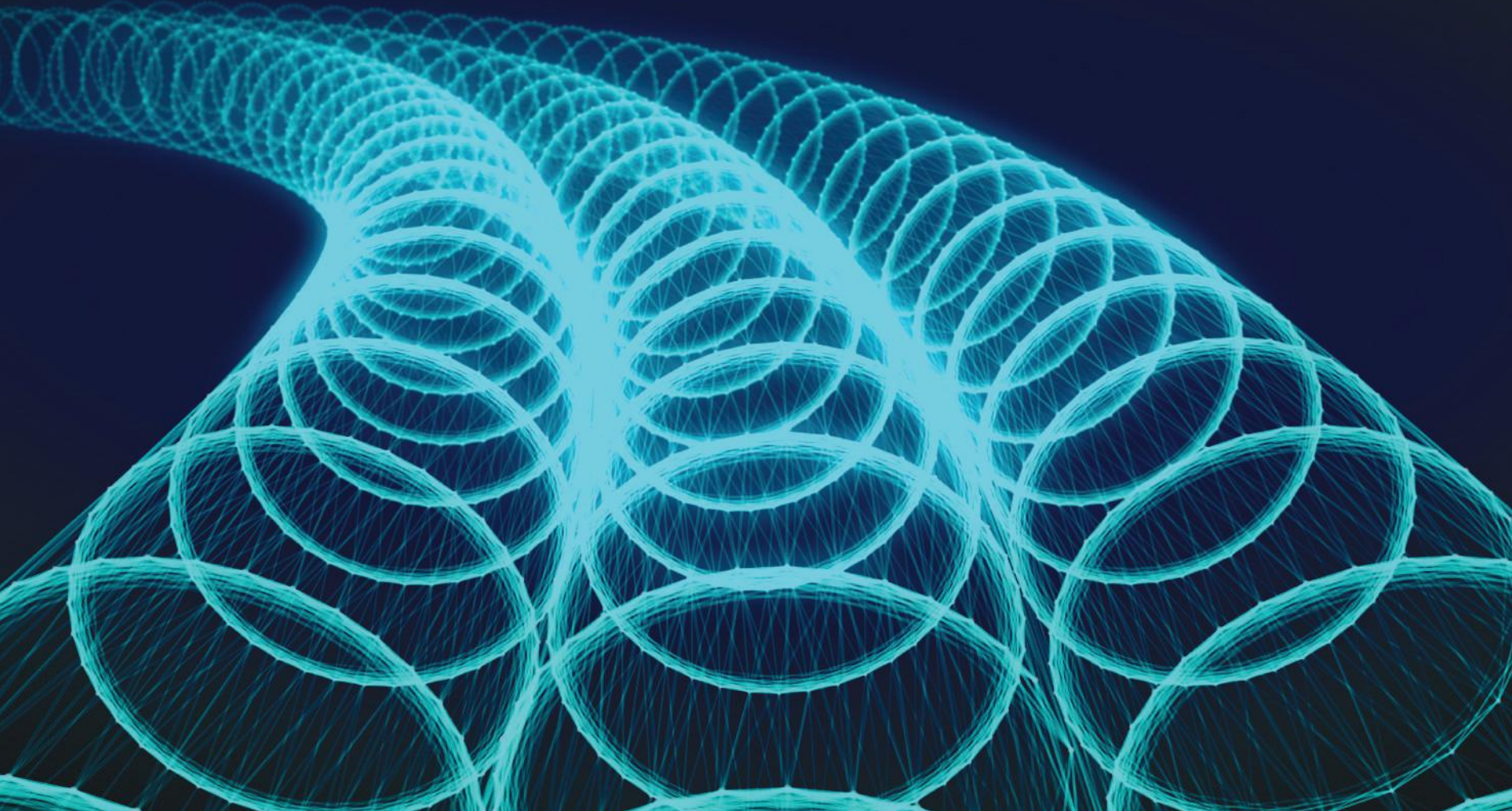


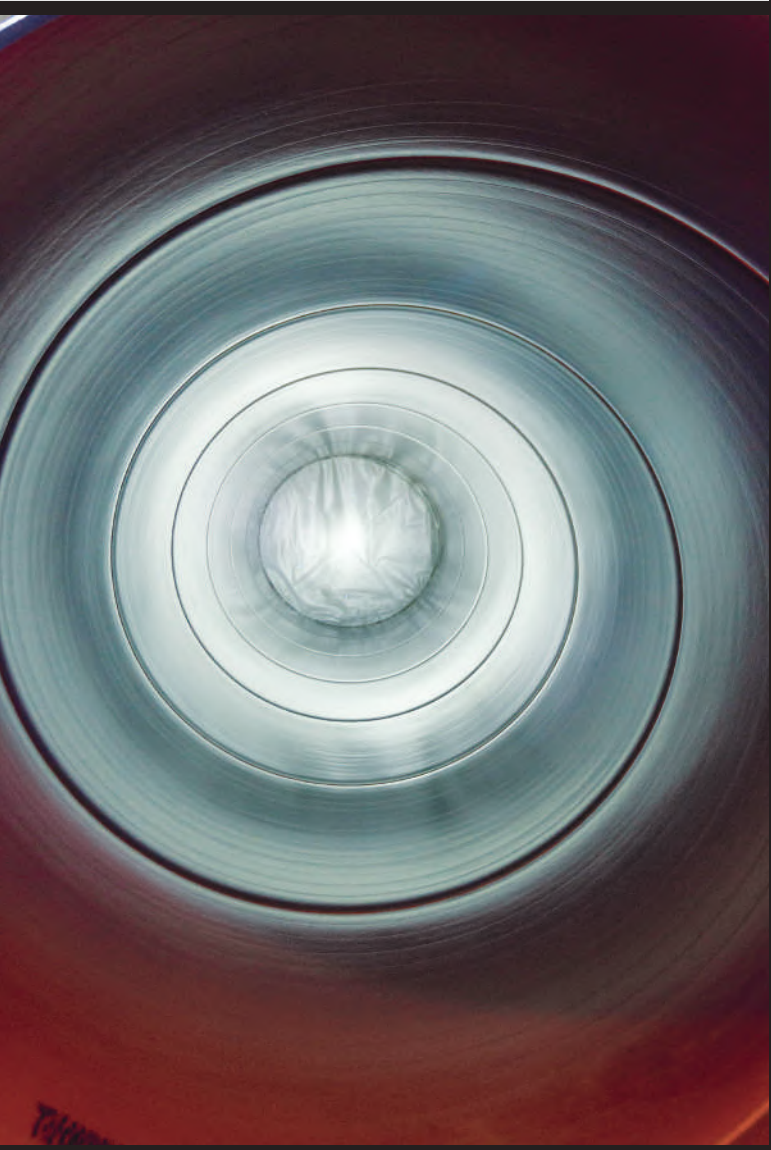


TOSÇELİK Spiral Pipe



WE SUPPLY
FOR MEGA
PIPELINE
PROJECTS
ACROSS
THE WORLD

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ABOUT COMPANY

WITH THE EXPERIENCE OF 60 YEARS IN IRON AND STEEL INDUSTRY, TOSYALI HOLDING IS MOVING CONFIDENTLY TOWARDS THE OBJECTIVES OF 2023, WHICH MARKS THE 100TH ANNIVERSARY OF THE REPUBLIC OF TURKEY. TOSYALI HOLDING, ESTABLISHING ITS LEADERSHIP IN IRON AND STEEL INDUSTRY IN TURKEY, HAS BECOME AN INTERNATIONAL BRAND WITH ITS NEW FOREIGN INVESTMENTS.



