

LINE PIPE PRODUCT CATALOGUE





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## Borusan Group at a Glance

### Steel

The Pipe Group

Borusan Mannesmann  
Borusan Stainless Steel Pipe  
Borusan Engineering  
Borusan İstikbal Trading

The Flat Steel Group

Borçelik  
Kerim Çelik



### Distributorship

The Earth Moving Equipments Group

Borusan Makina ve Güç Sistemleri

The Automotive Group

Borusan Otomotiv & Borusan Oto  
Supsan Engine Valves  
Manheim Turkey



### Partners



Giwa Holding GmbH



### Distributed Brands



RANGE ROVER



MAK





## Energy

Borusan EnBW Energy



## Logistics

Borusan Logistics

Borusan International



— EnBW

In 4 major business areas  
with 5.000 employees...



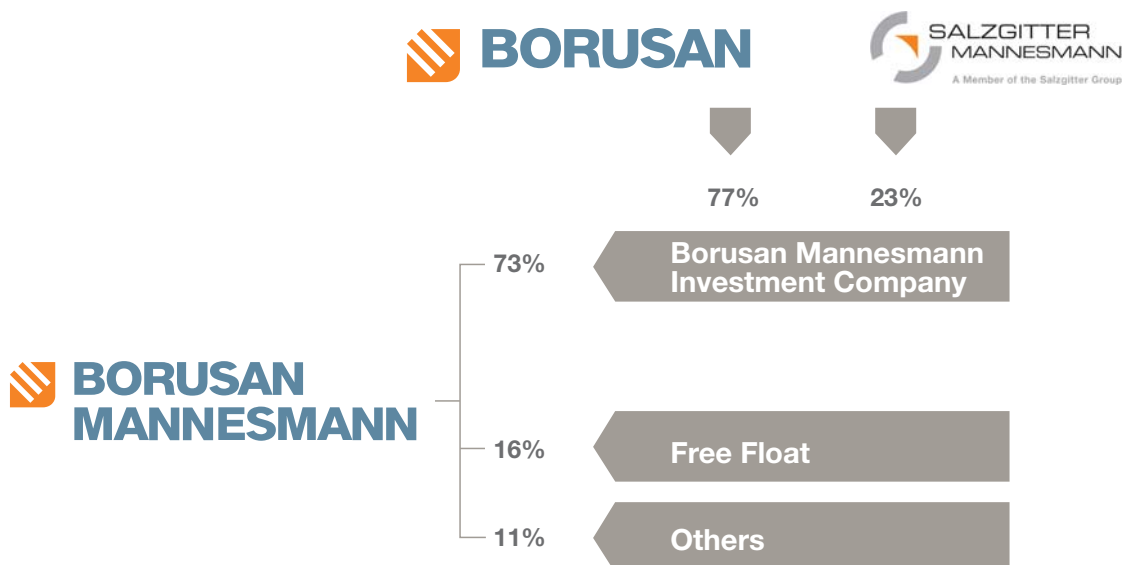
## Borusan Mannesmann in Brief

- ❏ Flagship of Borusan Group with 54 years of pipe manufacturing experience.
- ❏ Operates with 5 plants, 3 in Turkey (1 HSAW, 2 ERW), 1 in Italy (ERW), 1 in USA (ERW)
- ❏ Total annual capacity of 1 mn tons.
- ❏ Workforce of 1.250 people.
- ❏ 20 years of Contract Management competency
- ❏ Has its own port (Borusan Port) which brings operational flexibility in terms of logistics inbound and outbound.
- ❏ Together with Borusan Group's integrated logistic company Borusan Logistics; provides logistic services for every international pipeline project.
- ❏ Sole 24.5 m single seam API/ISO/EN large diameter line pipe producer in Europe

