



TOSÇELİK Spiral Boru



Tosçelik
Spiral Boru

www.toscelikspiral.com.tr

ENG





TOSYALI FOR A SUSTAINABLE LIFE

Tosyalı not only strengthens its position in the steel industry through product quality but also through sustainability-focused efforts. By declaring "Tosyalı for a Sustainable Life" we commit to green steel and decarbonization initiatives, demonstrating our dedication to environmental responsibilities.

Our responsible production and consumption approach includes the use of eco-friendly technologies, and the generation of energy from renewable sources ensures that our production maintains a low carbon footprint. At the same time, our production with a high scrap ratio contributes to the circular economy.

With the commencement of the Solar Power Plant (SPP) project across our facilities, we take pride in having the world's largest rooftop Solar Power Plant. This project not only reduces our energy costs but also contributes to making our steel production one of the cleanest and greenest facilities globally.

At our R&D Center, we focus on sustainability-driven projects, constantly reducing our carbon footprint through process improvements. Through innovation and technological advancements, we pave the way for environmentally friendly methods in steel production.

With a high rate of waste recycling and a commitment to the principles of the circular economy, we strive to leave a sustainable world for future generations. At Tosyalı, we take maximum effort to ensure a livable world for tomorrow. By taking steps today for a sustainable future, we play a pioneering role in the steel industry and maintain our determination to minimize environmental impacts.

GREEN STEEL



TOSYALI FOR A SUSTAINABLE LIFE

Steel is in life today, at the forefront of change and transformation tomorrow, and at the center of life in the future.

Leader in Green Steel for Today and Tomorrow

-  Türkiye's steel producer with the lowest carbon footprint
-  Partnership with world giants in circular economy
-  Sustainability-oriented R&D projects and investments
-  Leading the steel industry in the use of renewable energy sources



About Us

Tosçelik Spiral Boru, is an international pipe manufacturer for oil & gas and water transmission lines and marine project, which provides its products for prestigious pipeline projects all around the world.

Tosçelik Spiral Boru, Group Company of Tosyalı having facilities in Africa, Asia and Europe is producing submerged arc welded spiral pipes by using highest technology and fully equipped laboratories, with a highly qualified human resource. All production processes and products in Tosçelik Spiral comply with the international requirements and worldwide production standards including API 5L, EN ISO 3183, EN 10224, EN 10217, EN 10219, ASTM A252.

Tosçelik Spiral Boru mills are able to produce Submerged Arc Welded Steel Pipes from 8" diameter up to 126" diameter with a wall thickness from 4 mm to 26 mm respectively. Furthermore, Tosçelik Spiral is able to apply all kinds of anticorrosive coating and lining (i.e. 3LPE/3LPP, Epoxy Coatings, FCE, SFE, and Cement Mortar etc.) integrated with the pipe manufacturing.

Tosçelik Spiral has been come forward by being the main supplier to Trans Anatolian Natural Gas Pipeline (TANAP) Project and BRUA (Bulgaria-Romania-Hungary-Austria) Gas Pipeline project.

Our Vision

To be the architect of a better future through green steel production.

Our Mission

To represent the best reference to the world as one of the most important and strategic iron and steel companies in Europe and Africa.



