TUBÂCEX GROUP

OIL COUNTRY TUBULAR GOODS

SUSTAINABLE FLOW

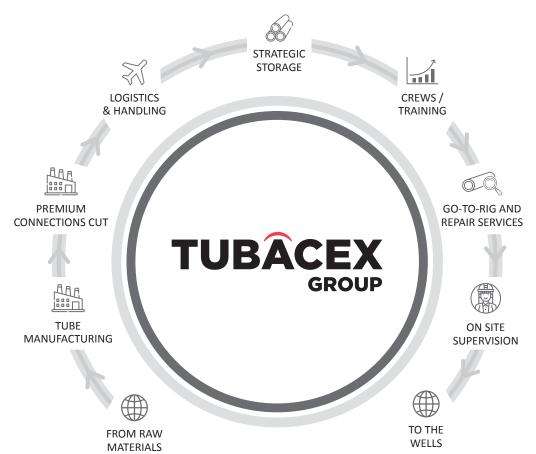
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FROM GROUND TO THE GROUND **ZERO FOOTPRINT**

A COMPREHENSIVE PORTFOLIO OF PRODUCTS AND ON DEMAND SERVICES

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WE ARE YOUR GLOBAL PARTNER

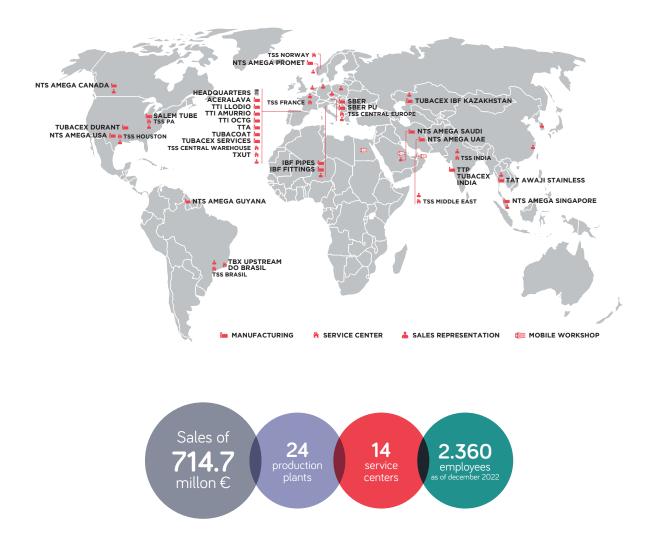
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ALL THE ACHIEVEMENTS IN THE WORLD HOLD LITTLE VALUE UNLESS WE PRIORITIZE THE WELL-BEING OF OUR PEOPLE AND THE ENVIRONMENT. SAFETY IS THE FOUNDATION OF IT ALL.

Jesús Esmoris, TUBACEX Group CEO



TUBACEX is a world leader in sophisticated industrial products and high-value-added services for the energy and mobility sectors. With global headquarters in Spain, we have 24 production plants on four continents and service centers and sales offices worldwide. A global footprint to bring us closer to you.



Tubacex brings value to its customers through its global presence, with 24 production plants and service centers in the major gas and oil hubs worldwide. Leveraging its extensive expertise, Tubacex provides integrated solutions to optimize upstream operations with a focus on safety, efficiency, and flexibility.

Pioneering progress for humanity as torchbearers of innovation, competition, and sustainability, we ignite change that resonates on a global scale. Anchored in our commitment to the environment, circular economy, and decarbonization, Tubacex is dedicated to propelling human progress, unbound by barriers or limitations. With unwavering devotion, we champion responsible business practices that set new benchmarks.

DRIVING VALUE IN UPSTREAM APPLICATIONS

Our goal is to optimize O&G E&P, increasing efficiency and sustainability, and developing new technologies.



A LEGACY OF DEDICATION AND INNOVATION

For decades, Tubacex has been an reliable partner in advancing the Oil & Gas sector. Our extensive portfolio of tubular solutions spans the entire lifecycle of operations. This milestone has been achieved through the unwavering trust and satisfaction of our esteemed customers. This accomplishment rests upon our holistic production process, continuous investments in research and development, and the relentless pursuit of knowledge enhancement within our personnel.