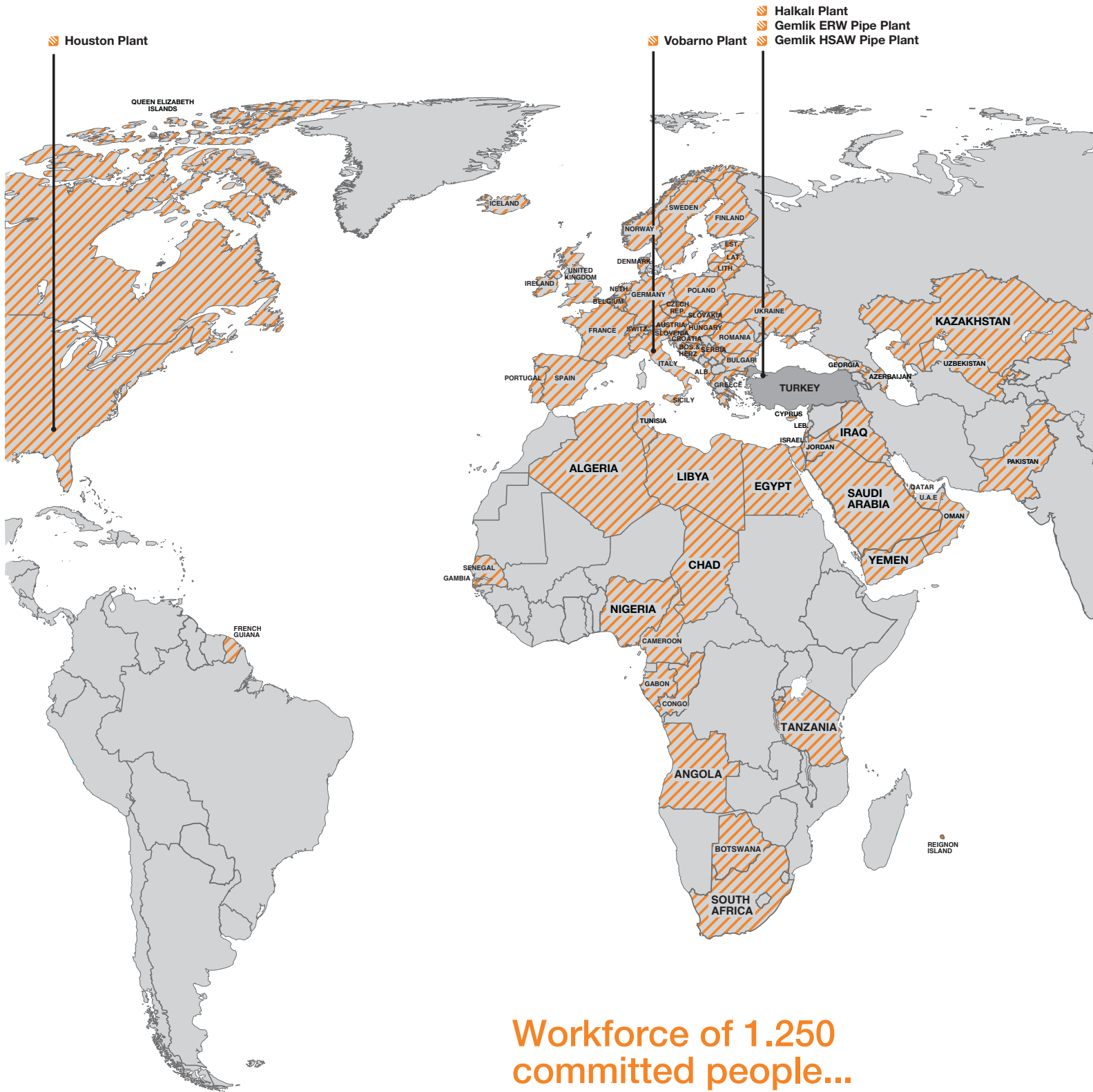


### Corporate Structure:



Borusan Group and one of Europe's leading steel and technology companies; Salzgitter Mannesmann GMBH, merged their welded steel pipe investments in Turkey and named that partnership; "Borusan Mannesmann Boru Yatırım Holding" in 1998. The company has 73% shares of Borusan Mannesmann Boru San. ve Tic. A.Ş.



“Our mission is to provide products and services that enhance the quality of life with our expertise in steel pipe industry and to promote the process of economic and social progress of our community...”



**Workforce of 1.250  
committed people...**

-  Current Export Countries of Borusan Mannesmann
-  Location of Borusan Mannesmann Plants

## Borusan Mannesmann Line Pipe Production Facilities



### Gemlik HSAW Pipe Plant

Process	Helically Two Step SAW
OD	20" - 64"
Wall Thickness	Up to 25.4 mm
Length	24.5 m
Grade including	X80
Coating	PE, PP, FBE, FCE, SFE Dual Layer FBE (ARO)

### Gemlik Conventional Spiral Pipe Plant

Process	Conventional
OD	28" - 120"
Wall Thickness	Up to 25.4 mm
Length	18.3 m
Grade including	X80

### Gemlik ERW Pipe Plant

Process	HFI - ERW
OD	1/2" - 13 3/8"
Wall Thickness	Up to 12,7 mm
Length	18.3 m
Grade including	X70
Coating	PE, PP, FCE, SFE

