



Delivering energy to the world







Delivering energy to the world

(3)







Reliability

Excellence

Integrity

Innovation

Customer Satisfaction

Company vision

We grow sustainably, set standards of excellence, refine our quality, invest and develop our technical knowledge to expand capabilities, increase efficiency and provide exceptional value to our customers.

We continue to deliver solutions to challenging projects with professional integrity while developing successful business relationships based on mutual trust and respect.





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To be the pipe producer of choice delivering energy to the world



Annual capacity





"We are a reliable partner to turn plans into reality"

History

Investments in the latest technology in our people and a pursuit of excellence culture make us ready to face the challenges of tomorrow

1960s

The start

Our history began in 1969 with the start of operations in the Corinth plant, 80Km west of Athens.

1970s The first steps

A decade of major importance as our Company made its first steps in a demanding sector with global competition. New installations and major investments created our solid production base and the first orders to North America, Asia, Europe and MENA region started building our understanding and experience of important export markets.

1980s

Establishment

In this decade the Company established itself as a producer of high quality steel pipes. Important alliances with top tier raw material suppliers were formed, and product and quality management systems were accredited and certified according to the recognized international standards.

1990s

Expansion to world market

The growth of Corinth Pipeworks's capabilities and experience, and a further series of new investments caught the attention of global oil and gas companies. During this period Corinth Pipeworks was audited and approved by many end-users and main contractors which lead to the award of several prestigious project orders including our first offshore pipeline references.

2000s

Restructuring and product expansion

This decade is a major breakthrough in the history of our Company. A brand new plant is constructed in Thisvi, 125Km North-West of Athens and our production facilities are relocated. Sidenor Group, the major Greek steel manufacturer acquires a majority holding and a massive restructuring plan begins. The Company publishes its first Corporate Responsibility and Sustainable Development Report.

2010s **Recognition as world** class manufacturer

The strategic investments impler the continuous improvement of our production base along with successful cooperation with major oil and gas companies and EPC contractors worldwide, evolved Corinth Pipeworks in a world class pipe manufacturer, recognized for its dedication to quality and high overall performance. Our strategic framework relies on sustainability in all aspects of our activity, innovation and creating value for our customers and our people.







Customers indicative

Snam

EDF

TIGF

RWF

Fluor

Chevron Shell ΒP Exxon Mobil Total OMV TechnipFMC Subsea 7 Saipem Allseas Noble Energy Plains All American Williams Gaz System Perenco

PFMFX Wintershall GRTGAZ TengizChevroil KPO MRC Global Spartan National Grid Edgen Murray EPCO Enbridge Spectra Energy Cheniere Energy Energy Transfer DNOW Denbury Resources Repsol Sinopec Saudi Aramco STEG DCP Midstream Sonatrach Qatar Petroleum PDO GASCO OGC



Construction applications

We serve the steel construction market with its extensive range of Structural Pipes and Hollow Structural Sections in Square, Rectangular and Round shapes, used in Architectural, Industrial and Infrastructure applications. Our Structural Tubes family of products pushes the envelope in steel construction by providing highstrength & fine-grain steels according to EN10219, API and ASTM standards, in a wide range of geometries and wall thickness in HFW, SAWH and SAWL production, suitable for very demanding highly-stressed steel structures.



Energy applications

Onshore Oil & Gas pipelines

Years of experience, a modern facility with its own port, all production methods of welded pipes and downstream operations such as internal/external coating and an impressive range of products make us an ideal partner for pipelines such as onshore oil and gas, downstream CO2 reinjection, petro-chemical, fuel transportation lines.

Offshore Oil & Gas pipelines

We are one of the few companies worldwide that can offer steel pipes commonly used in offshore 9

Energy and construction sector involve major capital investments, tight execution schedules and respect of environmental guidelines

Our markets

pipelines (HFI and SAWL), internal & external anticorrosion coating, concrete weight coating, storage and port facilities all in one facility. We have the experience and are perfectly setup to turn your offshore plans into a success.