EMPOWERING PROGRESS WITH A STRONG TECHNICAL TEAM

The heartbeat of our success resonates with a strong technical team that stands at the forefront of industry expertise. Their expertise drives the innovations that redefine norms and set new benchmarks. Our experts navigate complexities with finesse, ensuring every solution is tailor-made for excellence.



UNLOCKING SYNERGIES THROUGH INTEGRATED PROCESSES

At Tubacex, our operations are more than individual components; they are meticulously woven into an integrated tapestry. This synergy ensures that every stage, from inception to fruition, is orchestrated harmoniously. The result is a seamless flow that optimizes efficiency, reduces redundancies, and augments the overall value we bring to our partners.

PIONEERING EXCELLENCE: MASTERS OF OIL AND GAS

As masters of the Oil and Gas domain, we epitomize excellence. Our proven track record of supplying the industry with unrivaled tubular solutions underscores our commitment to raising the industry bar. We take pride in being architects of progress, driving innovations that are not only transformative but also essential for the sustainable growth of the Oil & Gas sector.

FUELING PROGRESS IN THE OIL & GAS SECTOR

Tubacex stands as a stalwart pillar of support in driving the evolution of the Oil & Gas industry. As a truly global and seamlessly integrated company, we cover the entire spectrum of the oil, chemical, and gas value chain. Our resolute mission revolves around optimizing the processes of hydrocarbon exploration and production, propelling efficiency, nurturing sustainability, and ushering in groundbreaking technologies.

DRILLING AND EXPLORATION BUSINESS: OCTG ECOSYSTEM

PIONEERING PROGRESS

Our adherence to API Q2 standards, advanced facilities, and the cooperation of sister companies make us a driving force in the OCTG ecosystem.



EXPLORING THE OCTG ECOSYSTEM FOR DRILLING AND EXPLORATION

Welcome to Tubacex's Drilling and Exploration business hub: the OCTG Ecosystem. At the forefront is Tubacex Upstream Technologies (TXUT), a OCTG based business unit within the Tubacex Group. TXUT is dedicated to providing a comprehensive range of products and services associated with the OCTG ecosystem, with a focus on quality and API Q2 certification.

Within the realm of API Q2 certification, Tubacex Upstream Technologies (TXUT) extends a range of comprehensive solutions:

→ MATERIALS EXPERTISE

- Careful selection of materials and design of innovative alloys
- In-house integrated manufacturing of tubes
- State-of-the-art finishing and inspection line, audited by major international O&G super-majors

→ ADVANCED CONNECTIONS

- Effective management of threading capacity
- Supply of cutting-edge premium connections
- Implementation of environmentally friendly coatings and lubrication systems

→ EFFICIENT PROJECT MANAGEMENT

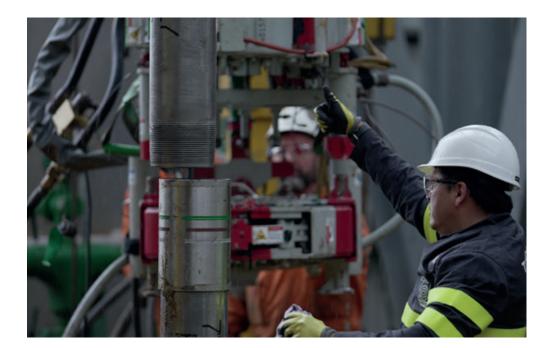
- Inventory management and control of inventories
- Logistics and storage solutions
- Rig preparation and rig-returns management

→ ROBUST RIG SERVICES

- Crew training under stringent safety conditions
- Risk analysis and hazard identification methodology
- Running supervision, parameter monitoring, data acquisition, and documentation protocols

From initial materials to the rig itself, Tubacex Upstream Technologies (TXUT) provides a seamless and holistic suite of services that encompass every aspect of the OCTG ecosystem.