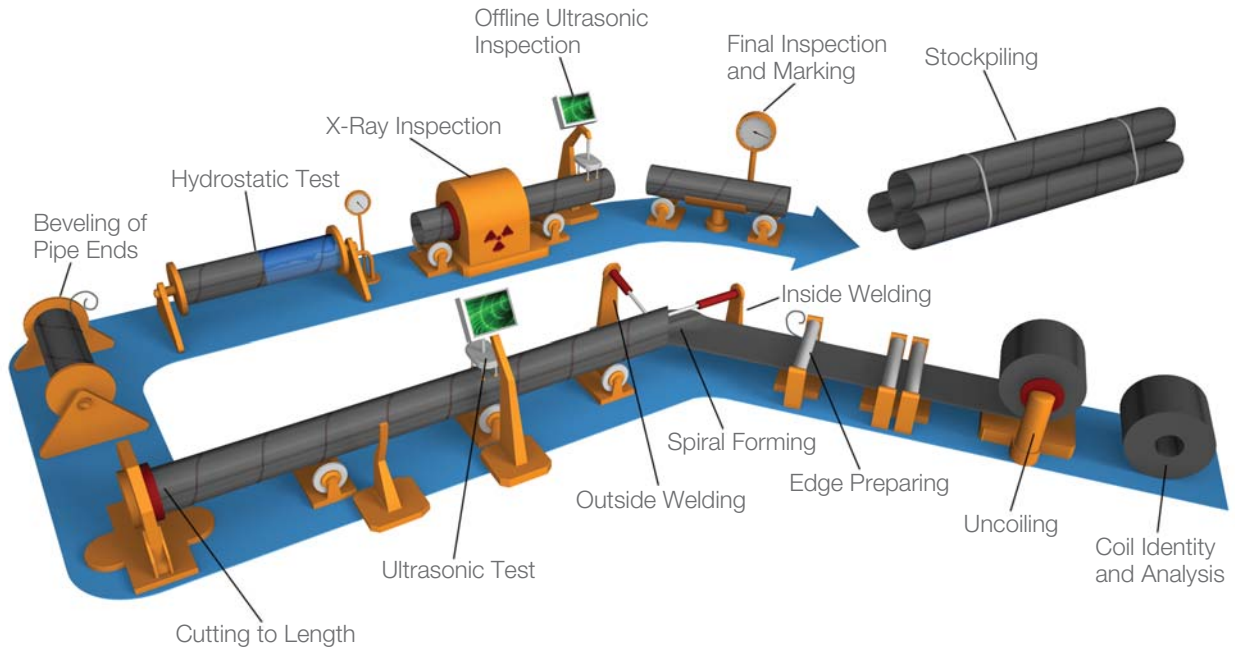


Over 10,000 Km  
Large Diameter Oil/Gas Line Pipe  
Over 15,000 Km  
ERW/HFI  
Oil/Gas Line