Environmentalist



World Company



Sustainability



Innovator



Experienced Staff

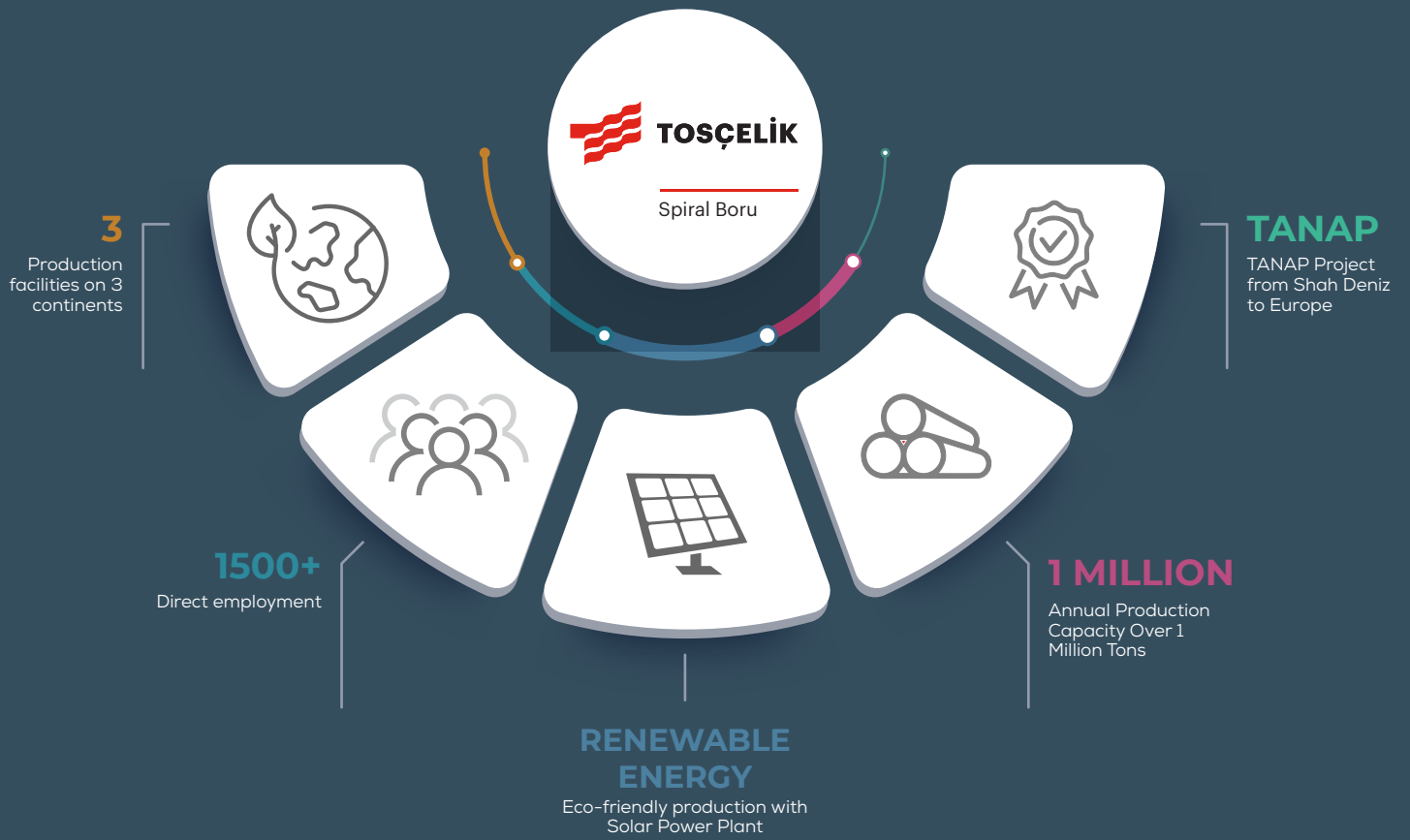


Efficiency Oriented



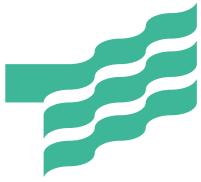
Industry Leading

Tosçelik Spiral Boru





INDUSTRY
INDUSTRY
QUALITY
QUALITY
INVESTMENT
INVESTMENT
PRODUCT RANGE
PRODUCT RANGE
PRODUCT
PRODUCT
MACHINE
MACHINE
ELECTRONICS
ELECTRONICS
AUTOMATION
AUTOMATION
HIGH TECHNOLOGY
HIGH TECHNOLOGY
INDUSTRY 4.0
INDUSTRY 4.0
IRON&STEEL
IRON&STEEL
SUSTAINABILITY
SUSTAINABILITY
GREEN STEEL
GREEN STEEL
DECARBONIZATION
DECARBONIZATION



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Spiral Welded Steel Pipes



Our facility has a very broad production portfolio in the diameter range of \varnothing 8" (219mm)- \varnothing 128" (3200mm), meeting all norms regarding spiral pipes with the API and other well-known international 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 standards.



Production Ranges



Production range of outside diameter from Ø 8" (219mm) up to Ø 128" (3200mm) with wall thickness up to 26mm

Tosçelik Spiral Boru 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.