THE ONE-STOP-SHOP Leader in Octg

With 60 years of experience in the Oil&Gas market, Tubacex has established itself as a global leader in designing, manufacturing, and installing advanced industrial products and high-value-added services for the OCTG segment.



RELIABILITY AND FLEXIBILITY GUARANTEED

Our Commitment In the realm of client partnerships, reliability, and flexibility are the utmost priority. Our unwavering dedication to punctual deliveries is etched into our DNA, ensuring that every commitment is met on time, every time. Mutual solutions are our cornerstone, offering the flexibility and efficiency that both parties anticipate. With a fully integrated production process under our purview, including steel manufacturing, we hold the reins, enabling the creation of special castings and reducing delivery times for urgent orders.



ELEVATING EXCELLENCE TOGETHER

At Tubacex, we extend a hand to uplift excellence in partnership. Together, we navigate uncharted territories, redefine industry standards, and fortify the path toward an exceptional future.

Our unwavering quest for excellence is rooted in the development and optimization of our teams. The TUBACEX way is our philosophy, deeply intertwined with a business ethos of continuous improvement. Guided by our proprietary lean manufacturing methodology, the Tubacex Production System (TxPS), and inspired by the fundamental principles of the EFQM excellence model, we carve our path to greatness.



A COLLABORATIVE APPROACH

The OCTG Ecosystem goes beyond manufacturing. It's a collaborative effort involving a network of sister and external companies, each playing a crucial role in the creation and delivery of our offerings. These processes are overseen by the TXUT management system, ensuring consistent quality and control.



TUBACEX MATERIALS DEVELOPMENT JOURNEY

We are experts in the harshest environments for challenging wells.

GUIDELINES FOR MATERIAL SELECTION

INNOVATION IN SERVICE OF OUR PLANET

At Tubacex, innovation isn't just a concept; it's a commitment to our planet's wellbeing. Our journey through material development has been an evolutionary one, marked by progress and driven by a dedication to a greener future. Every step, from enhancing metal resistance to oxidation to incorporating nickel and chromium for improved humidity and corrosion resistance, is rooted in a single principle: harnessing innovation for the betterment of our planet.



CONSTANT EVOLUTION IN MATERIALS

We've consistently stayed at the forefront of material advancements, ensuring that we're always in sync with the latest developments. Recognizing the imperative of creating a new generation of materials, we strive not only to meet the most rigorous technical specifications but also to achieve this with optimal efficiency and the least environmental impact.



MASTERY IN CHALLENGING ENVIRONMENTS: EFFICIENCY AND SAFETY AT THE CORE

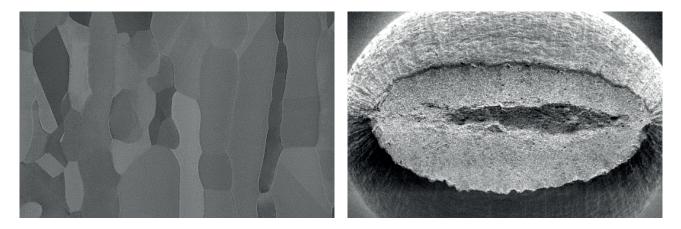
Tubacex excels in some of the toughest environments, where efficiency and safety stand as paramount principles. These challenging settings demand adherence to a diverse spectrum of design requirements that ensure unwavering performance over time. Our expertise lies in crafting products that not only meet these critical demands but also guarantee the highest levels of reliability.





MEETING THE DEMANDS OF HARSH ENVIRONMENTS

Harsh-environment applications necessitate a comprehensive approach to design, encompassing a wide range of factors. Our products are meticulously engineered to rise to these challenges, providing robust solutions that withstand the test of time. Particularly, our downhole casing and production tubing, crafted from Corrosion-Resistant Alloys (CRA) like dual-phase, superaustenitic, and nickel base alloys, are tailor-made to combat the aggressive corrosion conditions found in sour wells. These wells often contain elements such as hydrogen sulphide, carbon dioxide, and other chemicals.



