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TMK IPSCO is an industry leader in welded and seamless pipe, premium connections and accessories with a legacy of quality, exceptional customer service and innovation. We offer unparalleled value for our customers through the strength of more than twenty manufacturing facilities strategically located in the key energy-producing areas of the world. Our strength—in product and presence—gives customers a competitive edge, making us the ideal supplier for the oil and gas industry as well as many industrial markets worldwide.

TMK IPSCO continues to design and develop a portfolio of products with features that enhance performance in sour service, offshore, horizontal drilling and special clearance applications. Many of these products are developed in collaboration with oil and gas companies seeking to partner with our experts who are in the vanguard of creating innovative product solutions. As a result, TMK IPSCO offers a range of proprietary and API products that are used in a variety of drilling environments.



### Commitment to Innovation

Furthering our commitment to deliver more innovative solutions for our customers, the 70,000 square foot Research & Development Center in Houston, Texas is a premier facility for tubular product technology. TMK IPSCO's Research & Development Center combines the most advanced virtual and physical testing equipment with some of the industry's leading engineers, scientists and technologists. These tubular experts cover a variety of disciplines, including metallurgy, mechanical engineering, corrosion and product testing. To develop more customized solutions for the industry's ever-changing applications, our customers have the opportunity to collaborate with our team members and utilize the center's state-of-the-art equipment.

Premium connections have become a critical aspect of well designs in today's unconventional drilling environments. The development—at an accelerated pace—of connections ideally suited for today's severe drilling conditions starts with virtual testing. Our metallurgists and engineers apply finite element analysis and other advanced software to generate 3D predictive modeling to virtually validate the performance of our premium connections. Because sour service applications have grown dramatically in oil and gas exploration and transmission, we offer a state-of-the-art corrosion lab capable of running a series of physical tests on alloys and coatings. HIC (hydrogen-induced cracking) and SSC (sulfide stress cracking) testing can also be performed in-house under the careful eye of our metallurgists. In addition, our scientists who are at the forefront of NACE testing are conducting advanced research on materials solutions for future drilling conditions.

Our Research & Development Center is capable of performing a wide array of on-site physical tests, which can be designed to simulate a range of down-hole conditions. Testing for tensile, compression, bending, collapse and high temperature metrics can be performed on one of our two (1,000 ton and 2,000 ton), in-house connection testing load frames. Thermocycling and mechanical cycling can be performed individually or in tandem.



## Oil Country Tubular Goods Solutions

TMK IPSCO is on the forefront of oil country tubular goods innovation, partnering with our customers to create new, highly customized solutions to move the oil and gas industry forward. As we recognize that each well design is unique, TMK IPSCO manufactures a portfolio of OCTG products to ensure that we offer products for varied drilling applications. Our welded casing and tubing produced in the U.S. is formed using only high-quality, hot rolled coils via high frequency electric resistance welding (ERW). Our ERW OCTG is available in carbon, alloy and proprietary J55-C110 grades in outside diameters ranging from 2 3/8" through 16" and gauges spanning 0.190" through 0.545".



Our vertically integrated seamless operation sets the industry standard for excellence with seamless casing, tubing, coupling stock and semi-finished drill pipe in a variety of heat-treated grades and wall thicknesses—in sizes up through 16" in outside diameter. Through our affiliates, we also provide customers with an expanded size range of high-quality, heavy-walled seamless OCTG up through 13 3/8" in outside diameter by way of green tube or plain end pipe. These products are heat treated, threaded and inspected at the mill or our

**Casing  
Tubing  
Coupling Stock  
Drill Pipe**

state-of-the-art finishing operations strategically located in Texas, Oklahoma, Arkansas, Pennsylvania and Ohio. Thorough testing and inspection ensures that each pipe and connection meets the high-performance standards our customers require.