| WT | inch | 0,2 | 0,22 | 0,25 | 0,28 | 0,31 | 0,35 | 0,39 | 0,43 | 0,47 | 0,49 | 0,55 | 0,63 | 0,69 | 0,79 | 0,87 | 0,94 | 1,00 | 1,02 | |
|----------|------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--|
| | mm | 5,0 | 5,6 | 6,3 | 7,1 | 8,0 | 8,8 | 10,0 | 11,0 | 12,0 | 12,7 | 14,0 | 16,0 | 17,5 | 20,0 | 22,0 | 24,0 | 25,4 | 26,0 | |
| Diameter | | Weight Kg/m | | | | | | | | | | | | | | | | | | |
| inch | mm | | | | | | | | | | | | | | | | | | | |
| 8 | 219 | 26,4 | 55,3 | | | | | | | | | | | | | | | | | |
| 10 | 254 | 30,7 | 34,3 | 38,5 | | | | | | | | | | | | | | | | |
| 12 | 305 | 37,0 | 41,3 | 46,4 | 51,4 | | | | | | | | | | | | | | | |
| 14 | 356 | 43,2 | 48,3 | 54,3 | 61,0 | 68,6 | | | | | | | | | | | | | | |
| 16 | 406 | 49,5 | 55,3 | 62,2 | 69,9 | 78,6 | 86,3 | | | | | | | | | | | | | |
| 18 | 457 | 55,7 | 62,3 | 70,0 | 78,8 | 88,6 | 97,3 | 110,2 | 121,0 | 131,7 | 139,1 | 152,9 | | | | | | | | |
| 20 | 508 | 62,0 | 69,4 | 77,9 | 87,7 | 98,6 | 108,3 | 122,8 | 134,8 | 146,8 | 155,1 | 170,5 | 194,1 | | | | | | | |
| 22 | 559 | 68,3 | 76,4 | 85,9 | 96,6 | 108,7 | 119,4 | 135,4 | 148,7 | 161,9 | 171,1 | 188,2 | 214,2 | | | | | | | |
| 24 | 610 | 74,6 | 83,5 | 93,8 | 105,6 | 118,8 | 130,5 | 148,0 | 162,5 | 177,0 | 187,1 | 205,8 | 234,4 | 233,7 | | | | | | |
| 26 | 660 | 80,8 | 90,4 | 101,6 | 114,3 | 128,6 | 141,3 | 160,3 | 176,0 | 191,8 | 202,7 | 223,0 | 254,1 | 255,7 | | | | | | |
| 28 | 711 | 87,0 | 97,4 | 109,5 | 123,2 | 138,7 | 152,4 | 172,9 | 189,9 | 206,8 | 218,7 | 240,6 | 274,2 | 227,3 | | | | | | |
| 30 | 762 | 93,3 | 104,5 | 117,4 | 132,2 | 148,7 | 163,5 | 185,4 | 203,7 | 221,9 | 234,7 | 258,2 | 294,3 | 299,3 | | | | | | |
| 32 | 813 | 99,6 | 111,5 | 125,3 | 141,1 | 158,8 | 174,5 | 198,0 | 217,6 | 237,0 | 250,6 | 275,8 | 314,5 | 321,3 | 366,0 | | | | | |
| 34 | 864 | 105,9 | 118,5 | 133,3 | 150,0 | 168,9 | 185,6 | 210,6 | 231,4 | 252,1 | 266,6 | 293,5 | 334,6 | 343,3 | 391,1 | 429,1 | | | | |
| 36 | 914 | 112,1 | 125,4 | 141,0 | 158,8 | 178,7 | 196,4 | 222,9 | 244,9 | 266,9 | 282,3 | 310,7 | 354,3 | 365,3 | 416,3 | 456,8 | 526,7 | | | |
| 38 | 965 | 118,4 | 132,5 | 148,9 | 167,7 | 188,8 | 207,5 | 235,5 | 258,8 | 282,0 | 298,2 | 328,3 | 374,4 | 386,9 | 440,9 | 483,9 | 556,9 | 556,6 | 569,4 | |
| 40 | 1016 | | 139,5 | 156,9 | 176,6 | 198,9 | 218,6 | 248,1 | 272,6 | 297,1 | 314,2 | 345,9 | 394,6 | 408,9 | 466,1 | 511,6 | 587,1 | 588,5 | 602,0 | |
| 42 | 1067 | | 146,6 | 164,8 | 185,6 | 208,9 | 229,6 | 260,7 | 286,5 | 312,2 | 330,2 | 363,5 | 414,7 | 430,9 | 491,2 | 539,3 | 617,3 | 620,5 | 634,7 | |
| 44 | 1118 | | 153,6 | 172,7 | 194,5 | 219,0 | 240,7 | 273,2 | 300,3 | 327,3 | 346,2 | 381,1 | 434,8 | 452,9 | 516,4 | 566,9 | 647,5 | 652,4 | 667,4 | |
| 46 | 1168 | | | 180,5 | 203,3 | 228,8 | 251,6 | 285,6 | 313,8 | 342,1 | 361,8 | 398,4 | 454,5 | 474,9 | 541,5 | 594,6 | 677,1 | 684,4 | 700,1 | |
| 48 | 1219 | | | 188,4 | 212,2 | 238,9 | 262,6 | 298,1 | 327,7 | 357,2 | 377,8 | 416,0 | 474,7 | 496,5 | 566,2 | 621,7 | 707,2 | 715,7 | 732,2 | |
| 52 | 1321 | | | | 230,0 | 259,0 | 284,8 | 323,3 | 355,4 | 387,4 | 409,7 | 451,2 | 514,9 | 518,5 | 591,3 | 649,4 | 767,6 | 747,6 | 764,9 | |
| 54 | 1372 | | | | 239,0 | 269,1 | 295,8 | 335,9 | 369,2 | 402,5 | 425,7 | 468,8 | 535,0 | 562,5 | 641,7 | 704,7 | 797,8 | 811,5 | 830,3 | |
| 56 | 1422 | | | | 247,7 | 279,0 | 306,7 | 348,2 | 382,7 | 417,2 | 441,4 | 486,1 | 554,8 | 584,5 | 666,8 | 732,4 | 827,4 | 843,5 | 863,0 | |
| 60 | 1524 | | | | | 299,1 | 328,8 | 373,4 | 410,4 | 447,4 | 473,3 | 521,3 | 595,0 | 606,1 | 691,5 | 759,5 | 887,8 | 874,8 | 895,1 | |
| 64 | 1626 | | | | | | 350,9 | 398,5 | 438,1 | 477,6 | 505,3 | 556,5 | 635,2 | 650,1 | 741,8 | 814,9 | 948,1 | 938,7 | 960,5 | |
| 66 | 1676 | | | | | | 361,8 | 410,8 | 451,6 | 492,4 | 520,9 | 573,8 | 655,0 | 694,1 | 792,1 | 870,2 | 977,7 | 1002,6 | 1025,9 | |
| 68 | 1727 | | | | | | 372,9 | 423,4 | 465,5 | 507,5 | 536,9 | 591,4 | 675,1 | 715,7 | 816, | 897,3 | 1007,9 | 1033,9 | 1057,9 | |
| 72 | 1829 | | | | | | | 448,6 | 493,2 | 537,7 | 568,8 | 626,6 | 715,3 | 737,7 | 841,9 | 925,0 | 1068,3 | 1065,8 | 1090,6 | |
| 76 | 1930 | | | | | | | 473,5 | 520,5 | 567,6 | 600,5 | 661,5 | 755,2 | 781,8 | 892,2 | 980,3 | 1128,0 | 1129,7 | 1156,0 | |
| 80 | 2032 | | | | | | | 498,6 | 548,2 | 597,8 | 632,4 | 696,7 | 795,4 | 825,3 | 942,0 | 1035,1 | 1188,4 | 1193,0 | 1220,8 | |
| 88 | 2235 | | | | | | | | 603,3 | 657,8 | 696,0 | 766,8 | 875,5 | 869,4 | 992,3 | 1090,5 | 1308,6 | 1256,9 | 1286,2 | |
| 92 | 2337 | | | | | | | | | 686,0 | 727,9 | 802,0 | 915,8 | 957,0 | 1092,4 | 1200,6 | 1368,6 | 1384,0 | 1416,3 | |
| 96 | 2438 | | | | | | | | | | 759,6 | 836,9 | 955,6 | 1001,0 | 1142,7 | 1255,9 | 1428,7 | 1447,9 | 1481,7 | |
| 100 | 2540 | | | | | | | | | | | 872,1 | 995,9 | 1044,6 | 1192,6 | 1310,7 | 1489,1 | 1511,2 | 1546,5 | |
| 104 | 2642 | | | | | | | | | | | 907,3 | 1036,1 | 1088,6 | 1242,9 | 1366,1 | 1549,4 | 1575,1 | 1611,9 | |
| 108 | 2743 | | | | | | | | | | | 94,2 | 1079,0 | 1132,6 | 1293,2 | 1421,4 | 1609,2 | 1638,9 | 1677,3 | |
| 112 | 2845 | | | | | | | | | | | | 1116,2 | 1176,2 | 1343,0 | 1476,2 | 1669,6 | 1702,2 | 1742,0 | |
| 116 | 2946 | | | | | | | | | | | | 1156,1 | 1220,2 | 1393,3 | 1531,5 | 1669,6 | 1766,1 | 1807,4 | |
| 120 | 3048 | | | | | | | | | | | | 1196,3 | 1263,8 | 1443,1 | 1586,3 | 1729,4 | 1829,4 | 1872,2 | |
| 120 | 3048 | | | | | | | | | | | | 1256,4 | 1307,8 | 1493,4 | 1641,7 | 1789,7 | 1893,2 | 1937,6 | |
| 126 | 3200 | | | | | | | | | | | | | 1373,6 | 1568,6 | 1724,3 | 1879,9 | 1988,7 | 2035,3 | |