Tosyalı Holding with its head office in Hatay İskenderun, has many production facilities in Osmaniye, Istanbul, Izmir, Algeria, and Montenegro. For all its employees in these different points of the world, it aims to offer a transparent work environment which supports creativity and team spirit, facilitates personal development, where company goals have been internalized at every level and opinions are freely shared.



OSMANIYE SPIRAL WELDED STEEL PIPE AND COATING FACILITIES

Production	HSAW
Outside Diameter	16" - 126" / 406,4 mm - 3200 mm
Wall Thickness	0,2" - 1" / 5 mm - 26 mm
Unit Length	up to 20 m
Steel Capacity	up to X80 / L555
Annual Capacity	400.000 Tonnes

OSMANIYE ERW STEEL PIPE PRODUCTION AND COATING FACILITIES

Production	ERW
Outside Diameter	1/2" - 13 3/8" / 21,3 mm - 339,7 mm
Wall Thickness	2,0 - 12,7 mm
Unit Length	up to 14,6 m
Steel Capacity	up to X80 / L555
Annual Capacity	2.000.000 Tonnes

OSMANIYE FLAT STEEL PRODUCTION FACILITIES

Production Type	EAF, LF Steel Making, Slab Casting, Billet Casting, Hot Strip Rolling
Billet Size	130 mm, 150 mm, 160 mm
HRC* Thickness	1 - 15 mm
HRC* Width	550 - 1000 mm
Quality	Structural Steels, High-strength steels for cold forming, API 5L & API 5CT Steels.

Tosyalı Holding have great successes from the past to the present; through his technology, his corporate identity ready to integrate to the global market, his know-how and his professional staff take his place within the esteemed companies of Turkey. The group's main philosophy is growing up together with his customers and suppliers with earning them permanent appreciations through his corporate management system, his reliability and his customer focused working principal.

HISTORY

1952

First Step

The success story of Tosalı Holding goes all the way back to 1952 when the Father, Şerif TOSYALI, produced handcrafted stove pipes and boiler buckets in a 9 meter square shop in Iskenderun with his sons.

1970

Fuat, Ayhan and Fatih TOSYALI

Since then the Craftsman Şerif's sons Fuat, Ayhan and Fatih took over the TOSYALI flag and started commercial life.

1988

Tosalı Metal Trade

When the young and hardworking brothers, who were shaped by the sounds of hammers on sheet metal, had established Tosalı Metal Trade, the results of their patience and hard work.

1993

Preceence Known In Iskenderun Area

Three brothers who followed in the path of their father in trade, made their presence known in the market at the Iskenderun Organized Industrial Zone

1994

Tosalı Iron and Steel Industry

The Brothers prepared to realize their investment idea for Tosalı Iron and Steel Industries INC. This investment, which was completed only a year later, included the first rolling mill where construction iron would start to be produced and bracket production would start in the following year.

1996

Tosalı Foreign Trade

After Turkey the family began preparations to open out to other countries and decided to establish Tosalı Foreign Trade INC.

1997

Tosçelik Profile and Sheet Industries

One of the locomotives of the holding, Tosçelik Profile and Sheet Industries INC. was established in the Iskenderun Organized Industrial Zone. Only a year later all of the companies active in the sector convened under the roof of Tosalı Holding

1999

Social Responsibilities

Tosalı Holding Chairman of Board of Directors Fuat TOSYALI was awarded with an "Honorary Certificate" for his service to health and education by the President of the time, Süleyman DEMİREL.

2002

Tosçelik Galvanized Pipe Production

The investment in the Tosçelik Galvanized Pipe Production Facility began in 2002. While the group began dispatching galvanized pipes 2 years after this investment. They also decided to begin producing natural gas pipes and low carbon steel granules (balls) in 2005.

2006

800 million US \$ Export

Along with all of these developments Tosalı Holding succeeded in being ranked 90th in Turkey with 800 Million dollar export.

2008

Spiral Pipe Investment

The Tosalı Family began seeking out new investments to further fortify their place in the sector. Two such investments, Osmaniye Spiral Welded Steel Pipe Production Facility and Tosçelik Osmaniye Flat – Structural Steel Production Facility started being built in April 2008.

2009

Spiral Mill Start Production

With the Tosçelik brand reinforcing its power in industry more each day, The Spiral Welded Steel Pipe Facility within the Osmaniye Plant began production in April of 2009.

2010

Investor of the Year

In 2010, Fuat Tosalı was named as "Investor of the Year" at the World Newspaper's Honorary Podium of Economy and on the same date Tosçelik Profile and Sheet Industries INC. became the champion in income tax for the province of Hatay.

2012

Tosçelik in 17th Place

Tosçelik Profile and Sheet Industries INC. as the leader of the sector rose to 17th place in the ISO 2010 top 500 companies list, Tosalı Iron and Steel was positioned at 152nd place.

2013

Tosçelik in 1st Place

Thus two Tosalı companies continued to hold significant places in the ISO 500 list. In the "Anatolia 500" ranking, organized by the Economist magazine, Tosçelik Profil ve Sac Endüstrisi A.Ş. rose to 1st place in 2013 taking a position at the top of the rankings.

2014

TANAP

Tosçelik has been awarded as a main pipe supplier to TANAP (Trans Anatolian Natural Gas Pipeline Project).

VISION



Becoming a leading innovative, strong, environment and human sensitive world company in the steel sector.

MISSION



With its social responsibility and environmental awareness, by producing high value added steel products, becoming a world company which raises people's quality of living, brings value for its stakeholders and adopts continuous improvement as a principle.

VALUES



Being trustworthy, innovative, sensitive, powerful and participative

PHILOSOPHY



People oriented management, customer oriented management and technology based management, a safe working place, continuous improvement.

QUALITY POLICY



- Increasing customer satisfaction with a Quality Mentality which will meet our customers' requirements and expectations.
- Improving our processes and continuously improving to ensure competitive edge at the international level with the suggestion system and team works observing environment and WHS conditions.
- Increasing productivity and profitability by minimizing production costs.
- Setting out quality targets in line with the philosophy of total quality.

The continuous conformance of our quality policy to changing conditions and its comprehensibility by the employees are assured with the review meetings held by the senior management.

Tosyalı Quality Management System based on the Quality Policy shall be implemented in all functions and levels within our organization. For this purpose qualified personnel, production tools, service and additional resources shall be provided.