OCTG pipes

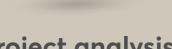
We offer a wide range of high quality Casing &Conductor pipes, for use in all types of oil and gas drilling and well completion activities for both onshore and offshore exploration and production.

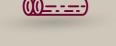


From design... to final execution



Design







We use our manufacturing and industry experience to support our clients during the design phase, with solutions to optimise mechanical properties, dimensions, production methods, longer length pipes, and many more options to improve installation productivity and overall project cost.

Our team has vast experience gained from many years in the business, we offer to conduct a deep analysis of our customer's requirements from the initial request, to provide a detailed technical review with production know-how, analytic delivery schedule, so that the customer knows exactly what to expect during the project execution phase.

Our continuous investments in the latest technology offer a wide production base with all welding methods available (ERW/HFI, SAWL, SAWH) for steel pipes from 2"-100". Our production lines feature automated control systems, quality assurance, quality and pipe tracking systems, advanced dimensional measuring systems, all in compliance with our quality and HSE systems. Our pipe mills are able to produce pipes with length up to 24m which can offer a significant advantage in welding cost reduction at final site.

To cover the market need for high quality anti-corrosion coating, we have 2 lines suitable for external coating (3LPE, 3LPP, FBE single and dual layer) for pipes from 4.5" up to 100" diameter and an internal epoxy coating line from 8.625" up to 56"diameter. The maximum coating length both in external and internal can reach up to 24m.

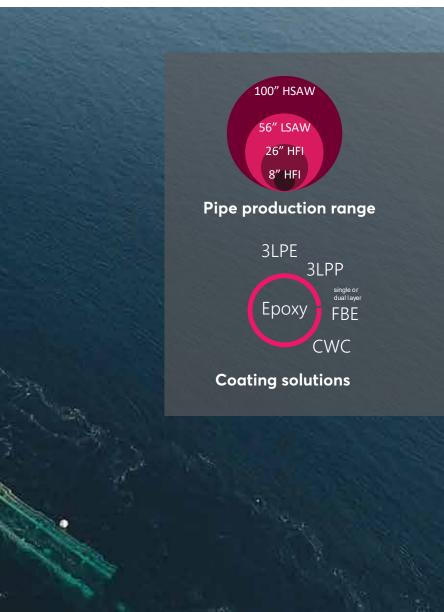
Coating

Also a concrete weight coating line (CWC) is available for offshore applications up to 40" pipes with the appropriate storage area for curing.

The proximity of coating facilities just a few meters from the pipe production offers huge benefits in minimization of damages from inbound logistics and improved project execution time.

base for many years.

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Delivery at site

Services

We safely and efficiently deliver pipes by sea, rail, and road to our customer's storage yard, fabrication site or spool

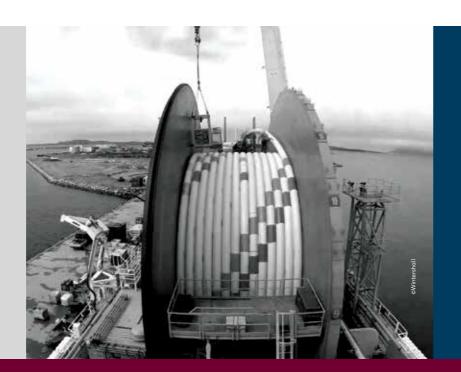
Our own port facilities just 1,5Km from our plant gives us a big advantage and the confidence to our customers that no surprises will appear during transportation We have hands-on experience of multimodal transport, regulatory requirements and associated delivery documentation requirements to over 40 countries across the globe, often under very challenging conditions and with very basic facilities.

We add value to our customers and provide first class services such as project management, complete package with materials being supplied like bends, fittings etc., accredited laboratory for material & corrosion testing including sour service performance testing (HIC & SSCC), weld-on connector facilities for OCTG pipes, cutting services, detailed quality and dimensional records for every single pipe, storage, optimized packing, handling and preservation procedures.