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, Tosçelik Spiral Boru is 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 Tosçelik Spiral Boru 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

ISO 3183

CSA Z245.1

EN 10224

EN 10217

EN 10219

ASTM A252

AWWA C200

External Coating

Polyethylene Coating

Polypropylene Coating

Single / Dual Layer FBE

Liquid Epoxy Applications

Polyurethane Coating

DIN 30670, TS 5139, EN ISO 21809-1

DIN 30678

AWWA C213

AWWA C210, ISO 12944

AWWA C222, EN 10290

Internal Lining

Epoxy Lining

Cement Mortar Lining

API RP 5L2, AWWA C 210, NF A 49-709, EN 10301, EN 10339

AWWA C 205, EN 10298, DIN 2614, BS534, TS 8590

Quality Control / Assurance



Tosçelik Spiral Boru has been certified and fulfills all requirements of quality management systems such as ISO 9001, ISO 14001, ISO 45001, ISO 29001 and API Spec Q1. Tosçelik Spiral Boru 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

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



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

Internal Lining & External Coating

In order to prevent steel to be affected by corrosive environment, the pipes are high quality and care 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.

Surface Preparation

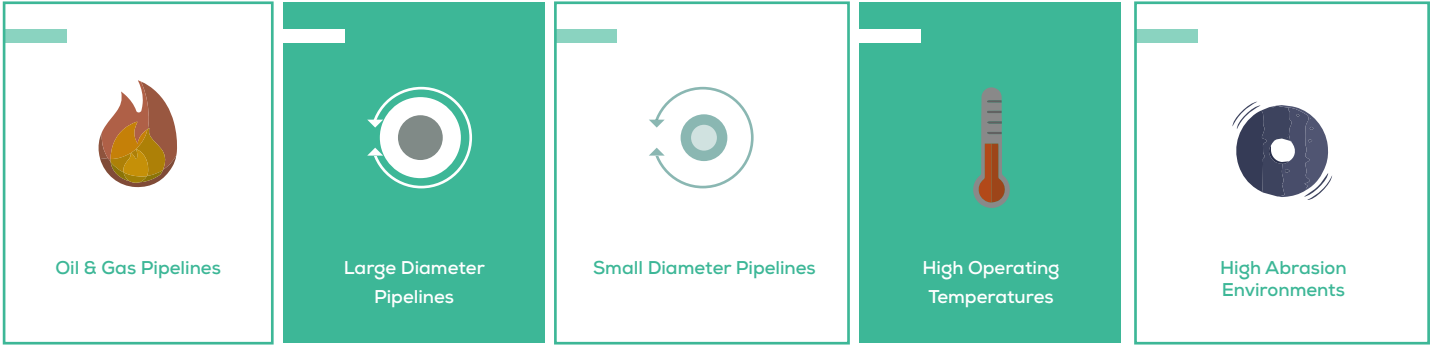


Tosçelik applies surface preparation with utmost care to obtain satisfactory surface roughness and cleanliness and assure high performance of its coating / lining applications.

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.

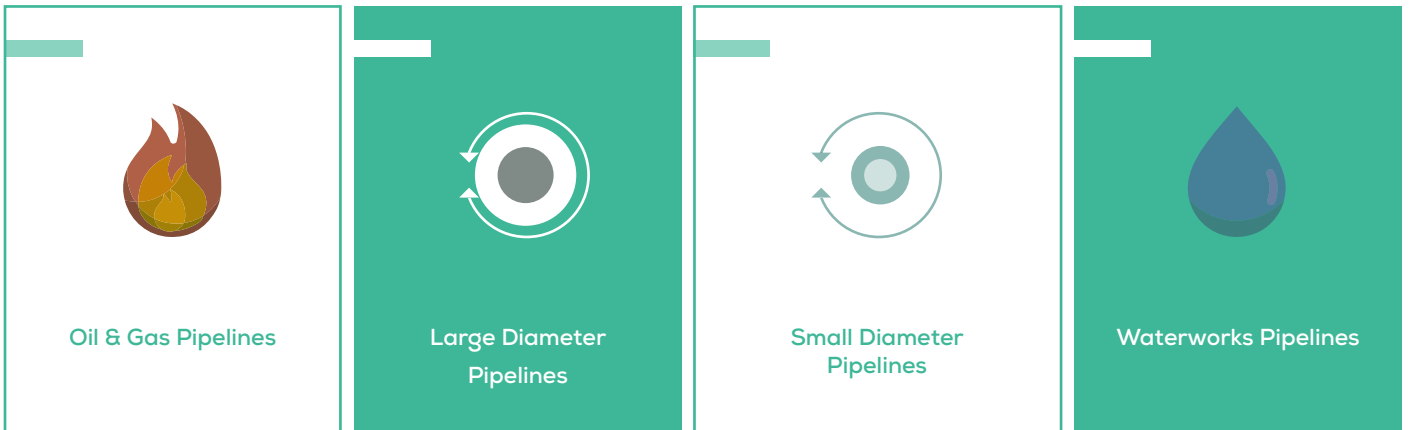
3LPP (Three Layer Polypropylene Coating)

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 Boru.