Chairman of the Board of Directors

SPIRAL WELDED STEEL PIPES

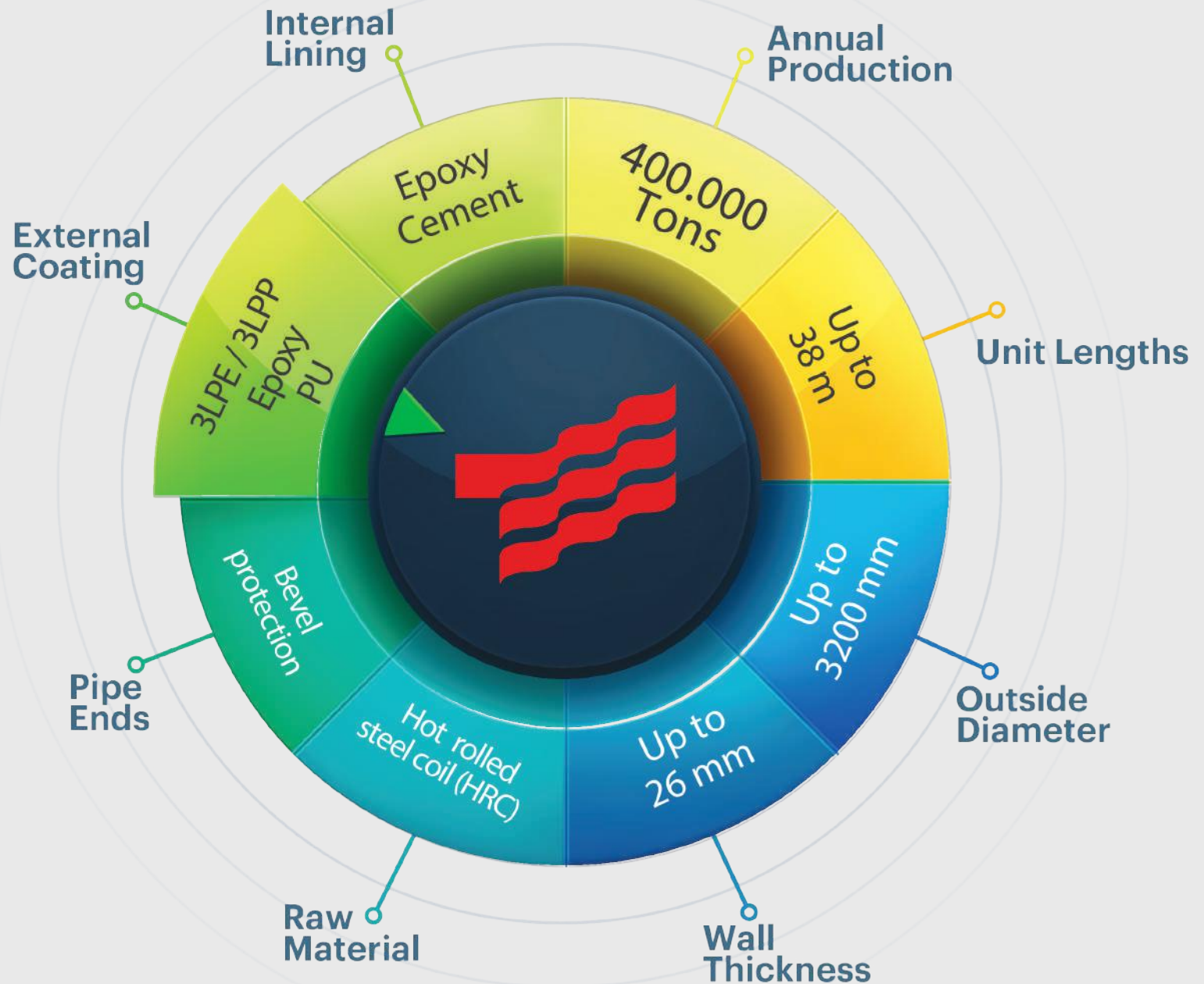
Submerged Arc Welding



The investment of the annual 400.000 tonnes capacity Spiral Welded Steel Pipe Facilities, the foundations of which were laid in April 2008 at the Osmaniye Facility on a 350.000 m² area was completed in a short time of 1 year and have started production in April 2009.

Our facility has a very broad production portfolio in the diameter range of Ø 16"-Ø 126", meeting all norms regarding spiral pipes with the API standards at the forefront. In the facilities, which have the newest production technology, additionally all kinds of internal and external protective coatings can be applied. All well-known domestic and international specifications can be answered.

SPIRAL PIPE PRODUCTION FACILITIES



PRODUCTION FLOW

Tosçelik pipe flow is fully controlled with Tosçelik Pipe Tracibility System from coil identification to delivery. Tosçelik uses its own specialized barcode system to maintain traceability.



Accumulated skelp end welding system has an advantage of continuous production with less repair rate of start and stop welding. Weld control system continuously records and monitors all welding parameters.

In Tosçelik Production Flow, pipes are being manufactured and controlled in high quality and standards.

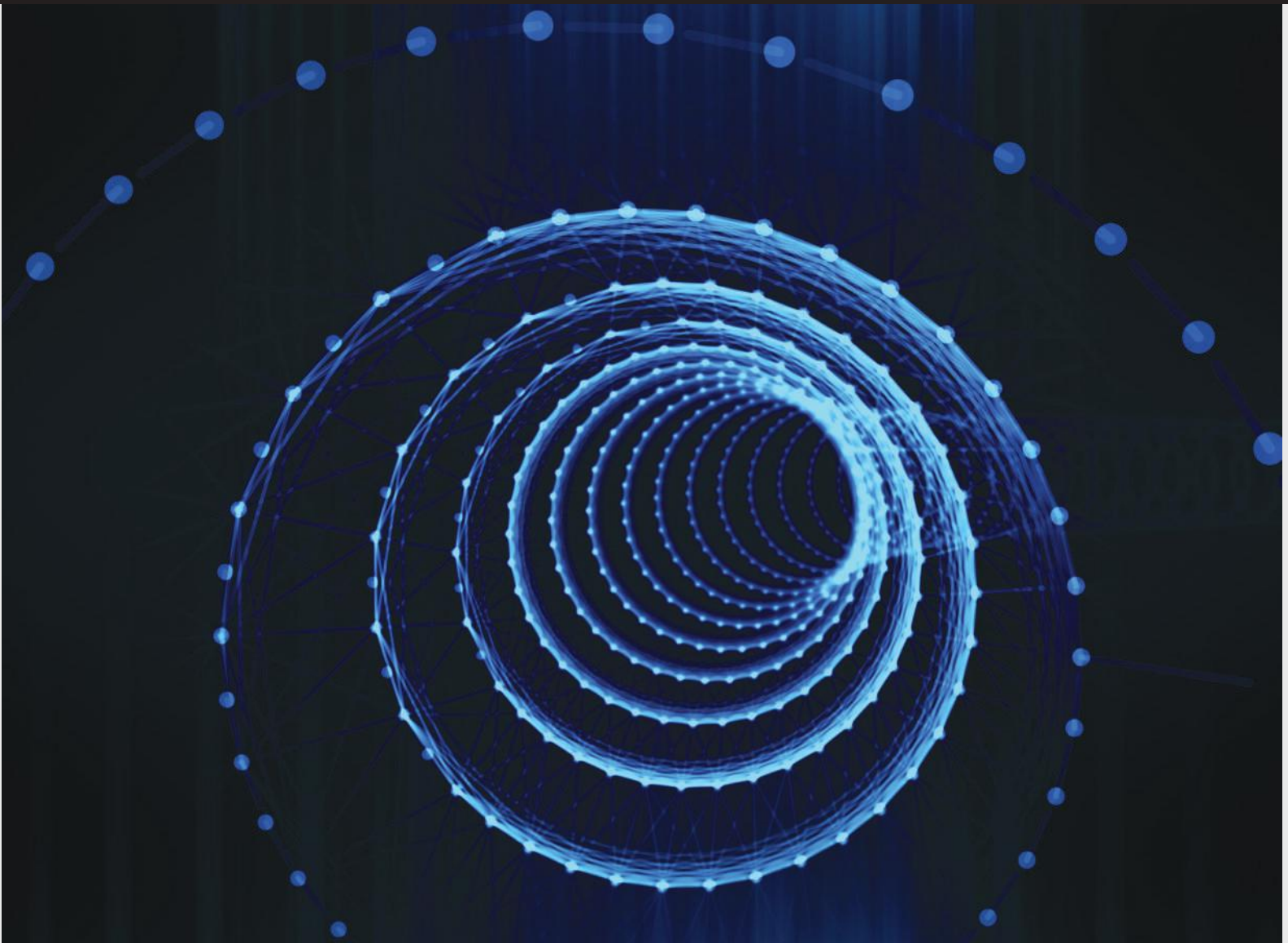




PRODUCTION RANGES

Production range of outside diameter from 16" (406,4mm) up to 126" (3200mm) with wall thickness up to 26mm

Tosçelik Spiral Pipe Mill converts steel coils into high-strength, large-diameter API-grade pipes for high-pressure natural gas and oil transmission lines as well as for structural applications.