UNLOCKING EXCELLENCE WITH MATERIAL EXPERTISE AND MANUFACTURING MASTERY

At Tubacex, our profound understanding of materials and mastery in manufacturing come together to present an unparalleled portfolio of corrosion-resistant alloys (CRA). These alloys include the remarkable dual phase 22Cr and 25Cr as well as Fe/Ni base austenitic alloys. These proprietary grades are meticulously engineered to endure the harshest and most aggressive conditions, earning the approval and utilization of leading Oil and Gas companies worldwide.

Guided Material Selection Our team of experts stands ready to guide you in selecting the optimal material for your specific application. This not only streamlines your supply process but also streamlines costs, fostering efficiency and cost-effectiveness in every facet of your operations.

IMPROVING PERFORMANCE IN HARSH ENVIRONMENTS

PIONEERING THE FUTURE

TUBACEX is positioned to take on remarkable cutting-edge projects in the market. One such example is the supply of CCS injection tubing with tailored materials. This application holds immense significance as we work towards realizing a net-zero emissions scenario by 2050. We're driven by the responsibility to contribute to a sustainable future, and our dedication to innovation paves the way for solutions that make a meaningful impact.

Material selection is more than a choice; it's a commitment to innovation that serves our planet and shapes a brighter tomorrow.

Join us in pioneering materials that redefine sustainability and progress.

ENGINEERED FOR EXCELLENCE

Our tubes are predominantly supplied in a cold-worked condition, ensuring they possess both high strength and low weight. This combination empowers engineers to select the optimal configuration, perfectly tailored to endure the rigors of severe working conditions.

EMBRACING THE CHALLENGE

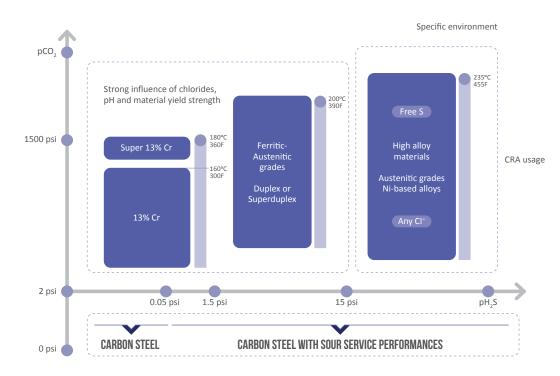
In the face of challenging environments marked by hydrogen sulfide, carbon dioxide, and free sulfur, our high-yield grades stand strong, ensuring longevity and reliability in downhole operations. We rise to the occasion, delivering steadfast solutions that thrive where others falter.

VERSATILE ALLOYS FOR VARIED APPLICATIONS

Tubacex's proprietary alloys are designed to be versatile, covering an extensive array of applications.

- Challenging Oil&gas wells with:
 - HP/HT
 - Sour or wet gas
 - Cl-, H2S, S0, ... presence
 - Chemical and sea water injection
- Enhanced Oil Recovery
- Sandscrews and accesories
- CCUS
- Geothermal Wells