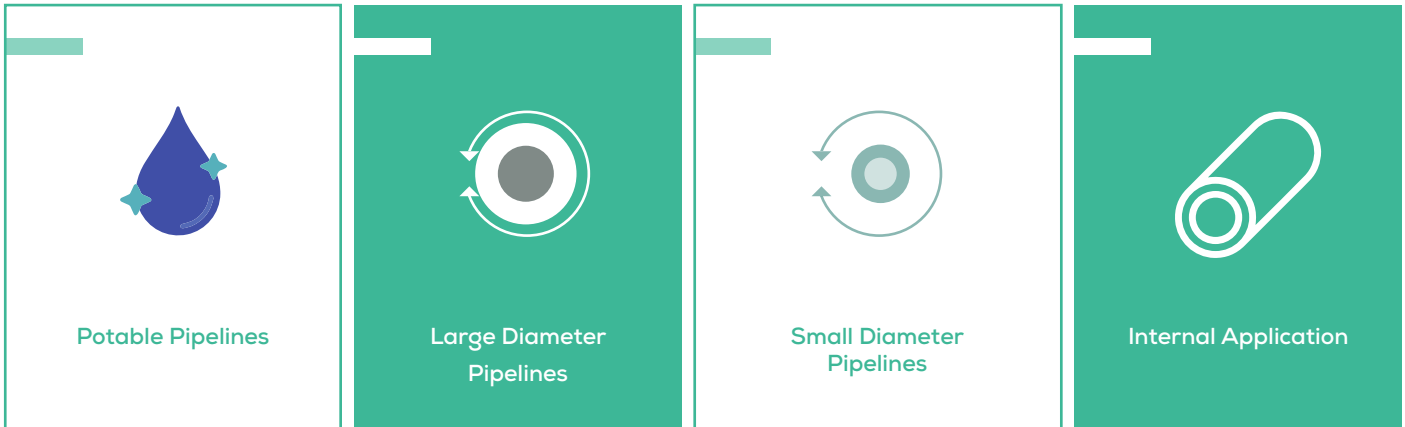
3LPE (Three Layer Polyethylene Coating)

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 Boru.



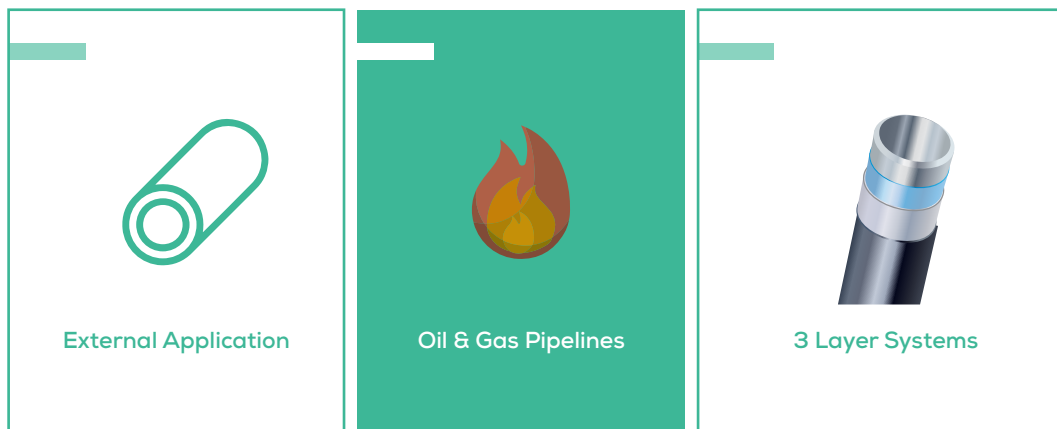
Cement Mortar

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.



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.



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.