PRODUCTION STANDARDS

Tosçelik manufactures spiral welded steel pipes in compliance with API, ISO, EN and DIN standards. The pipe production is certified by several internationally well-known certification bodies.



Our manufacturing facilities are periodically certified by third parties and have official certification such as ISO 9001 and other international and national production standards.

Depending on the project requirements, **TOSÇELİK SPIRAL PIPES** are being manufactured according to production standards some of which listed below and many other international or local project specifications.

Raw materials are received with vendor certification demonstrating their compliance with **TOSÇELİK SPIRAL PIPE** quality requirements. In addition, all raw materials are qualified and tested prior to their use. These tests ensure that the raw materials comply with the specifications as stated.

Pipe Production

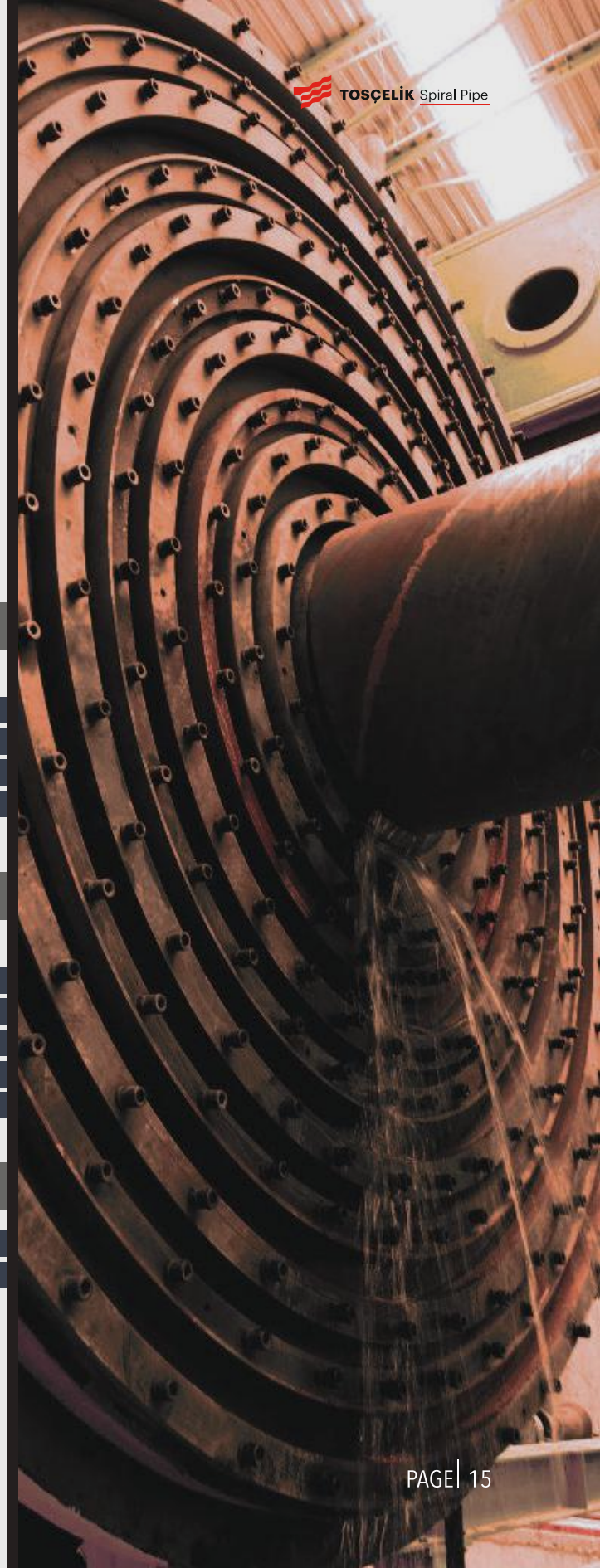
API Spec 5L PSL 1 and PSL 2	EN 10217
ISO 3183	EN 10219
CSA Z245.1	ASTM A252
EN 10224	AWWA C200

External Coating

Polyethylene Coating	EN ISO 21809, DIN 30670, NFA 49710, UNI 9099
Polypropylene Coating	EN ISO 21809, DIN 30678, NFA 49711
Single/Dual Layer FBE (Fusion Bonded Epoxy) Coating	CSA Z 245-20, NACE RP 0394, API 5L7, AWWA C213
Liquid Epoxy Applications	AWWA C210, NFA 49709
Polyurethane Coating	BS 5493, AWWA C222

Internal Lining

Epoxy Lining	API RP 5L2, AWWA C210, NFA 49709
Cement Mortar Coating	AWWA C205, EN 10298, DIN 2614, BS 534, TS 8590



QUALITY CONTROL / ASSURANCE

Tosçelik Spiral Pipe has been certified and fulfills all requirements of quality management systems such as ISO 9001, ISO 14001, OHSAS 18001, ISO 29001 and API Spec Q1. Tosçelik Spiral Pipe manages quality and management processes from production to quality with understanding of quality management system.



Through each phase of production, starting from acceptance quality control of raw materials until the delivery of the materials to the Clients, Tosçelik Quality Department thoroughly tests, inspects and verifies the compliance of products in accordance with API 5L, ISO 3183, EN 10224, EN 10217, EN 10219, ISO 21809, DIN 30670 as well as project specific technical requirements.



NON-DESTRUCTIVE TESTS

The usage of the latest technology devices operated by specialized staff with certification of ISO 9712, ISO 11484 and ASNT SNT TC 1A provides 100% reliable pipe production.

- AUT Coil Lamination with 100% Coverage
- AUT Online Weld Inspection
- First Visual Inspection
- Manual Ultrasonic Inspection
- Hydrotest
- AUT Offline Weld, HAZ and Pipe End Lamination Inspection
- Digital X-Ray Weld Inspection
- Pipe End Magnetic Examination
- Magnetic Particle Inspection
- Final Visual and Dimensional Inspection