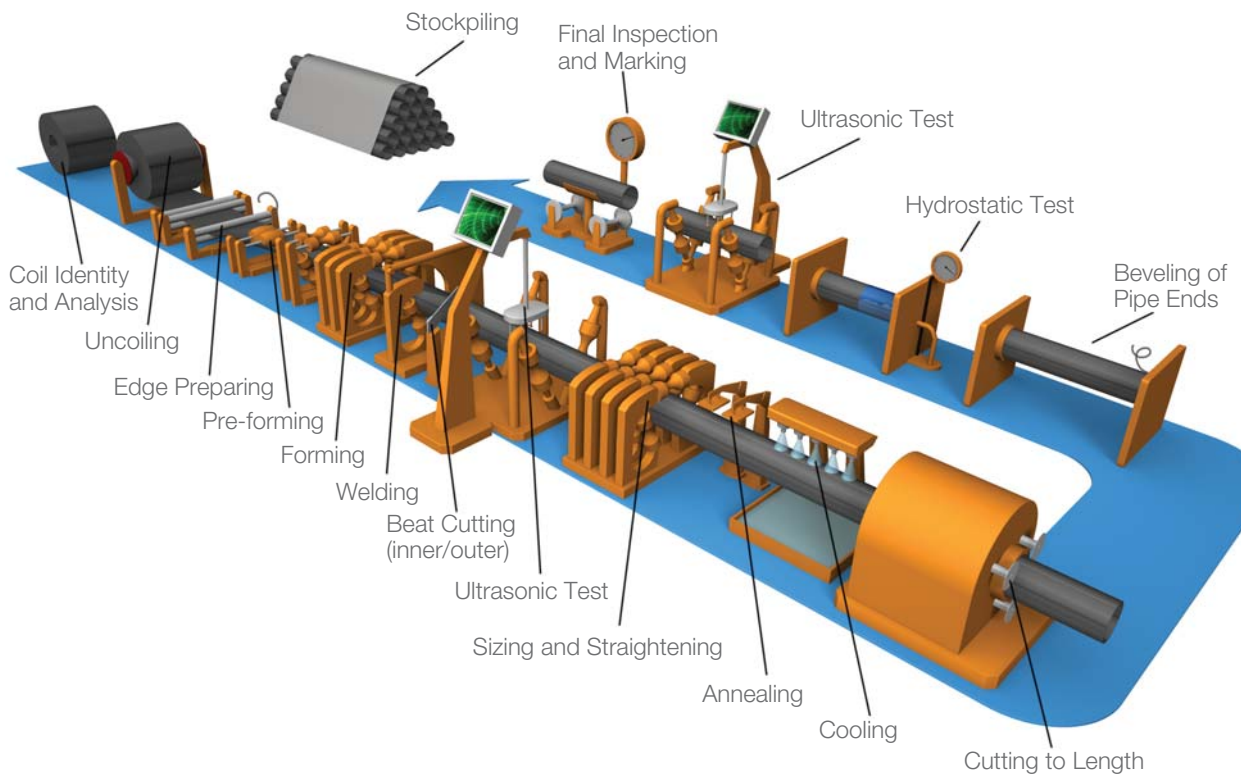


## Production Flow

### Conventional Helical Submerged Arc Welded Pipe



### Electric Resistance Welded Pipe

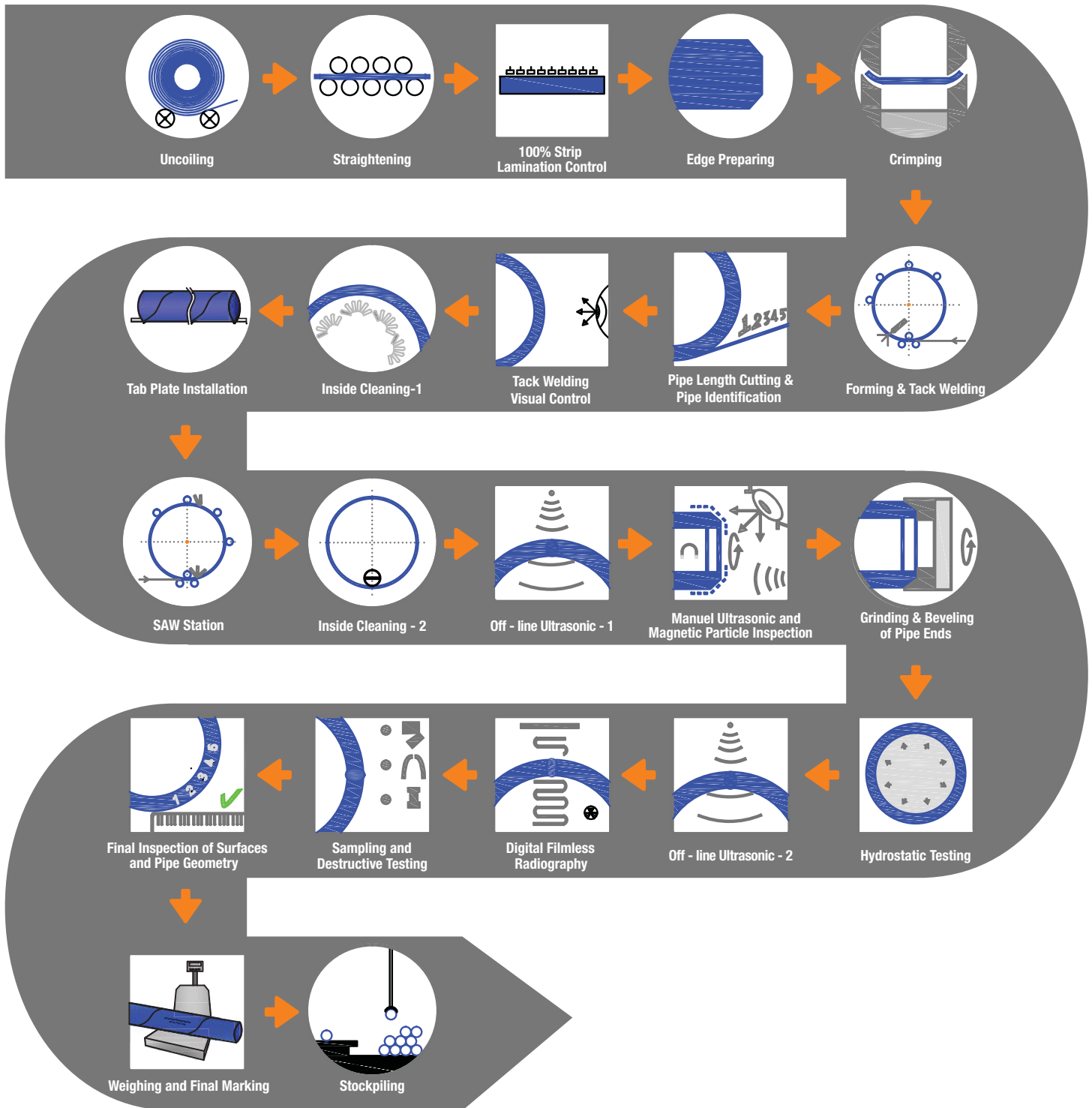




# Production Flow




## Two Step Helical Submerged Arc Welded Pipe

□ Quality Steps      ○ Production Steps



# Production Range - HSAW Line Pipes

OD	Wall Thickness (mm & inch)																												
	mm	inch	3.18	3.96	4.37	4.78	5.16	5.56	6.35	7.14	7.92	8.74	9.52	10.31	11.13	11.91	12.70	13.49	14.27	15.00	16.66	17.48	18.26	19.05	20.62	22.23	23.83	25.40	
mm	inch	0.125	0.156	0.172	0.188	0.203	0.219	0.250	0.281	0.312	0.344	0.375	0.406	0.438	0.469	0.500	0.531	0.562	0.591	0.656	0.688	0.719	0.750	0.812	0.875	0.938	1		
508	20																												
559	22																												
610	24																												
660	26																												
711.2	28																												
762	30																												
812.8	32																												
863.6	34																												
914	36																												
965.2	38																												
1016	40																												
1067	42																												
1118	44																												
1168	46																												
1219	48																												
1270	50																												
1321	52																												
1372	54																												
1422	56																												
1524	60																												
1626	64																												
1676	66																												
1727	68																												
1829	72																												
2032	80																												
2083	82																												
2235	88																												
2540	100																												
2794	110																												
3048	120																												