Solvent-Free Epoxy

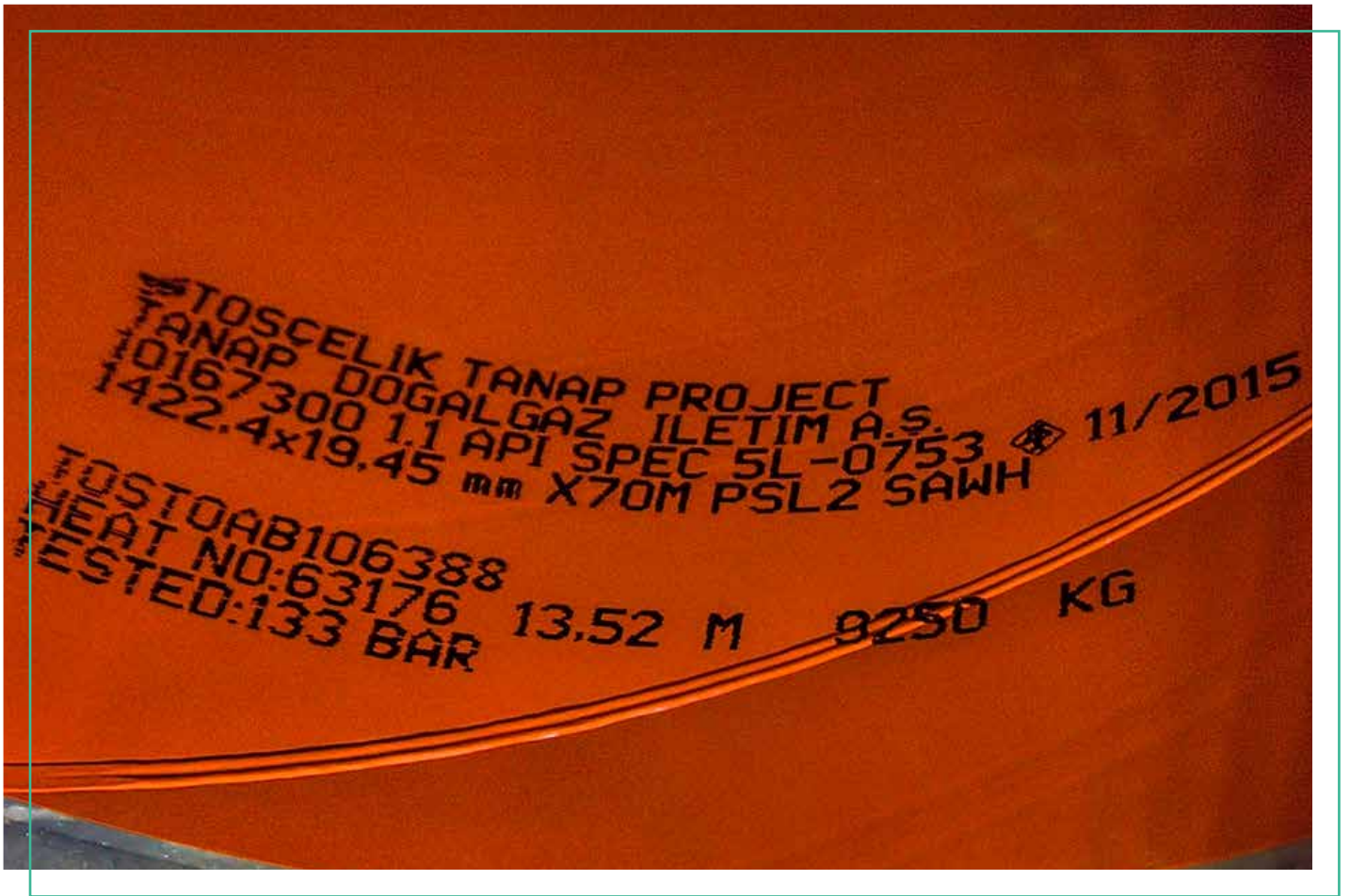
Tosçelik SFE application provides a corrosion protection for the internals of water pipes which conforms to international standards for potable water transmission as well as other applications including field water, process water, sewage, salt water, wastewater, etc.

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.

Robotic Marking

Tosçelik Spiral Boru has online pipe tracking systems and make robotic marking on outside and inside of the pipe for easy and reliable identification of the pipe ID.



Logistics

Fast & Safe Delivery

Tosçelik Spiral Boru is located on the eastern Mediterranean coast of Türkiye 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.

Projects Worldwide

TANAP

Natural Gas Transmission Pipeline



| TANAP | |
|---------------------|-----------------------------------|
| Total Quantity | 470 km / 282.000 tons |
| Purpose of Use | 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 | X70M PSL2 |
| Coating & Lining | 3LPE / FCE |

DP WORLD

İzmit Yarımca, Türkiye
DP World Port Project



| DP WORLD PORT | |
|---------------------|----------------|
| Total Quantity | 21.000 tons |
| Purpose of Use | Piling Project |
| Outside Diameter | 1219 mm |
| Wall Thickness | 19 mm / 23 mm |
| Production Standard | EN 10296-1 |
| Steel Grade | S355JR |
| Coating & Lining | GFE / Bare |

Projects Worldwide

İSTANBUL Airport (İGA)

İstanbul Grand Airport
(İGA) Project Water Supply

| İSTANBUL AIRPORT | |
|---------------------|-----------------------------|
| Total Quantity | 12 km / 11.500 tons |
| Purpose of Use | 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 |



iski

İstanbul Water and Sewerage
Administration Melen Project

| iski | |
|---------------------|-----------------------------|
| Total Quantity | 37,5 km / 70.000 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 3048 mm |
| Wall Thickness | 25 mm |
| Production Standard | EN 10217-1 |
| Steel Grade | S275JR |
| Coating & Lining | 3LPE / Cement Mortar |



Projects Worldwide

DSİ DEVELİ

Türkiye DSİ Develi Lowland
Gaziantep-Düzbağ
Elazığ Water Transmission Pipelines

| DP Develi | |
|---------------------|-----------------------------|
| Total Quantity | 25 km / 31.000 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 2540 mm |
| Wall Thickness | 20 mm |
| Production Standard | TS EN 10217-1 |
| Steel Grade | S275JR |
| Coating & Lining | 3LPE / SFE |



| DSİ Gaziantep-Düzbağ | |
|----------------------|-----------------------------|
| Total Quantity | 131 km / 156.500 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 1219 mm / 2642 mm |
| Wall Thickness | 10 mm / 25,4 mm |
| Production Standard | EN 10217-1 |
| Steel Grade | S275JR |
| Coating & Lining | 3LPE / Cement Mortar |

| DSİ Elazığ | |
|---------------------|-----------------------------|
| Total Quantity | 53 km / 34.800 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 1524 mm |
| Wall Thickness | 14,2 mm / 17,5 mm |
| Production Standard | EN 10217-1 |
| Steel Grade | S275JR |
| Coating & Lining | 3LPE / Cement Mortar |