Ultra long lengths

Pipe length is directly linked to the number of girth welds needed at final site. Our company is one of the very few in the world that offer ERW/HFI pipes with a length up to 24m and SAWL & SAWH pipes up to 18,3m. The benefit from longer pipes is out significantly matching the higher logistics cost because of longer lengths, so when possible our customers select the biggest possible length to decreased preparation time and lower total cost.



Offshore: Set up for success

State of the art SAWL and HFI pipe manufacturing, innovative real-time control in the forming process, outstanding geometrical characteristics, quality assurance using the latest technology in nondestructive testing and dimensional measuring systems, combined with years of experience and long-term cooperation with the top steel manufacturers. Anti-corrosion coating, concrete weight coating and test laboratories complete the full scope of work. We are well equipped... to go deep

Value adding **SERVICES** oldendor

Ultra tight tolerances

Our modern manufacturing mills are able to guarantee upon request much tighter dimensional tolerances on key parameters such as out-ofroundness on pipe ends and pipe body, pipe wall thickness, and pipe straightness. SAW Pipes can also be supplied with a detailed dimensional report of pipe ends which is generated by a robotic laser measuring system helping facilitate enhanced fit up of pipe ends during fabrication at site. We are always ready to help optimize dimensional tolerances for specific project requirements when required.



Own port & storage

We have an exclusive use port with 3 docks, just 1,5Km from our plant, giving us the advantage of importing raw materials and exporting our products with no surprises and minimum delays. Thisvi port is a well-organized port providing accuracy of operations and safety for both people and products. The port is equipped with the necessary equipment such as dock and harbor cranes, forklifts etc.

We also offer storage of finished or semi-finished products either at our Thisvi facility in Greece, or at other agreed locations as required by our client.



Project management & multimodal delivery to site

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All you need in one location

We are one of the few steel pipe manufacturers in the world that can offer all available welded pipe manufacturing methods with a range up to 100", external and internal coating, concrete weight coating, storage, own port facilities and downstream services in one place. Corinth Pipeworks is a value-adding partner and a trustworthy supplier... to your success





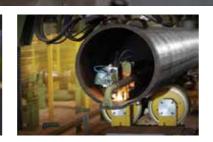
"To offer you the **best** available solutions

we continuously invest in **new technologies**"













Best available solutions

Our people are expert in their areas of knowledge and are here to offer you the best available solutions, supported by top steel suppliers, modern equipment that includes all available welded pipe production methods so each time we offer the most appropriate solution, all types of coating, project planning and other services to perfectly match or exceed your expectations.

High strain installation method

Reel lay installation is a special method of offshore pipeline installation with pipes being welded onshore and then subjected to plastic strain when pipes are coiled and uncoiled during the pipe-lay phase. This method is considered more cost effective than traditional S lay, as the pipes are welded onshore and the installation normally involves fewer vessel days.

Our company is one of few able to comply with the international standards and additional client specification requirements for such an installation method.

Tight dimensional tolerances

CPW's modern manufacturing mills are able to guarantee upon request much tighter dimensional tolerances on key parameters such as out-ofroundness on pipe ends and pipe body, pipe wall thickness, and pipe straightness.

SAW pipes can also be supplied with a detailed dimensional report of pipe ends which is generated by a robotic laser measuring system helping facilitate enhanced fit up of pipe ends during fabrication at site.

We are always ready to help optimize dimensional tolerances for specific project requirements when required.

Longer pipes, less girth welds

The selection of longer pipes has a direct cost benefit to the installation cost as it requires less girth welds at site. The benefit surpasses any increase in logistics cost. Our pipe mills offer pipe lengths up to 24m in ERW/HFI and 18.3m in SAWL & SAWH so our customers can choose the appropriate length that best suit project needs. Longer pipes internal & external coating is also available up to 24m.