## Premium Products Engineered to Perform

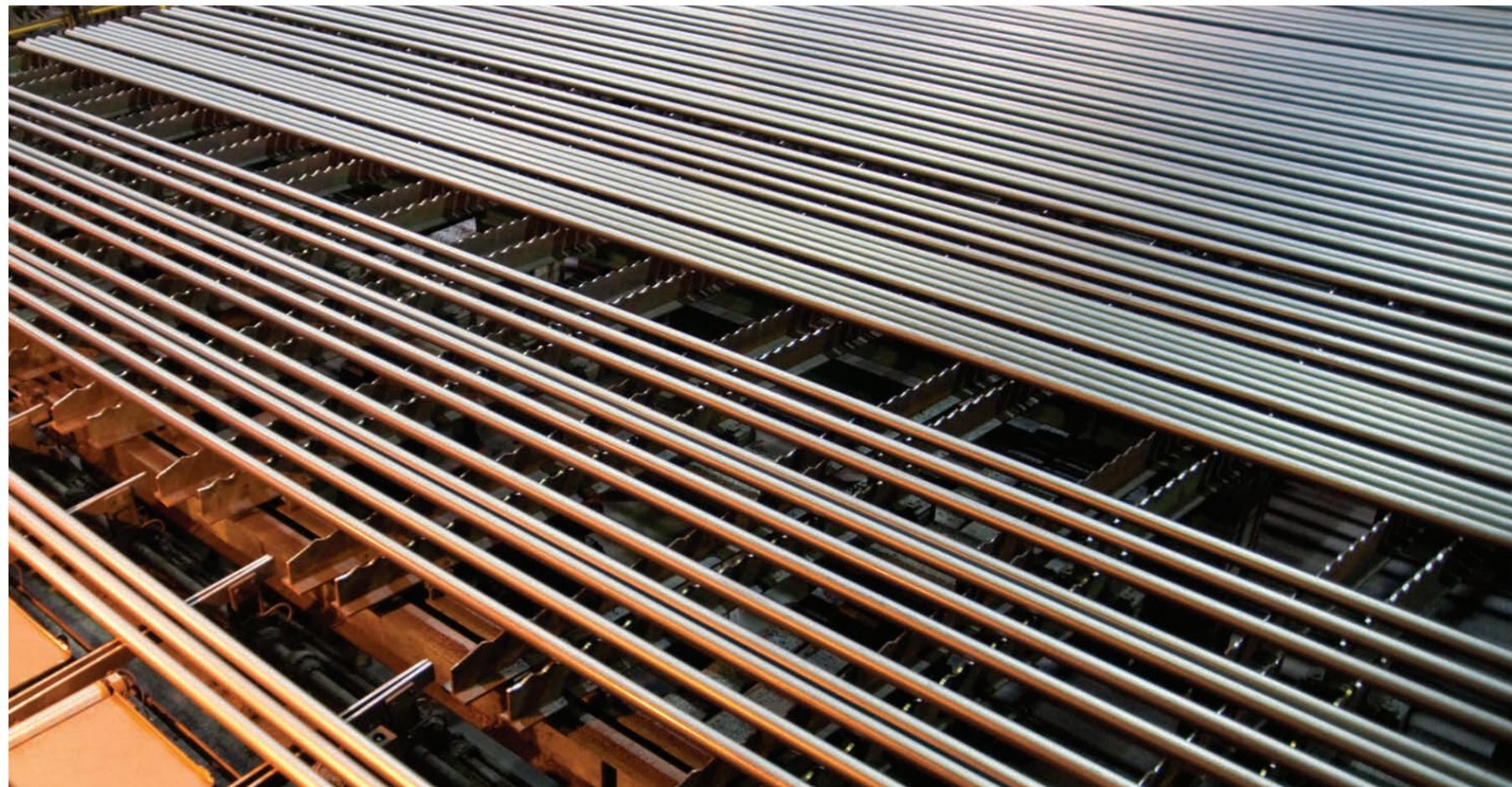
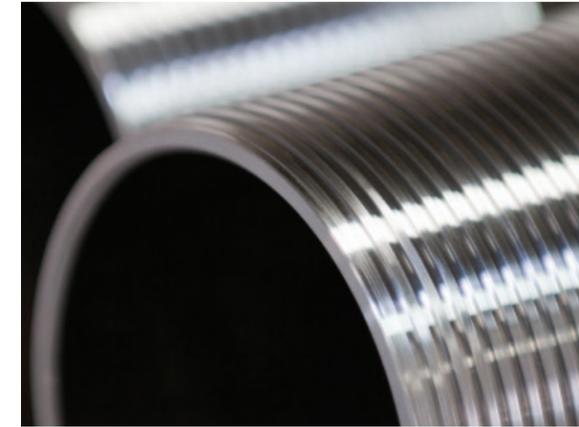
TMK IPSCO recognizes that as oil and gas well geometries evolve, so should your casing and connections. TMK IPSCO provides casing and premium connections that increase casing performance in well environments including high-temperature, high pressure, along with gas and hydraulic stimulation. Integrating TMK IPSCO casing products into your well can give the assurance that comes from highly engineered premium connections and tubulars that are tested under the toughest industry standards. The TMK UP™ products include threaded and coupled connections for greater cased hole strength and slim-profile integral connections that preserve a large casing internal diameter.