BOTAŞ

Türkiye BOTAŞ Western Black Sea
DGBH Phase 1/ Phase 3 &
BOTAŞ Manavgat-Alanya-Gazipaşa-
Anamur DGBH Phase 2
Natural Gas Transmission Project

| BOTAŞ Batı Karadeniz | |
|----------------------|-----------------------------------|
| Total Quantity | 60 km / 28.000 tons |
| Purpose of Use | Natural Gas Transmission Pipeline |
| Outside Diameter | 1219 mm |
| Wall Thickness | 14,3 mm / 22,2 mm |
| Production Standard | API 5L PSL2 |
| Steel Grade | X65M PSL2 |
| Coating & Lining | 3LPE / Bare |

| BOTAŞ Manavgat-Alanya-Gazipaşa-Anamur | |
|---------------------------------------|-----------------------------------|
| Total Quantity | 68 km / 20.000 tons |
| Purpose of Use | Natural Gas Transmission Pipeline |
| Outside Diameter | 1016 mm |
| Wall Thickness | 11,9 mm / 17,5 mm |
| Production Standard | API 5L PSL2 |
| Steel Grade | X65M PSL2 |
| Coating & Lining | 3LPE / Bare |



Projects Worldwide

SONELGAZ

Natural Gas Transmission Project

| SONELGAZ | |
|---------------------|-----------------------------------|
| Total Quantity | 70 km / 11.500 tons |
| Purpose of Use | Natural Gas Transmission Pipeline |
| Outside Diameter | 711 mm |
| Wall Thickness | 9,5 mm |
| Production Standard | API 5L PSL2 |
| Steel Grade | X70M PSL2 |
| Coating & Lining | 3LPE / FCE |



ALGERIA CAMEG

S.P.A Natural Gas Transmission Project

| CAMEG | |
|---------------------|-----------------------------------|
| Total Quantity | 351 km / 77.000 tons |
| Purpose of Use | Natural Gas Transmission Pipeline |
| Outside Diameter | 508 mm / 711 mm |
| Wall Thickness | 9,5 mm / 14,3 mm |
| Production Standard | API 5L PSL2 |
| Steel Grade | X70M PSL2 |
| Coating & Lining | 3LPE / FCE |



Projects Worldwide

EGYPT

El Hammam - Mostakbal Masr
Bahr El-Baqr
Water Transmission Pipeline

| EL HAMMAM | |
|---------------------|-----------------------------|
| Total Quantity | 25 km / 18.500 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 2225 mm / 2525 mm |
| Wall Thickness | 12,7 mm |
| Production Standard | TS EN10217-1 |
| Steel Grade | S235JR |
| Coating & Lining | 3LPE / SFE |



| MOSTAKBAL MASR | |
|---------------------|-----------------------------|
| Total Quantity | 16 km / 12.600 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 1420 mm / 3028 mm |
| Wall Thickness | 10 mm / 14 mm |
| Production Standard | EN 10217-1 |
| Steel Grade | S235JR |
| Coating & Lining | 3LPE / SFE |

| BAHR EL-BAQR | |
|---------------------|-----------------------------|
| Total Quantity | 25 km / 18.500 tons |
| Purpose of Use | Water Transmission Pipeline |
| Outside Diameter | 2225 mm / 2525 mm |
| Wall Thickness | 12,7 mm |
| Production Standard | TS EN10217-1 |
| Steel Grade | S235JR |
| Coating & Lining | 3LPE / SFE |

MOROCCO NADOR PORT

Morocco Nador Port Piling Project

| MOROCCO NADOR PORT | |
|---------------------|------------------|
| Total Quantity | 33.000 Tons |
| Purpose of Use | Piling Project |
| Outside Diameter | 914 mm / 1422 mm |
| Wall Thickness | 18 mm / 25,4 mm |
| Production Standard | EN10219-1/2 |
| Steel Grade | X65 PSL1 |
| Coating & Lining | EPX / Bare |



Projects Worldwide

ROMANIA

Brua Natural Gas Transmission Pipeline
 Transgaz Podișor Natural Gas Transmission Pipeline

| BRUA PIPELINE | |
|---------------------|-----------------------------------|
| Total Length | 471 km / 104.000 tons |
| Purpose of Use | Natural Gas Transmission Pipeline |
| Outside Diameter | 813 mm |
| Wall Thickness | 10 mm / 14,2 mm |
| Production Standard | EN ISO 3183 PSL2 |
| Steel Grade | L415NE PSL2 |
| Coating & Lining | 3LPE / FCE |

| PODIȘOR PIPELINE | |
|---------------------|-----------------------------------|
| Total Quantity | 306 km / 100.000 tons |
| Purpose of Use | Natural Gas Transmission Pipeline |
| Outside Diameter | 813 mm / 1219 mm |
| Wall Thickness | 12,5 mm / 20 mm |
| Production Standard | EN ISO 3183 PSL2 |
| Steel Grade | L415N PSL2 |
| Coating & Lining | 3LPE / EPX |