Research and development

Research and development is an integral part of our business strategy through our group's R&D department, international research organizations and institutes, close cooperation with our steel suppliers and universities. We continuously monitor the following activities: development of pipes for low temperature application, deep offshore service and high strain applications (e.g. reeling), sour service conditions, high strength steel, process optimization, advanced welding techniques. 15



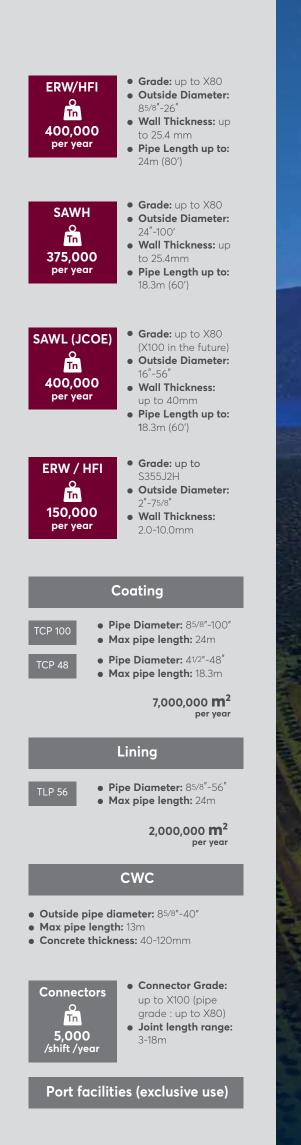
Technology in action



Real-time control in the forming process

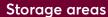
Shapeview

In cooperation with our pipe mill manufacturer developed an innovative technology tool designed to optimize the process of JCO® pipe forming. It calculates the perfect forming parameters for each plate for an ideal process. Using on-line laser sensors, collect data and during the forming process it measures the geometry and automatically adjust the next forming step leading to outstanding results. Shapeview system is introduced for the first time in the world in our SAWL pipe mill.



ERW/HFI **ERW/HFI** Pipe mill Pipe mill Port facilities (exclusive use) Weld on Connectors Laboratory for HIC SAWL/JCOE Pipe mill SAWH **Pipe mill**

Production & port facilities



A HILL A LOW

Coating (2 mills)

Lining mill

Storage areas







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Delivering energy to the world

Pipe production, test labs, coatings and port in one site to decrease project complexity, simplify communication and assure on-time execution

www.cpw.gr

Pipe Production range											Pro	Coating Production range																																			
																																				External	Internal	CWC									
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# All welded pipes manufacturing methods



"Our people tailor our wide range of services to meet your requirements handle any circumstances and **deliver on time**"

# **Onshore pipelines** and demanding applications

### Onshore pipelines

We offer all sizes and grades of pipe used for onshore gas and oil pipelines, downstream CO₂ reinjection, petrochemical and fuel transportation lines.

### Sour service

The development of new fields and reserves in harsh environments worldwide is needed in order to reach new energy resources. Sour service pipelines transporting gas having high concentration of H₂S need advanced properties to withstand hydrogen induced cracking (HIC) and Sulfide Stress Corrosion Cracking (SSCC).

Our experienced technical team, our cooperation in the development of steel grades with top steel suppliers, state of the art equipment and our in-house HIC laboratory facilities guarantee top performance in the realization of such highly demanding projects.





the world."

Our pipes are in compliance with all major international standards used for onshore applications such as API 5L, ISO 3183 and CSA Z245.1, supplemented where necessary by additional client specification requirements.

Pipes can also be supplied with external anti-corrosion coatings and internal linings such as FBE single and dual layer, three layer PE/PP and internal epoxy lining for flow efficiency and/or anticorrosion protection. Pipe length can reach 24m and give significant cost benefit in the final laying phase.



# "You can find our products and satisfied customers all over



"Ultra long lengths and tight dimensional characteristics are offering reduced project installation costs and improve fit up times"



All around the world new pipeline projects are being developed offshore, often in very harsh environments involving very low temperatures, sour conditions, or deepwater where pipes require improved collapse resistance.