GRADES AND EQUIVALENCES

MATERIAL	UNS NUMBER	ISO 136	80/API5CRA				CHEMISTRY				GRADE
	MATCHIAL	UN3 NUMDEN	GROUP	CATEGORY	NI	CR	MO	CU	N	OTHERS	STRUCTURE
TX-22	S31803	2	22-5-3	4,5/6,5	21,0/23,0	2,5/3,5		0,14/0,20		Duplex	65/110/125
TX-25NP	S32750		25-7-4	6,0/8,0	24,0/26,0	3,0/5,0	-	0,24/0,32		Superduplex	80/125/140
TX-25W	S32760		25-7-4	6,0/8,0	24,0/26,0	3,0/4,0	0,50/1,0	0,20/0,30	W: 0,5/1,0	Superduplex	80/125/140
TX-28N	N08535	3	25-32-3	29,0/36,5	24,0/27,0	2,5/4,0	-/1,5			Austenitic Fe	110
TX-28	N08028	3	27-31-4	30,0/32,0	26,0/28,0	3,0/4,0	0,80/1,40	0,04/0,15		Austenitic Fe	110/125
TX-28HY	N08028	3	27-31-4	30,0/32,0	26,0/28,0	3,0/4,0	0,80/1,40	0,04/0,15		Austenitic Fe	140
TX-825	N08825	- 4	21-42-3	38,0/46,0	19,5/23,5	2,5/3,5	1,5/3,0		Ti: 0,6/1,2		110
TX-G3	N06985		22-50-7	44,0/52,0	21,0/23,5	6,5/8,0	1,5/2,5		Fe: 18,0/21,0	Austenitic Ni –	110/125
TX-G50	N06950	4	20-54-9	50 min	19/21	8/10	max 0,5		Fe: 15/20	Austenitic Ni	110/125

Size range goes from 23/8" to 9 5/8" | Lengths R2 or R3 depending on wall thickness

PREMIUM CONNECTIONS

Innovative connections based on advanced manufacturing techniques and environmentally friendly solutions.



EMPOWERING THE OIL AND GAS INDUSTRY

Our fusion of advanced manufacturing and eco-conscious solutions culminates in connections that drive performance across a broad spectrum of applications in the oil and gas industry. From exploration to production, our connections empower your operations, ensuring reliability and high performance in every scenario.

Experience the future of premium connections with Tubacex Upstream Technologies, where precision, innovation, and environmental responsibility converge

PRECISION-CUT CONNECTIONS

TUBACEX UPSTREAM TECHNOLOGIES provides manufacturing of precision-cut, proven, and innovative connections in certified mills to ensure dependable running and exceptional downhole performance. These connections are qualified according to the latest and most stringent test protocols, and they incorporate new environmentally friendly coatings and lubrication systems. This combination of advanced manufacturing techniques and environmentally conscious solutions guarantees reliable and highperforming connections for a wide range of applications in the oil and gas industry.

CUTTING-EDGE PREMIUM CONNECTIONS REDEFINED

At Tubacex Upstream Technologies, we introduce the epitome of advancement: the most advanced premium connections that redefine industry standards. Our commitment to precision and innovation shines through as we manufacture connections that are not only proven but also elevate performance downhole.





DEPENDABLE RUNNING, EXCEPTIONAL Performance

Our precision-cut connections are meticulously crafted in certified mills, ensuring the highest standards of quality. These connections are more than components; they are a promise of dependable running and exceptional downhole performance. With Tubacex, you're investing in connections that stand the test of time.



RIGOROUSLY QUALIFIED AND ENVIRONMENTALLY CONSCIOUS

Each connection undergoes rigorous qualification, adhering to the latest and most stringent test protocols. But that's not all – we've taken a step further by incorporating new environmentally friendly coatings and lubrication systems. This conscious choice blends advanced manufacturing techniques with sustainability, guaranteeing connections that are not only reliable but also environmentally responsible.

PROJECT MANAGEMENT & LOGISTICS

Developed internal tools aligned with Customer needs to provide a holistic solution.

HOLISTIC SOLUTIONS PROVIDER: Uniting customer needs

Cognizant of our customers' requisites, we lead an agile consortium of companies in designing, fabricating, and delivering critical undertakings. These projects are geared for markets that demand uncompromising standards in quality, safety, delivery, and environmental stewardship.

To this end, our perspective has shifted outward, aligning with customer aspirations.

Our expanding portfolio under the TUBACEX umbrella fortifies our dominance in the oil and gas exploration and production domain. Furthermore, we've harnessed internal tools that streamline operations at storage yards and rigs.



PROJECT MANAGEMENT: ENHANCING VALUE, REDUCING COSTS

Our approach to project management centers on minimizing the total cost of ownership by integrating supply and inventory management, guaranteeing availability regardless of location or time. Tubacex tailors its management for each project based on customer requisites, employing a comprehensive Tubacex toolbox that encompasses API Q2 and project management standards. Our adept teams consistently apply a repertoire of skills and structured knowledge, guided by strategies, processes, tools, and techniques.