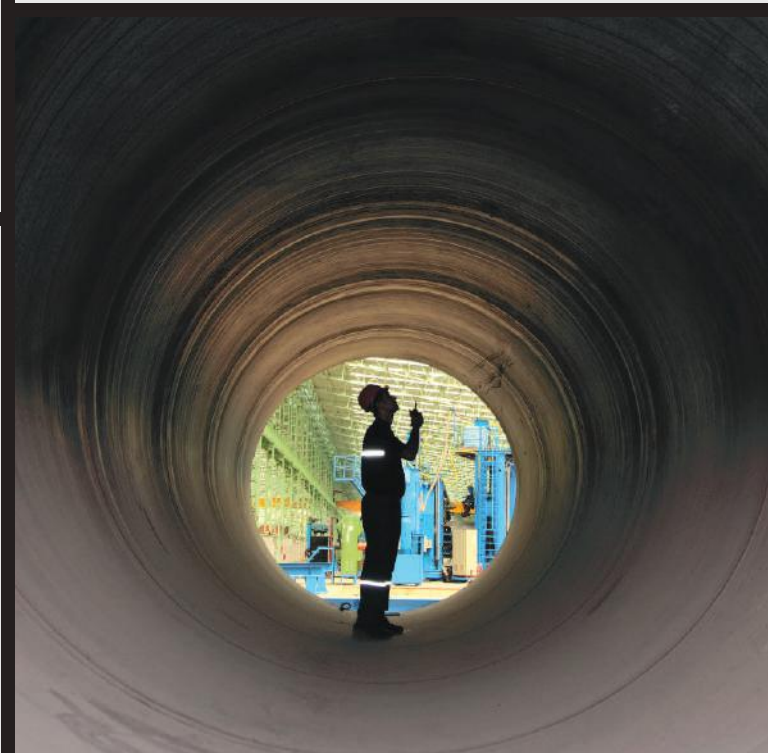
DESTRUCTIVE TESTS

All destructive tests covering preparation of the specimens, testing, analyzing and reporting, required by international standards and project specifications are being carried out in Tosçelik Spiral Pipe Laboratories which have been modernized in 2015.

- Tensile Test
- Bending Test
- Charpy V Notch Impact Test
- Hardness Test
- Macro and Micro Metallographic Examination
- DWTT - Drop Weight Tear Test
- Chemical Analysis
- Crack Tip Opening Displacement (CTOD) Test

TESTING OF COATING & LINING

- Vicat Softening
- Brittleness Temperature
- Melt Flow Index
- Tensile and Elongation Properties of Plastics
- Hardness of Plastics
- ESCR
- Carbon Black Content
- Cathodic Disbondment
- Viscosity of Epoxy
- Cure Time
- Gel Time
- Moisture Content
- Density
- Particle Analysis
- DSC
- Oxidative Induction
- Melt Flow



COATING & LINING

Surface preparation, 3LPE/3LPP, epoxy, fusion bonded epoxy coatings, flow coat epoxy, solvent free epoxy, cement mortar linings and marking.

Internal Lining & External Coating

In order to prevent steel to be affected by corrosive environment, the pipes are covered with various materials according to its usage purpose. According to the customer needs, different coating choices may apply such as 3 layers PP/PE, epoxy, thoroughly de-oiling, de-rusting and de-dusting of the surface to be covered is performed through special sandblasting machine on Sa 2½ level.

Our prior principal is high quality and care in coating field as it is in the production of steel pipe.



Surface Preparation

Tosçelik applies surface preparation with utmost care to obtain satisfactory surface roughness and cleanliness and assure high performance of its coating / lining applications.

The cleanliness of the blast cleaned surface shall be as per requirements of coating system, i.e. Sa 2½ or Sa 3 in accordance with ISO 8501-1.



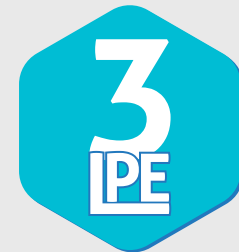
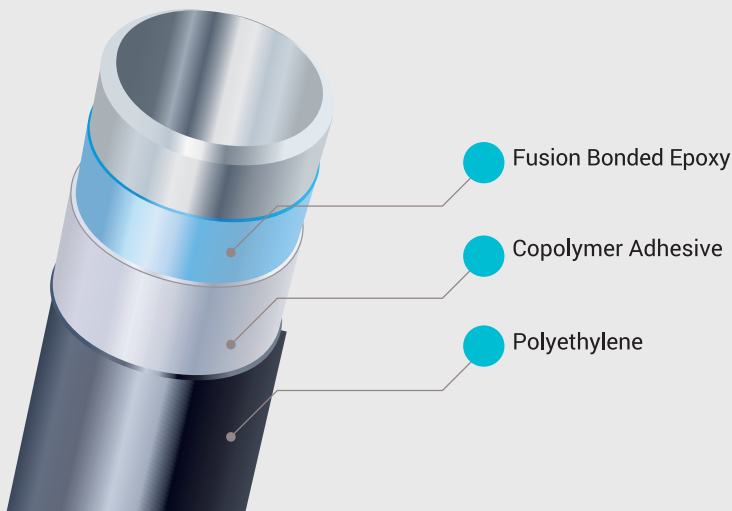
Surface Preparation



Internal & External Sand-Blasting

3LPE (Three Layer Polyethylene Coating)

Tosçelik 3LPE System is a multi-layer coating composed of three functional layers. This anti-corrosion system consists of fusion bonded epoxy (FBE) for corrosion protection followed by an adhesive and outer layer of polyethylene which provides tough, durable protection with moderate to high operating temperatures. Tosçelik 3LPE System provides excellent pipeline protection for Tosçelik Spiral Pipe.



Three Layer Polyethylene Coating



Oil & Gas Pipelines



Large Diameter Pipelines



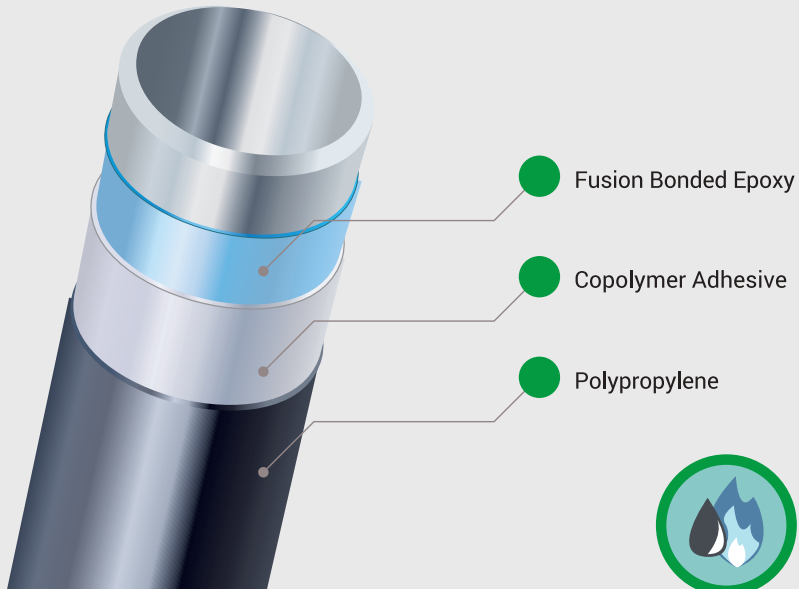
Small Diameter Pipelines



Waterworks Pipelines

3LPP (Three Layer Polypropylene Coating)

Tosçelik 3LPP System is a multi-layer coating composed of three functional layers. This anti-corrosion system consists of fusion bonded epoxy (FBE) for corrosion protection followed by an adhesive and outer layer of polypropylene which provides the toughest, most durable protection with high operation temperatures and high abrasion environments. Tosçelik 3LPP System provides excellent pipeline protection for Tosçelik Spiral Pipe.



Three Layer
Polypropylene Coating



Oil & Gas
Pipelines



Large Diameter
Pipelines



Small Diameter
Pipelines



High Operating
Temperatures



High Abrasion
Environments



Cement Mortar

Tosçelik has a proven track record of high quality cement mortar applications protecting interiors of its pipes providing durable and cost-effective solution for water transmission pipe supplies suitable for potable water use. Tosçelik applies cement with centrifuge system using its high-tech, state-of-the-art equipment which ensures proper and consistent mix, density, strength and quality. All cement mortar applications strictly conform with international standards and project specific customer requirements.