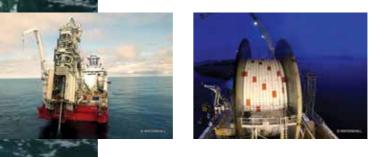
We have specifically developed our range of welded linepipe products to satisfy just such onerous conditions and now have a strong track record of supply for a range of subsea applications including linepipe for subsea-tie backs to existing facilities installed by the reel-lay method, and major export pipelines for new field developments installed by S or J lay.

Our range of pipe coatings is also tailored to offshore applications, including anti-corrosion coatings such as three layer polypropylene or polyethylene which also offer physical protection, high performance fusion bonded epoxy coatings, epoxy lining for flow assurance, and concrete coating where needed for negative buoyancy.

Manufacturing of high quality welded pipes and pipe coating is just part of Corinth Pipeworks' capability which also includes a number of unique value adding proposals such as 24m pipe joint capability significantly reducing time and cost for on-site or lay-barge welding and field joint coating.

Class leading dimensional tolerances coupled with advanced measuring systems developed in close cooperation with end-users and installation contractors offers a detailed report on of every pipe's dimensional characteristics to give a clear advantage with reduced sorting or manipulation during offshore installation.

We make a difference to offshore projects all around the world.



Pipe manufacturing + Coating + CWC in one location to minimize project complexity and potential damages.

# **Offshore pipelines**





"We push the envelope in tube production by offering a wide range of high quality casing & structural tubes"



and a second second

deep water and shale plays.

production. on our expertise in:

### Hollow Structural Sections

HSAW and LSAW production.



50x50mm-500x500mm max. WT: 25.4mm



# We invest in innovation to offer pipeline solutions that optimize our customer's cost.

# **Structural tubes**

### Casing & Conductor Pipes

Finding new oil and gas resources is a way of securing sustainable access to energy for everyone. Technological breakthroughs have made it possible to develop Oil & Gas exploration and production methods sustainably and efficiently in previously uneconomical and hard geological environments such as

We meet this challenge together with our customers by offering a wide range of high quality Casing & Conductor pipes, for use in all types of oil and gas drilling and well completion activities for both onshore and offshore exploration and

We can offer many solutions that accompany our products with services, based

• Weld-on semi-premium connector solutions for large OD casing/conductor pipes. Our mill-finished weld-on connector facility, offers top-quality control and competitive edge to our customers in a one-stop-shop approach.

• Reduced lead-times based on HRC & Plate stock

• Optimum material selection and customer-specific steel and pipe testing • Pipe handling and door to door delivery

CPW is serving the steel construction market with its extensive range of Structural Tubes and Hollow Structural Sections (HSS) in Square, Rectangular and Round shapes, used in Architectural, Industrial and Infrastructure applications.

Our Structural Tubes family of products pushes the envelope in steel construction by providing high-strength & fine-grain steel tubes according to EN10219, API and ASTM standards, in a wide range of geometries and wall thickness in HFW,





60.3mm-2,540mm(2"-100") max. WT: 39.7mm

60x40mm-600x400mm max. WT: 25.4mm





# **ERW/HFI** main projects

# **Big projects**

delivered on schedule

### Dvalin offshore pipeline

: DEA Norge AS EPC : Technip Country : Norway

15Km pipes DNV450 16"x17.5mm in max. length 22.5m

Reel-lay **Pipe length up to 22.5m** 



### **Dalton pipeline**

: 2016 Year : Williams User Country : USA

191Km pipes X70 16"/20"/24"x 8.74/14.27mm

Maria offshore pipeline

Year

User

EPC

Country : Norway

50Km pipes

DNV450 12"x17.5mm

in max. length 19.8m

up to 24m coated pipes

### Diamond

207Km HFI pipes

**Red River** 

Country : USA

Year

: 2015

532Km HFI pipes

User : Plains All American

X60 16"x 7.92/12.7mm, 18m length

### DAPL pipeline

### Nawara pipeline

### Greencore CO, : 2011-2012 Year : Denbury User Design : CH2M Hill Country : USA

Year

User

EPC

385Km pipes

Reel-lay **Pipe length up to 19.8m** 



Offshore projects



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Knarr field development : 2012 : BG Norge Country : Norway