Comprehensive management services span various facets, encompassing tubular management, rig preparation, inspection, and rig returns management. This holistic management package underscores TUBACEX's commitment to delivering value through seamless project execution.



LOGISTICS AND STRATEGIC STORAGE

TUBACEX's logistical operations assume a pivotal role in shaping the overarching value within the supply chain. Our approach ensures that our products are poised at precisely the right juncture, ready for operational requirements. Our comprehensive suite of services encompasses every facet of the supply chain's logistical system: transportation, storage and inventory management, as well as meticulous packing and timely delivery.

This capability is made possible through our extensive network of global service centers, strategically positioned across the world. This positioning propels us into the vanguard of CRA master distributors, distinguished by our extensive stock of products and their unfailing availability. Furthermore, this resourcefulness enables us to deliver a spectrum of high value added services.



PRECISE HANDLING AND REAL-TIME TRACEABILITY

The nexus of handling and running seamlessly converges with advanced traceability within our operations. Our identification and tracking system meticulously woven into each product's journey through all stages of the process.

The final product bears a bidimensional matrix code and a corresponding tracking number. These codes are intelligible through laser readers and software, facilitating effortless control of products during handling and running operations.

This system extends its reach even to mobile platforms, as a dedicated smartphone app can also initiate and engage with it. Every movement is automatically logged within our IT systems, ensuring real-time updates and access to comprehensive product information.

RIG SITE SERVICES & SUPPORT

Our support, present at all times. Our professional team will be on-site to conduct, analyze and manage the entire process.



ENHANCING RIG SITE SERVICES

Our specialized team is dedicated to enhancing rig site operations, aiming to elevate safety, quality, operational performance, and the delicate equilibrium between efficiency and cost.

EMPOWERING CREWS THROUGH TRAINING

TUBACEX stands committed to empowering crews across diverse operational settings. A seasoned and proficient team ensures comprehensive training for personnel stationed at various operations. This training equips them with the practical skills and knowledge essential for the secure and efficient utilization of equipment.

EXPERTISE TAILORED TO RIG SITE REALITIES

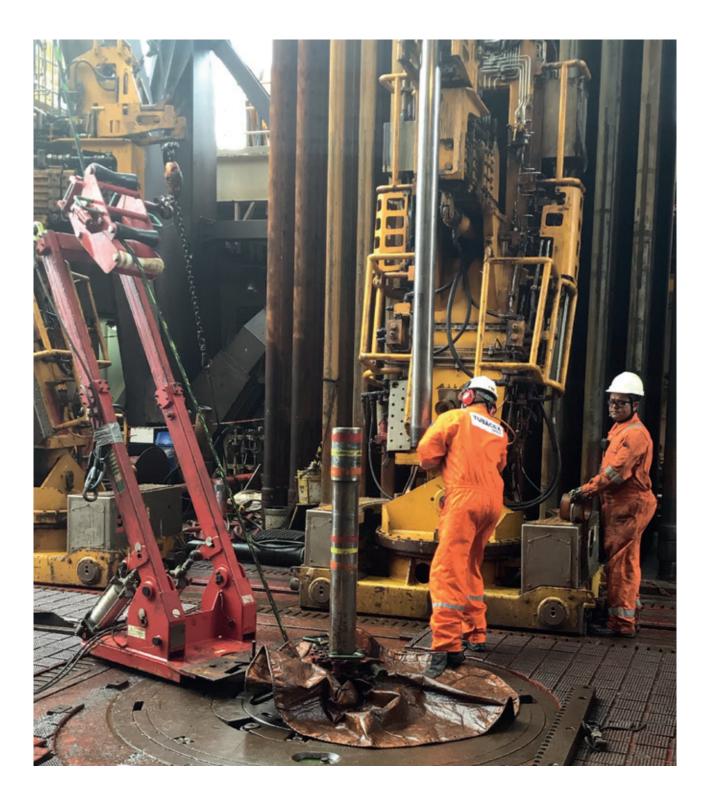
Our experienced team, stationed on-site, covers a spectrum of crucial areas:

- Conducting safety assessments and risk analysis
- Identifying potential hazards within operations
- Managing environmental controls
- Efficient handling and storage yard management
- Inculcating best practices for operation care and maintenance
- Ensuring precise parameter monitoring and data interpretation
- Navigating traceability systems and documentation protocols

COMPREHENSIVE REPAIR SERVICES

Our extensive network of qualified and licensed service shops spans the globe, ensuring the capability to manage inspection and repair tasks wherever the need arises. Our commitment to innovation is evident in the range of pioneering repair techniques we've developed, incorporating cutting-edge technologies and materials. This effort has culminated in a portfolio of approved repairs, strategically designed to prolong the longevity and availability of high-value downhole tools.





FLEXIBLE ONSITE SOLUTIONS

Onsite services are seamlessly delivered through two avenues:

EXISTING CUSTOMER WORKSHOPS:

Leveraging the facilities of our clients, we bring our expertise directly to the site, optimizing convenience and accessibility.

BESPOKE SELF-CONTAINED MOBILE WORKSHOPS:

When conventional workspace is scarce, our mobile workshops stand as a testament to adaptability, ensuring onsite repairs remain feasible.



RUNNING SERVICES And on-site oversight

Our adept, collaborative, and adaptable team of professionals stands ready to provide comprehensive support. With a focus on precision, Tubacex's team lends invaluable aid during running operations, offering technical assistance in alignment with the most stringent industry standards. The expertise of these professionals is guided by specific technical documentation for each activity.

GUIDED BY INDUSTRY EXCELLENCE

This team excels in various crucial aspects, including:

- Applying meticulous criteria for analyzing make-up graphs, determining acceptance or rejection.
- Providing assistance during visual inspections.Equipping you with field repair techniques for
- connections.Offering decisive insights and criteria for navigating unexpected situations.



ON DEMAND Services

We offer a multidisciplinary and professional team with expertise in different disciplines to provide a personalized service tailored to our customer's needs.



TAILORED SPECIALIZED SERVICES

Our specialized services harmonize design, analysis, equipment selection, and implementation under the umbrella of operational expertise. Our multidisciplinary team of professionals brings together a diverse skill set encompassing disciplines such as simulation, Finite Element Analysis (FEA), material selection, failure analysis, and more. This wealth of expertise coalesces to offer personalized solutions that cater to individual customer needs, marked by qualities like honesty, agility, flexibility, and unwavering rigor.

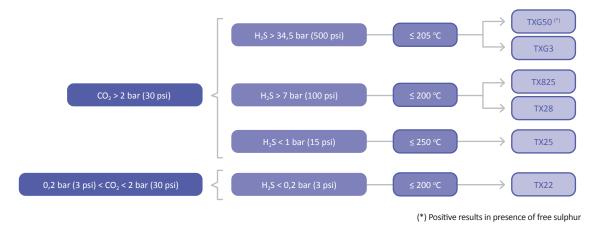
DEDICATED PROFESSIONALS Serving our customers

Our team of professionals is unwaveringly committed to serving our customers with excellence. With a focus on delivering value and expertise, we prioritize your needs above all else.



EXPERTISE IN RESEARCH AND DEVELOPMENT

Our qualified Research and Development (R+D) team forms the backbone of our commitment to innovation. We collaborate with a vast network of approved laboratories to provide comprehensive support for your design requirements. This includes specialized data on critical factors such as collapse, compression, slow strain rate tests, corrosion behavior in H2S ambient (SSRT, SSC, SCC), and temperature derating.



