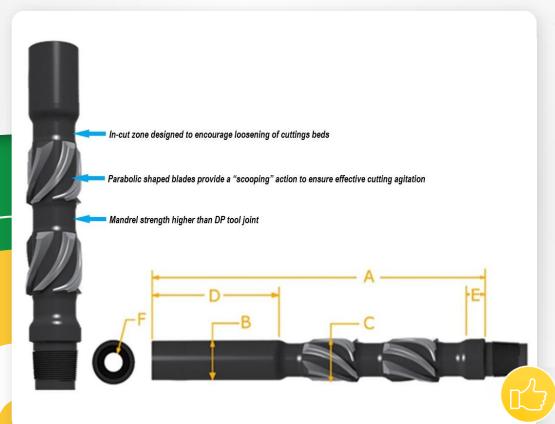












### **Cuttings Bed Agitator (CBA) sub**

The DDT Cutting Bed Agitator (CBA) is a down hole drill string tool intended to improve hole cleaning in ERD type well profiles.

It is an integral drill string component consisting of a short mandrel with no moving parts, shaped to stimulate cuttings recirculation; agitating the cuttings from the low side of the wellbore, and moving them to the upper side of the hole which is where the higher velocity drilling fluid is located. This enables the cuttings to be incrementally moved up the wellbore.

The CBA is particularly appropriate for use in the "avalanche zone" high angled sections (40° - 60° inclination) where cuttings build up can lead to instability, and subsequent pack off. The tool is suitable for both inside the casing or in open hole environments.

We have proprietary simulations to predict when cutting are likely to fall out of the mud during transport up the hole, we then plan to have tools spaced slightly less than the cuttings dropout period, efficiently and effectively removing the cuttings from the wellbore. For example, if the cuttings removal increment was determined to be around 300' then positioning a CBA at every 3 stands will result in optimal cuttings removal.

Inclusion of the CBA in the drill string means that changes in rheology, cuttings size, or mud properties can be accommodated without increasing the risk of cuttings bed build up

- Reduces torque and drag on the string while in drilling mode.
- Reduces wear on the drill pipe and rotating equipment.
- Reduces frequency of twist-offs.
- Reduced drilling costs by allowing for higher ROP because you are cleaning the hole while drilling.
- Reduced ECD in tight pore pressure environments.













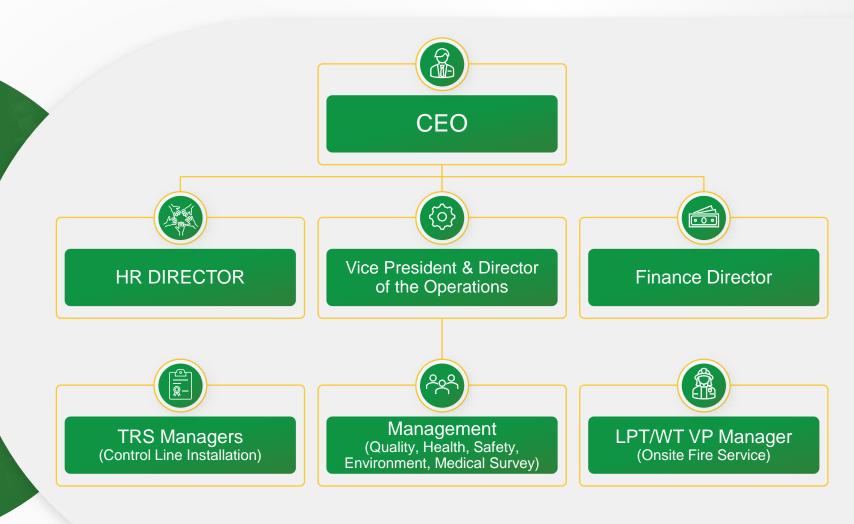


# RESPONSIBLE LEADERSHIP

### **EXPERIENCE MATTERS**

Continual reinvestment in our knowledge and expertise enables us to innovate and develop advanced capabilities.

Customers are assured that the equipment, software and service professionals they rely on are state-of-the-art, knowledgeable and fully compliant.















# **PTS Alliances**

PTS-MED has signed an collaboration agreement to explore areas of cooperation with **Oil States**, **OSP** and **Premier Inc.** 

Through this strategic alliance, PTS-MED and its partners have committed to exploring potential joint commercial agreements in areas of mutual interest in upstream such as deepwater operations, drilling activities and perforation. The alliance is also expected to include the transfer of knowledge, as well as joint services and research.





Premiere Inc.



**OSP** 



**Oil States** 



















# CASE REFERENCES



LOCATION:

Offshore Italy

**CUSTOMER:** ENI

**CALIPSO FIELDS** 

LOCATION: Offshore Italy

**CUSTOMER:** 



### **TEMPA ROSSA**



**CUSTOMER:** TotalEnergies Italia



#### **TENDRARA**



















# TRUSTWORTHY & LONG-LASTING PARTNERSHIP

### **AMAZING CUSTOMERS**

A quarter-century in a highly competitive and risk-filled industry has earned us the trust of E&P's most respected companies

# Schlumberger



