Our proprietary I80 and I85 grades are a growing line of as-rolled tubulars that achieve superior strength without costly, post-rolling heat treatment. To help operators economically mitigate the risks associated with sour service environments, TMK IPSCO has developed a family of premium H<sub>2</sub>S-resistant grades that combine high strength with targeted SSC resistance. We are also developing

**Flush  
Semi-Flush  
Tubing  
Threaded & Coupled  
Drilling with Casing**

a unique metallurgy and connection design to address the operating extremes presented by geothermal and Steam-Assisted Gravity Drainage (SAGD) wells.



## Welded and Seamless Line Pipe

From the well-established oil fields of the Southwest to the unconventional gas shales of the Northeast, TMK IPSCO supplies the welded and seamless line pipe needed to transport crude oil, natural gas and natural gas liquids from producing field to the processing plant or refinery.

Our ERW line pipe is rolled in nominal pipe sizes ranging from 2" through 16" up to API grades X70, in select sizes. Through our Oman facility, GIPI line pipe products are offered in sizes ranging from 8 5/8" up to 24" and wall thicknesses up to 1", in grades up to X80. Our seamless line pipe, known for highly uniform lengths and outstanding surface condition, is offered in grades that can be used for high pressure applications

ERW  
Seamless  
LSAW  
HSAW

including offshore use. In the U.S., TMK IPSCO produces grade API 5L B / X80 seamless line pipe in nominal pipe sizes ranging from 2" through 16" and wall thicknesses greater than 1". We also offer longitudinally submerged arc welded (LSAW) line



pipe in nominal pipe sizes ranging from 20" through 56" and helical submerged arc welded (HSAW) line pipe in nominal pipe sizes ranging from 22" through 100" in API grades up through X100.

We recognize that the integrity of our line pipe has a direct impact on the safety of our communities and our environment. As such, every joint of TMK IPSCO line pipe is manufactured at an ISO 9001 compliant facility to meet API 5L standards as well as customer specifications.

## A Variety of Industrial Products

TMK IPSCO produces a variety of seamless and welded products for a wide range of industrial markets. The automotive, mining/minerals, heavy equipment, agricultural, fluid power and oil and gas accessory industries all benefit from our mechanical tube products. TMK IPSCO also offers a full size range of superior products for boilers/heat exchangers and other pressure tube applications.



Customers depend on TMK IPSCO for our seamless standard pipe, mechanical tube, which is widely recognized for consistent physical properties, uniform wall thickness and quality surface condition. Through our affiliates, we can leverage our global strength to offer

Standard Pipe  
Hollow Structural Sections  
Mechanical Tube  
Pressure Pipe

an expanded portfolio of products, providing our customers with even more options to meet the increasing demands of our industry.

To learn more about TMK IPSCO products and services, visit our web site or call our sales office.



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