Cement Mortar



Potable Water
Pipelines



Large Diameter
Pipelines



Small Diameter
Pipelines



Apply
Internal



Fusion Bonded Epoxy

FBE can be applied as a stand alone system or as a first layer of 3 layer systems in order to provide anti-corrosion protection. Its superior adhesion properties provide excellent resistance to cathodic disbondment which reduces the total cost of cathodic protection during the operation of the pipeline.



Fusion Bonded Epoxy



Apply External



Oil & Gas
Pipelines



3 Layer
Systems

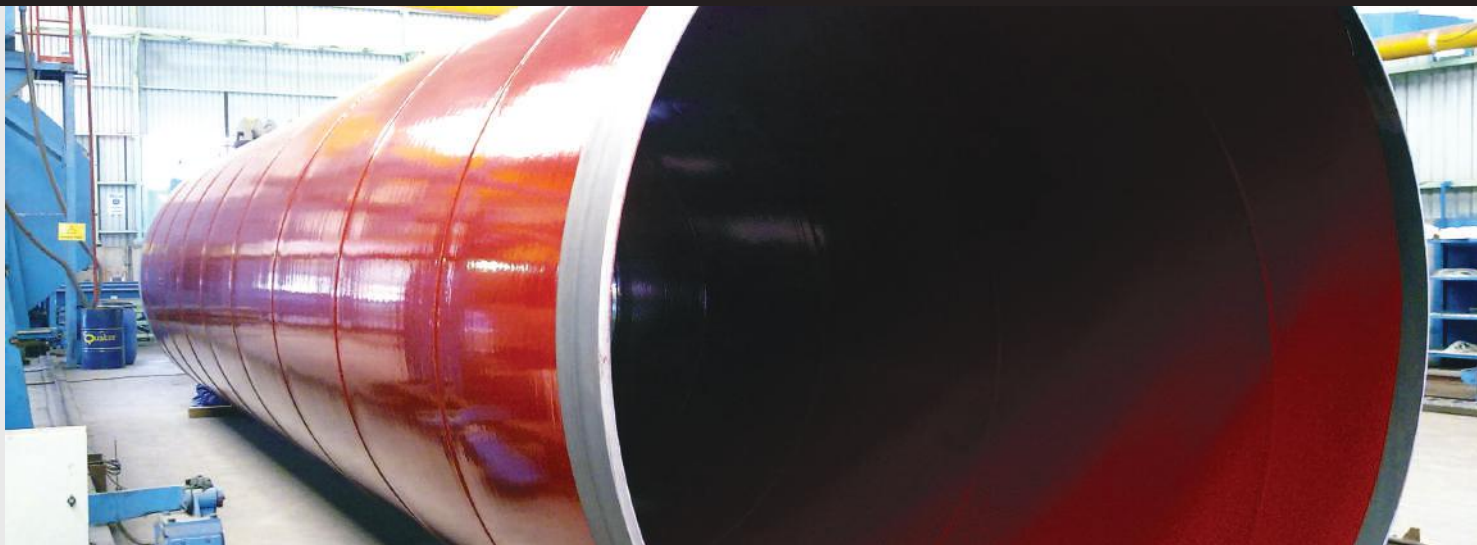
Flow Coat Epoxy

Tosçelik applies FCE to protect the internal surfaces of pipes against corrosion as well as provide smooth surface to improve flow for natural gas pipelines. Tosçelik is able to apply FCE lining with a high level of corrosion protection and meets API specification RP 5L2.

Epoxy flow coats applied by Tosçelik also complies with all technical and application requirements from clients meeting their high standards on quality and reliability.



Flow Coat Epoxy



Solvent Free Epoxy

Tosçelik SFE application provides a corrosion protection for the internals of water pipes which conforms to international standards for potable water transmission as well as other applications including field water, process water, sewage, salt water, wastewater, etc.



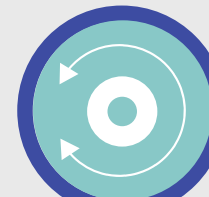
Solvent Free Epoxy



Potable Water Pipelines



Large Diameter Pipelines



Small Diameter Pipelines



Apply Internal

Epoxy Coating

Tosçelik performs several methods of epoxy paint applications, in accordance with project EC requirements, through inner and outer spraying method, in cool or hot way. Flow coat epoxy is used in natural gas pipes, where as solvent-free epoxy in water pipes, and coal tar epoxy or glass flake apply for piling pipes. Moreover, hot polyurethane paint apply for waste water and drainage lines.



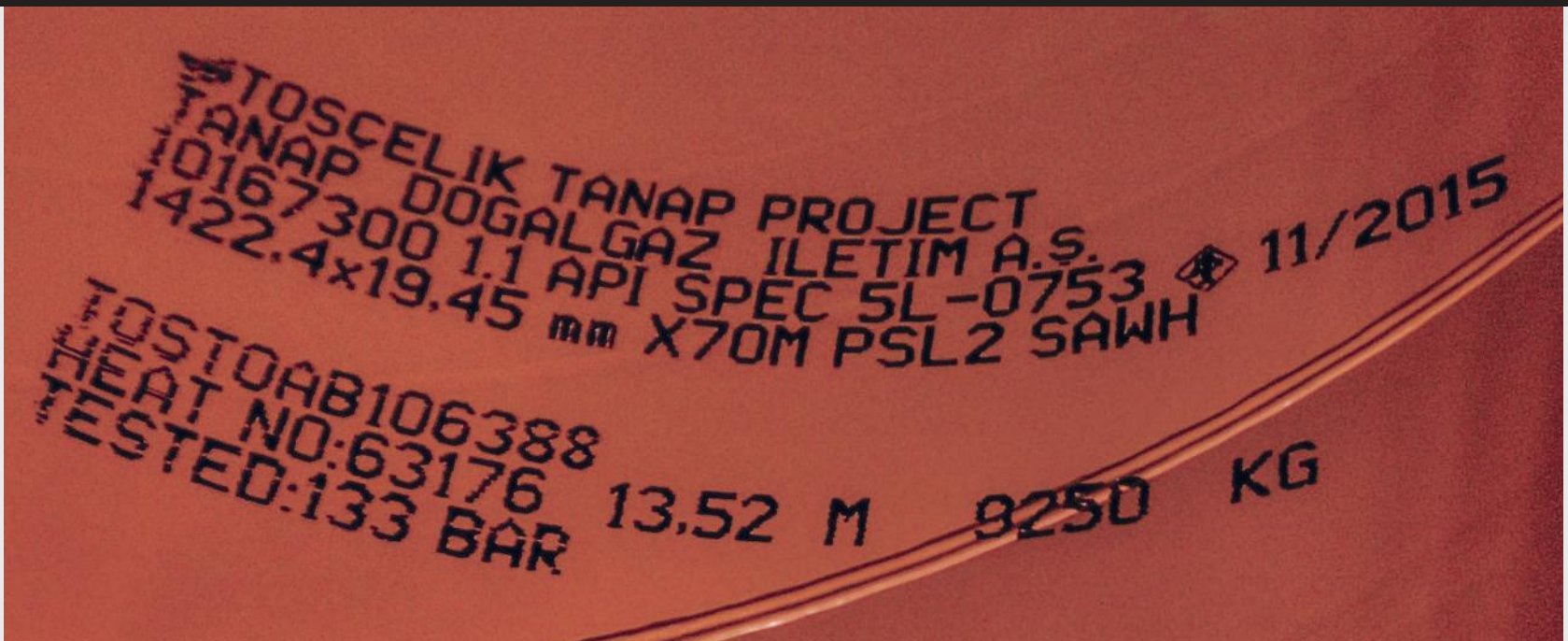
Epoxy Coating

Robotic Marking

TOSÇELİK SPIRAL PIPE has online pipe tracking systems and make robotic marking on outside and inside of the pipe in order to easy and reliable identification of the pipe ID.