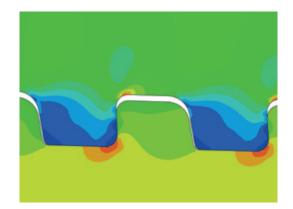
NAVIGATING COMPLEX CHALLENGES

We take pride in our technical prowess and metallurgical knowledge, to tackle the most complex challenges in metals and alloys. The energy sector is a realm where nearly every technological advancement is constrained by material capabilities. As such, our expertise becomes instrumental on overcoming these limitations and driving progress.

SUPERVISED MANUFACTURING OF TUBING, CASING, AND ACCESSORIES

The manufacturing process of tubing, casing, and associated accessories, including pup joints, X-overs, and couplings, is meticulously overseen by TXUT. Our focus is on achieving excellence in every step of the process, ensuring top-tier delivery accompanied by unparalleled customer service.

These components are produced in key international Oil & Gas hubs, such as the USA, Norway, Singapore, Saudi Arabia, UAE, and Guyana. This expansion is made possible through our sister company, NTS AMEGA, enabling us to cater to your unique requirements on a global scale.



SUCCESS Stories

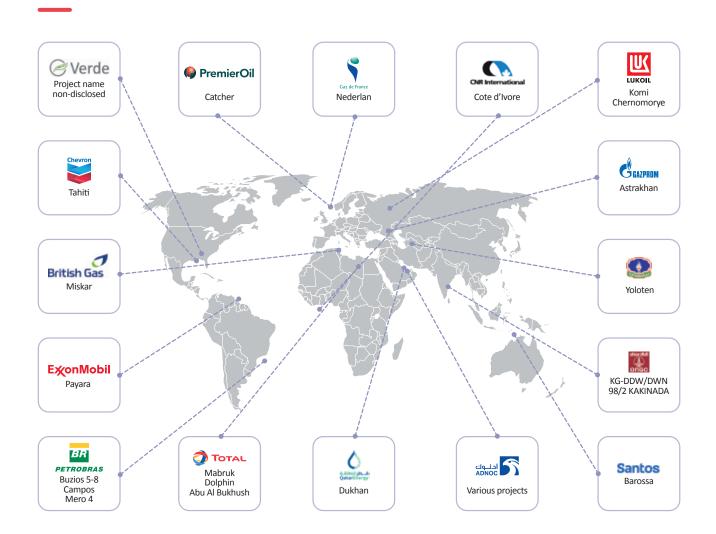
+30,000 tons of CRA OCTG delivered in the last years to O&G global leaders.



A LEGACY OF SUCCESS

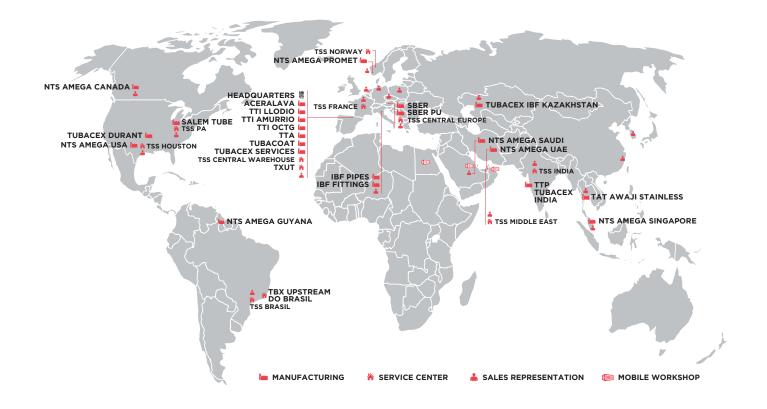
Tubacex's commitment finds its true expression in fostering a closer bond with our customers, propelling their businesses towards growth. This commitment is realized through the synergy of state-of-the-art facilities, crafting corrosion-resistant alloys, and the strategic development of local sourcing for the most pivotal components in Oil & Gas E&P.

This effort showcases our worldwide commitment to excellence, reflecting in the services and solutions we provide for managing tubulars within each country.





ADVANCED INDUSTRIAL SOLUTIONS FOR ENERGY & MOBILITY



OCTG TECHNICAL CENTER:

Tubacex Upstream Technologies (TXUT)

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