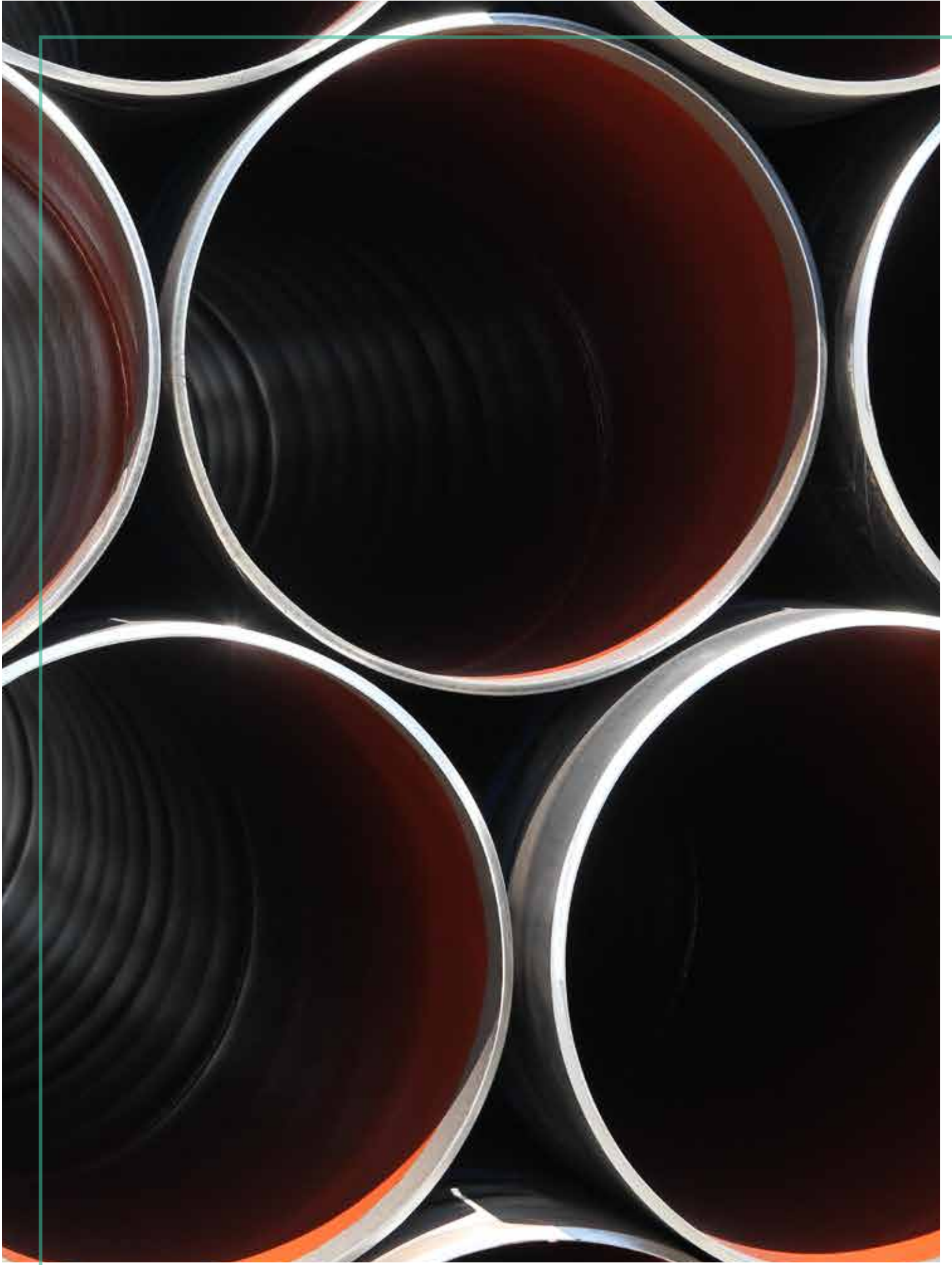
GENOA PORT

Genoa Piling Project
 Augusta Piling Project

| GENOA | |
|---------------------|-----------------|
| Total Quantity | 3.500 tons |
| Purpose of Use | Piling Project |
| Outside Diameter | 1829 mm |
| Wall Thickness | 15,4 mm / 25 mm |
| Production Standard | EN10219-1/2 |
| Steel Grade | S420M |
| Coating & Lining | GFE |

| AUGUSTA | |
|---------------------|-----------------|
| Total Quantity | 5.400 tons |
| Purpose of Use | Piling Project |
| Outside Diameter | 1524 mm |
| Wall Thickness | 14,2 mm / 16 mm |
| Production Standard | EN10219-1/2 |
| Steel Grade | S460M |
| Coating & Lining | EPX / Bare |





VISION GREEN

“

*As Tosyalı, our vision is to contribute to building a sustainable world via ensuring environmentally production in our facilities, with the help of technology, innovation and renewable energy usage. Within our responsible ecosystem management approach, we produce green steel products in every category of the steel. We produce **less carbon emission, consume less water, focus on renewable energy resources, produce with highest efficiency and recycle all our wastes.***

We believe that a sustainable world is possible with the green transformation of the steel industry.

Fuat Tosyalı
Chairman of the Board
of Directors of Tosyalı Holding

”

Tosyalı proudly presents a new umbrella brand to represent its green steel vision in every touch point of its operations.

Tosyalı V-Green

This is not just a brand, it is also the strongest indicator of sustainability actions those have been taking place for many years at Tosyalı and will continue by highest determination.

In all our production facilities, we focus on new generation green steel production and under the umbrella of V-Green, we introduce environment friendly products for our suppliers.

How we are making this vision live in Tosyalı?

We produce green steel with the help of;

- technology usage,
- innovation,
- renewable energy resources,
- recycling in every touch point production and
- operating with highest efficiency.

We aim to be the world's leading sustainable green steel producer with the lowest carbon footprint.

“

“V” are ready to be “Green”!

V-Green.
Vision Green.





TOSÇELİK Spiral Boru





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Barbaros Mahallesi
Sütçü yolu Caddesi
Ataşehir / İstanbul / Türkiye

Osmaniye Factory
Organize Sanayi Bölgesi,
Toprakkale / Türkiye

Algeria Factory
Pôle Economique Plateau Gourirate
commune Béthioua
Oran / Algérie

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