Robotic Marking



LOGISTICS

Fast and safe delivery.

The care devoted to proper storage and shipment of products is part of TOSÇELİK commitment to customer satisfaction.

Tosçelik Spiral Pipe is located on the eastern Mediterranean coast of Turkey close to Iskenderun ports which allows various cost-effective transportation methods of marine, inland, railroad and multimodal transportation.

Tosçelik handles the pipes with its utmost care and transportation of pipes are being carried out in compliance with international standards such as API 5LW Recommended Practice for Marine Transportation, API 5L1 Recommended Practice for Railroad Transportation of Line Pipe.

Tosçelik gives highest priority to the safety of its logistics activities.





PROJECTS WORLDWIDE

A proven track record of pipe supply consisting of national and international oil, gas, water pipelines and port construction projects.

MAJOR PIPE SUPPLIER OF TANAP PROJECT

Owner



TANAP Share Holders



With its gas carriage capacity TANAP is one of the mega pipeline projects in the world

Large diameter 56"
Heavy wall thickness 19,45mm
High steel grade X70M

Tosçelik is the largest HSAW pipe manufacturer for TANAP

Supplying pipe for nearly 25% of the project.

Deliveries up to 1,8 km per day.

Total Length - **470 Kilometers**

Usage Purpose - **Natural Gas Transmission Pipeline**

Outside Diameter - **1422 mm / 1219 mm**

Wall Thickness - **19,45 mm / 16,67 mm**

Production Standard - **API 5L PSL2**

Steel Grade - **X70**

Coating & Lining - **3LPE / Flow Coat Epoxy**





The Trans-Anatolian Natural Gas Pipeline (TANAP) is a natural gas pipeline from Azerbaijan through Georgia and Turkey to Europe. It will be a central part of the Southern Gas Corridor, which will connect the giant Shah Deniz gas field in Azerbaijan to Europe through the South Caucasus Pipeline (SCP), TANAP and the Trans Adriatic Pipeline (TAP).

TANAP from the Turkish border with Georgia, will run through 20 provinces within Turkey until it ends at the Greek border of Turkey. From this point, the TAP Pipeline will connect to convey natural gas to European nations. Two offtake stations are located within Turkey for national natural gas transmission, one located in Eskişehir and the other in Thrace.

With 19 km running under the Sea of Marmara, the main pipeline within Turkey reach a total of 1850 km.

Pipes are being delivered, unloaded and stacked in the final destinations (pipe yards, and pipeline route). Pipes are being handled with utmost care in the railway stations.

Comprehensive logistics operations being managed by Tosçelik Logistics Team specialized for linepipe transportation. Tosçelik delivered pipes to TANAP stockyards by multimodel transportation combination of railway and road transportations.