 up to 18,3 meter  
 up to 24,5 meter  
 Min. length 8 meters



## Production Range - ERW Line Pipes

OD		Wall Thickness (mm & inch)																							
		mm	inch	2.8	2.9	3.4	3.56	3.68	3.7	3.9	4.5	5.1	5.2	6	6.6	7	7.1	8.1	8.4	8.6	9.3	9.5	11	12	12.7
mm	inch	0.109	0.113	0.133	0.140	0.145	0.147	0.154	0.179	0.200	0.203	0.237	0.258	0.277	0.280	0.318	0.331	0.337	0.365	0.375	0.432	0.472	0.492		
21.3	1/2	1.28	1.32	1.50	1.56	1.60	1.61	1.67																	
26.9	3/4	1.66	1.72	1.97	2.05	2.11	2.12	2.21	2.49																
33.7	1	2.13	2.20	2.54	2.65	2.72	2.74	2.87	3.24	3.60															
42.4	1 1/4	2.73	2.82	3.27	3.41	3.51	3.53	3.70	4.21	4.69	4.77												X 52		
48.3	1 1/2	3.14	3.25	3.76	3.93	4.05	4.07	4.27	4.86	5.43	5.53														
60.3	2 3/8	3.97	4.10	4.77	4.98	5.14	5.16	5.42	6.19	6.94	7.07														
73	2 7/8	4.85	5.01	5.84	6.10	6.29	6.32	6.65	7.60	8.54	8.69	9.91													
88.9	3 1/2		6.15	7.17	7.49	7.73	7.77	8.17	9.37	10.54	10.73	12.27													
114.3	4 1/2		7.97	9.30	9.72	10.04	10.09	10.62	12.18	13.73	13.99	16.02	17.53	18.52	18.77	21.21	21.94	22.42	24.08						
141.3	5 9/16			11.56	12.09	12.49	12.55	13.21	15.18	17.13	17.45	20.02	21.92	23.18	23.50	26.61	27.53	28.14	30.27	30.88	35.35				
168.3	6 5/8					14.94	15.02	15.81	18.18	20.53	20.91	24.01	26.32	27.84	28.22	32.00	33.12	33.87	36.46	37.20	42.67	46.25	48.03		
219.1	8 5/8					19.55	19.65	20.70	23.81	26.91	27.43	31.53	34.59	36.61	37.12	42.15	43.65	44.64	48.12	49.10	56.45	61.29	63.68		
273	10 3/4							25.88	29.80	33.69	34.34	39.51	43.36	45.92	46.56	52.91	54.81	56.07	60.48	61.73	71.07	77.24	80.30		
323.9	12 3/4								35.44	40.09	40.87	47.04	51.64	54.70	55.47	63.08	65.35	66.87	72.15	73.65	84.88	92.30	95.99		
339.7	13 3/8									42.08	42.89	49.37	54.21	57.43	58.23	66.23	68.63	70.22	75.77	77.35	89.16	96.97	102.41		