107Km pipes DNV450SFD 12"x 12.7/13.0mm

Sour service

X70MS 20"x11.2/13.4/14.7mm



**X70** sour service





# **SAW** main projects

**CWC** at our facility

### Leviathan offshore pipeline

Year	: 2017
User	: Noble Energy
EPC	: Allseas
Country	: Israel
Pipe	: SAWL

15Km SAWL pipes DNV450 32" x 23.83-35.56mm + CWC 56" x 22.00mm



### **Gazsystem** Poland

2016-18 Pipe

130Km L485 40" x 22.0mm (SAWL) L485 28" x 17.5mm (SAWH)

# Highly demanding specifications

### **Trans Adriatic Pipeline**

2016-17 Year TAP A.G. User Country : Greece : SAWL & SAWH Pipe

495Km pipes L485 48" x 17.5mm (SAWH) L485 48" x 21.0mm (SAWL)



Multi logistics delivery with ~0% damage ratio



### **Rover pipeline**

: 2015 : Energy Transfer User Country : USA : SAWH Pipe

256Km pipes X70/X65 30"/36"/42" x 13.8/15.7mm

### **TANAP** offshore **Pipeline**

: 2017
: TANAP
: SapuraEnergy
: Turkey
: SAWL

37Km SAWL pipes DNV450 36" x 22.9mm + CWC

# **Biggest** project awarded to CPW



Long relations with customers >1.000Km in 8 years

(25



### WAG Expansion III

### South East **Supply Header**

442Km



442Km project delivered in USA



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# We are relentless in the pursuit of sustainable practices and value creation

At Corinth Pipeworks, we recognize that sustainability is critical to the future success of our business. We aim to provide value added solutions to our clients in a responsible way - respecting people, their safety and the environment. We seek to generate value for all our stakeholders through our business activities and to engage them to initiate changes for the benefit of the environment and our future generations.

Our business philosophy is founded upon international standards, policies, processes and tools to manage safety, the environment and our contribution to the society. We are committed to continuously improve the way we operate to prevent incidents and minimize our environmental footprint, while we work with local communities to understand their priorities and support their initiatives. We set Sustainability targets, which are annually assessed for their effectiveness and revised when deemed necessary. We report on our performance in our annual sustainability report.

creation.

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To Corinth Pipeworks sustainability is an ongoing process as we continue in our relentless pursuit of ever more sustainable business practices and greater value



# **Safety culture**

focuses on protecting our **most valuable asset: workers** 

# Health & safety

It is a strong belief in Corinth Pipeworks that excellence in health and safety drives excellence in business results. We strive to embed a strong health and safety culture in all our business management systems and processes. This requires focus and a systematic approach to occupationa standards, management commitment employee involvement, work site and risk analysis, training and education which constitute our health and safety framework

# Society

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Corinth Pipeworks cares for the sustainable development of the communities who live close to our site. We contribute to the ocal economy by offering employment o the inhabitants of the adjacent communities and by encouraging local suppliers to be part of our supply chain. We support communities near our operations in a number of ways, through activities that meet community needs or address particular issues, based on their suggestions. Environment

We are committed to protect the environment, respect our neighbors and strive to reduce our environmental footprint by complying national laws and international standards. Corinth Pipeworks applies the principle of prevention and takes systematic steps to minimize the impact of its operations on the environment. Aiming at environmental protection, we implement various programs for optimal management of resources, promote recycling, reduction of carbon emissions and waste management.

# holistic approach of the human being at the center of health, safety and development

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Our people are the driving force in achieving our business strategy. We strive to develop a positive, safe and dynamic work environment that favors Corinth Pipeworks' efficiency and people advancement. We aim to create a culture with the basic pillars of integrity, teamwork, mutual respect, personal development and fair treatment. We attract, develop and maintain the talents that share our corporate values, regardless their individual characteristics. We invest in education and reward our people based on their performance and behavior.



Delivering energy to the world







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Delivering energy to the world

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