**MAJOR PIPE SUPPLIER
OF**

 **TOSÇELİK** Spiral Pipe

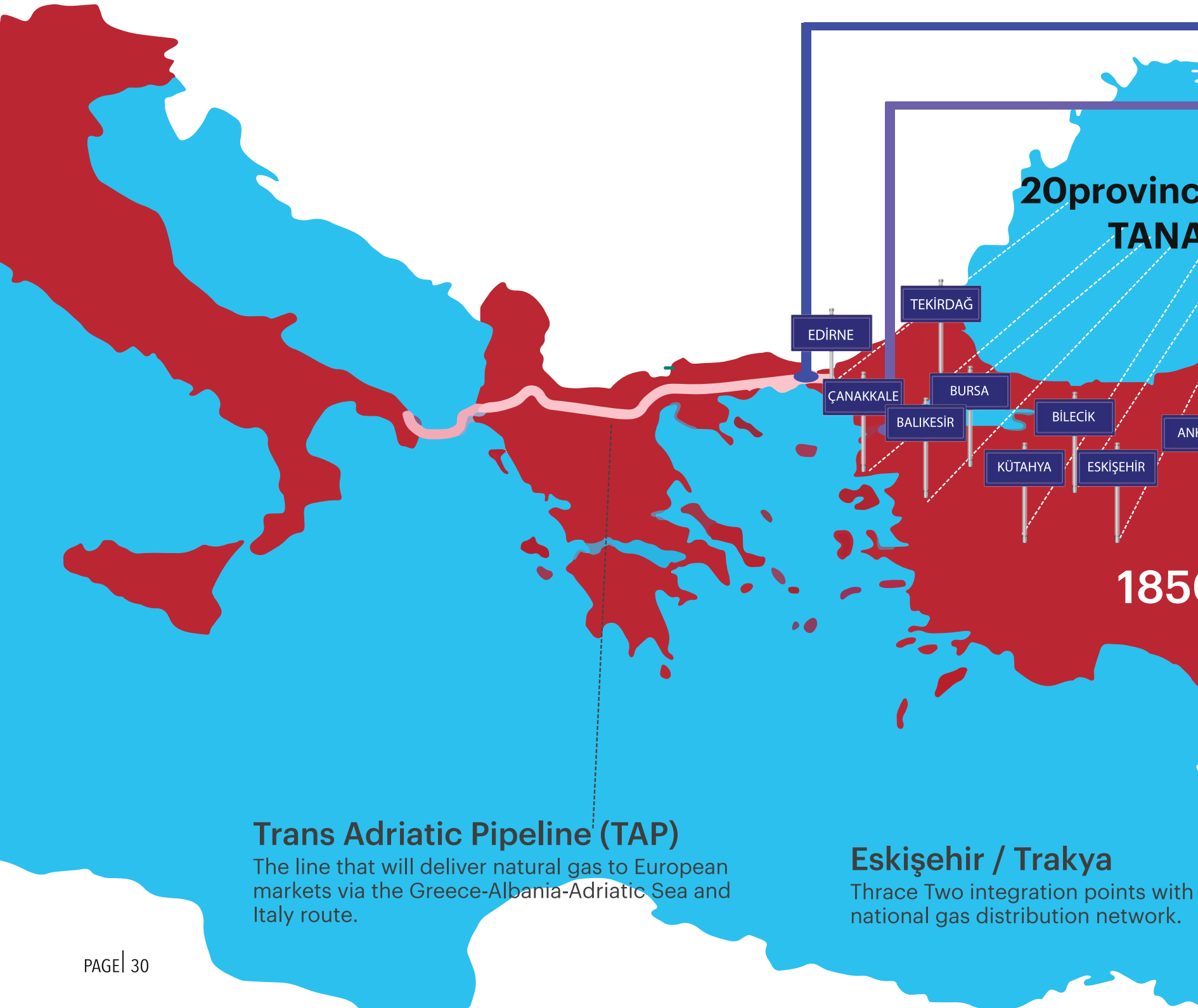


TANAP



Ardahan Posof

TANAP's start point in Turkey



20 provinces
TANAP

EDİRNE

TEKİRDAĞ

ÇANAKKALE

BURSA

BALIKESİR

BİLECİK

KÜTAHYA

ESKİŞEHİR

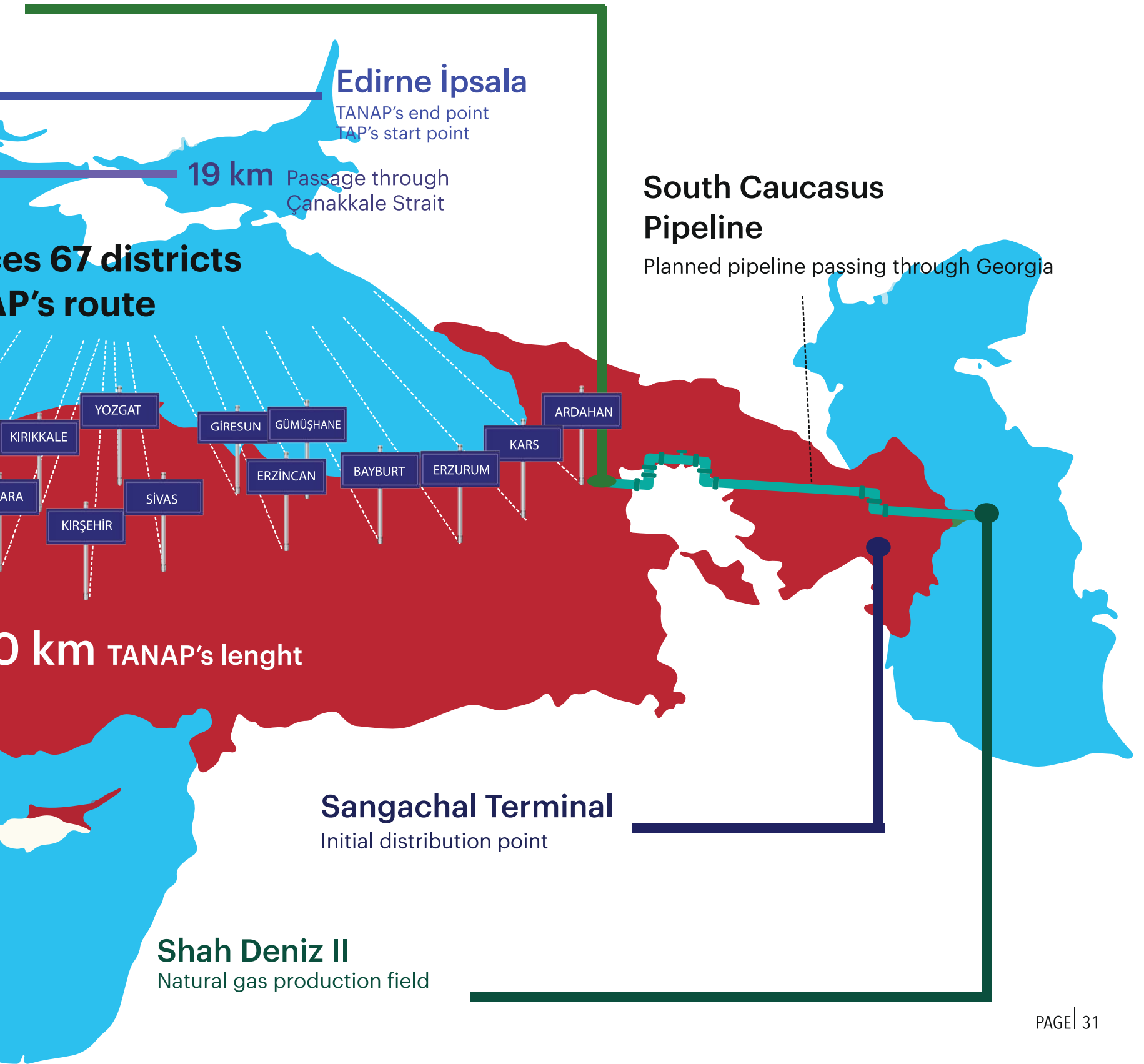
1850

Trans Adriatic Pipeline (TAP)

The line that will deliver natural gas to European markets via the Greece-Albania-Adriatic Sea and Italy route.

Eskişehir / Trakya

Thrace Two integration points with national gas distribution network.



**COMPTOIR ALGERIEN
DE MATERIEL
ELECTRIQUE ET GAZIER
(CAMEG)
NATURAL GAS
TRANSMISSION
PROJECTS**



Owner



Total Length	-	350 Kilometers
Usage Purpose	-	Gas Transmission Pipeline
Outside Diameter	-	508 mm / 711 mm
Wall Thickness	-	9,5 mm / 14,3 mm
Production Standard	-	API 5L PSL2
Steel Grade	-	X70
Coating & Lining	-	3LPE / Flow Coat Epoxy

**ISTANBUL WATER
AND SEWERAGE
ADMINISTRATION
MELEN PROJECT
ISTANBUL
MUNICIPALITY
WATER SUPPLY**

Owner



Total Length	-	37,5 Kilometers
Usage Purpose	-	Drinking Water Transmission Pipeline
Outside Diameter	-	3048 mm
Wall Thickness	-	25 mm
Production Standard	-	EN 10217-1
Steel Grade	-	S275JR
Coating & Lining	-	3LPE / Cement Mortar



İSTANBUL GRAND AIRPORT (İGA) PROJECT WATER SUPPLY

Owner



Contractor



Total Length	-	12 Kilometers
Usage Purpose	-	Water Transmission Pipeline
Outside Diameter	-	2235 mm
Wall Thickness	-	17,5 mm
Production Standard	-	EN 10217-1
Steel Grade	-	S235JR
Coating & Lining	-	3LPE / Cement Mortar



İZMİT TURKEY YARIMCA DP WORLD PORT PROJECT

Owner



DP WORLD
Yarimca

Contractor



Total Quantity	-	21.000 Tonnes
Usage Purpose	-	Piling Project
Outside Diameter	-	1219 mm
Wall Thickness	-	23 mm
Production Standard	-	EN 10217-1
Steel Grade	-	S355JR
Coating & Lining	-	Glass Flake Epoxy



**GENERAL DIRECTORATE
OF STATE HYDRAULIC
WORKS
GAZİANTEP-DÜZBAĞ
DRINKING WATER SUPPLY**

Owner



Contractor



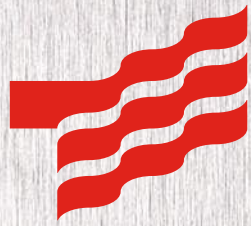
Total Quantity	-	160.000 Tonnes
Total Length	-	120 Kilometers
Usage Purpose	-	Drinking Water Transmission Pipeline
Outside Diameter	-	1422 mm / 2438 mm / 2642 mm
Wall Thickness	-	14 mm / 22 mm / 24 mm / 25,4 mm
Production Standard	-	TS EN 10217-1
Steel Grade	-	S275JR / S355JR
Coating & Lining	-	3LPE / Solvent Free Epoxy / Cement



**GLOBAL
STEEL
PRODUCER
OF TURKEY**



TOSYALI
HOLDING



TOSÇELİK Spiral Boru



TOSÇELİK SPIRAL PIPE

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TOSÇELİK Demir Çelik



TOSÇELİK Granül

Commitment to Excellence



TOSÇELİK Special Steel



TOSÇELİK Profil ve Sac



TOSÇELİK Spiral Boru



TOSYALI ALGERIE Iron Steel



TOSYALI Filmaşın ve İnşaat
Demiri Üretim Sanayi AŞ