We can meet all X 42 requirements in our production range.

## Production Standards

### Petroleum and Gas Line Pipes

- API 5L/ISO 3183 : Requirements of PSL 1 & PSL 2 (HSAW & ERW)
  - Annex G : Resistance to ductile fracture propagation
  - Annex H : For Sour Service
- EN 10208 : Requirements of Part 1 & Part 2 (HSAW & ERW)
- GOST 20295 : Requirements of Type 1, 2 and 3 (HSAW)

### Water Line Pipes

With protective OD and/or ID coating, plain (beveled) or sleeve welded joints.

- EN 10217-1 : HSAW & ERW
- EN 10224 : HSAW & ERW
- AWWA C 200 : HSAW & ERW
- BS 534 : HSAW & ERW

### General Purpose Pipes

- EN 10217-3 : HSAW - Alloy, fine grain  
Service condition: max 400°C, min -50°C
- EN 10217-5 : HSAW - Alloy or non-alloy,  
Service condition: max 400°C,
- EN 10217-6 : HSAW - Non-alloy,  
Service condition: - 40°C
- ASTM A139 : HSAW

### Piling & Construction Pipes

- ASTM A 252 : HSAW
- EN 10219 : HSAW & ERW
- EN 10210 : HSAW & ERW

Pipe Lengths: any desired lengths between 8 - 24,5 m

These are our general production standards and specifications.  
We can meet other production standards and specifications upon request.



## Quality System Certificates



- ISO 9001
- ISO 14001
- ISO 10002
- ISO 29001
- ISO 31000
- EN ISO/IEC 17025
- OHSAS 18001

- API 5L
- API 5CT
- API QR
- API Q1
- AD 2000HP0
- AD 2000 W0
- ÜHP
- UNE

- PED 97/23 EC
- B-MARK
- NSF Certified
- FM Certified
- UL/CUL Listed
- CE Certified
- DNV Certified

- DVGW 7101-2
- DIN 30670
- EN 10208-2
- EN 10217-1
- EN ISO 3834-2



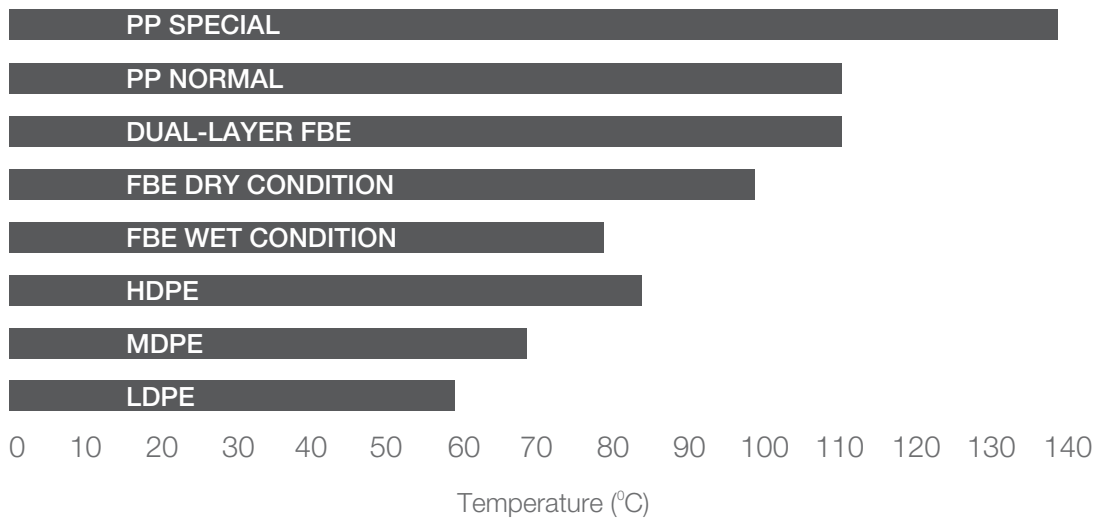
## Protective OD & ID Coating Systems

Borusan Mannesmann offers wide range of anti-corrosive and protective OD & ID coatings in its fully integrated coating facilities. The below table illustrates the type of coatings applied externally and internally according to standards and special customer requirements.

Type of Coating	OD	ID	General Application Area	
			Gas & Oil Line Pipe	Water Line Pipe
Dual-Layer FBE (ARO)	●		●	●
FBE	●		●	●
Epoxy (liquid)	●	●	●	●
Polyethylene (PE)	●		●	●
Polypropylene (PP)	●		●	●
Cement Mortar		●		●

Other OD&ID coating processes can also be designed for each specific application i.e. PU, coal tar, glass flake reinforced epoxy etc. which all above processes are within Borusan Mannesmann's broad experience.

### Maximum Operating Temperature of Coating





## General Application Standards

**Dual Layer Abrasion Resistant FBE OD Coating:** Dual layer fusion bonded epoxy provides a perfect abrasion and impact resistance, also maintains an excellent protection for oil - gas line pipes.

(API 5L7, CSA Z 245-20, NACE RP 0394, AWWA C213)

**FBE (Fusion Bonded Epoxy) OD Coating:** Fusion bonded powder epoxy coating provides high protection of oil and gas pipe lines.

(API 5L7, CSA Z 245-20, NACE RP 0394, AWWA C213)

**Polyethylene OD Coating:** Excellent protection of buried line pipes. High mechanical strength and corrosion resistance are achieved by 3-layer coating method.

(DIN 30670, TS 5139, NF A 49-710, UNI 9099, EN ISO 21809-1)

**Polypropylene OD Coating:** Excellent protection of buried line pipes. High mechanical strength and corrosion resistance are achieved by 3-layer coating method.

(DIN 30678, NF A 49-711, EN ISO 21809-1)

**Flow Efficiency ID Coating:** For gas transmission lines, flow-coat ID epoxy coating is applied in order to reduce pipe wall roughness thus increasing throughput.

(API RP 5L2)

**Solvent Free Epoxy ID Coating:** Various epoxy coatings applied internally are enabling hygienic inner surface for potable water transportation.

(AWWA C 210)

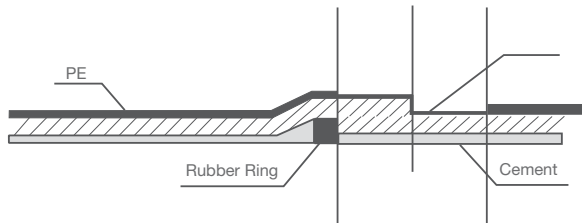
**Cement Mortar ID Coating:** Specifically for potable water pipe lines cement mortar ID coating provides hygienic and excellent corrosion resistance and protection. On demand regular cement mortar ID coating or synthetic dispersion added special cement mortar ID coating can be applied.

(AWWA C 205, DIN 2614, BS 534, TS 8590)



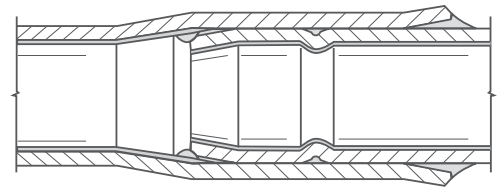
## Pipe Joint Systems

### Cylindrical end



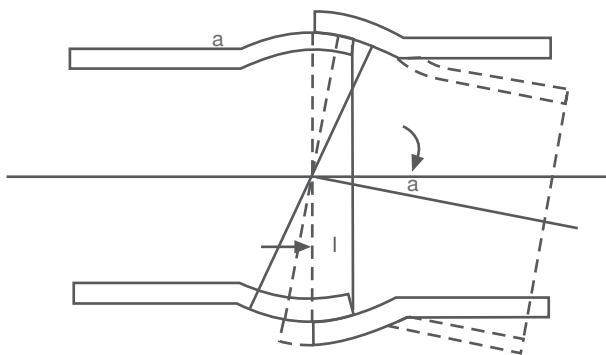
\* For water pipelines

### ZAP-LOK<sup>®</sup>



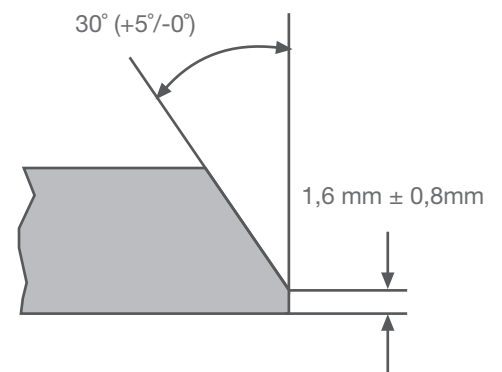
\* For high pressure gas & oil pipelines up to 12"

### Spherical end



\* For water pipelines

### Butt Weld Joint Preparation



\* For all types of applications

Other types of joints may be available upon request.





Just in time  
on-site delivery



## Integrated Logistics Experiences

The care devoted to proper storage and shipment of products is part of Borusan Mannesmann's commitment to customer satisfaction.

Borusan Mannesmann plants are located on the eastern coast of Marmara Sea in the vicinity of many piers that are expert in pipe loading equipped with mobile cranes, forklifts and other machinery necessary for international shipment.

Borusan Mannesmann, together with Group's integrated logistic company Borusan Logistics, is able to deliver with high versatility for every international project from Saharan desert to Rocky mountains.

We deliver

- By railway
- By barge transportation
- By IACS class vessels (sous-palan unloading)
- By truck and trailers
- Even by containers

In many of our projects we have been in charge of custom clearance, sous-palan operations, leasing and management of stockyards, on-site delivery; providing complete integrated logistics solutions to meet even the most stringent client delivery terms.





# Project: In Salah Gas Southern Fields Development

## Operational Highlights



### Project Details

Size:

24"-32"

Total Length:

133 km

Standard & Material:

API 5L 44<sup>th</sup> Edition PSL2, X70M and Customer Specifications

OD Coating:

3 layers of High Density Polyethylene

ID Coating

Flow Coat Epoxy

Contractor:

Petrofac Engineering and Construction - Sharjah

Project Owner:

BP - Statoil - Sonatrach (JV)

Scope of Logistics:

Delivery of line pipes with minimum 12.7 meters of average pipe length and bends to Djen Djen Port in Algeria as unloaded to the trucks in the port.

Logistic Partners:

Borusan Logistics - a Borusan Holding company  
Borusan Logistics International Algeria

# Project: Capacity Expansion Ellund - Egtved Pipeline - Line Pipes and Bends

## Operational Highlights



### Project Details

Size:

From DN600 to DN1000 line pipes and bends

Total Length:

95 km

Standard & Material:

EN10208-2 and ENDK Specifications - L485 MB

OD Coating:

3 layers of High Density Polyethylene

ID Coating

Flow Coat Epoxy

Project Owner:

Energinet.dk - Denmark

### Scope of Logistics:

Delivery of line pipes with minimum 16.5 meters of average pipe length and bends to 40 pipe yards along the route of the pipeline as unloaded and stockpiled in Denmark.

### Logistic Partners:

Borusan Logistics - a Borusan Holding company



# Project: Ben Ahin Bras Pipeline Project

## Operational Highlights



### Project Details

Size:	DN500
Total Length:	48.5 km
Standard & Material:	EN10208-2 and C4Gas / Fluxys Specifications - L415 MB
OD Coating:	3 layers of High Density Polyethylene
ID Coating	Bare
Project Owner:	Fluxys - Belgium

**Scope of Logistics:** Delivery of line pipes with minimum 15.8 meters of average pipe length to Fluxys pipe yard via train in Belgium.

**Logistic Partners:** Borusan Logistics - a Borusan Holding company

# Project: West 4 Westrail DN800 High Pressure Gas Pipeline

## Operational Highlights



### Project Details

Size: DN800  
Total Length: 57 km  
Standard & Material: EN10208-2 and EVN Specifications - L485 MB

OD Coating: 3 layers of High Density Polyethylene  
ID Coating: Flow Coat Epoxy  
Project Owner: EVN Netz GmbH - Austria

Scope of Logistics: Delivery of line pipes with minimum 17.2 meters of average pipe length to EVN pipe yard via train as unloaded and stockpiled in Austria.

Logistic Partners: Borusan Logistics - a Borusan Holding company



# Project: Elba Express Expansion Gas Pipeline / USA - 2008

## Operational Highlights



### Project Details

Size:	36"-42"
Total Length:	313 km
Standard & Material:	API 5L PSL2, X70M
OD Coating:	FBE

**Project Owner:** Southern Natural Gas Pipeline Group

**Scope of Logistics:** DDP basis delivery to 5 pipe yards. The logistics scope includes unloading, double jointing, girth weld coating, sand berms preparations and stacking.

- 22 shipments via A class vessels.
- On site double-joint operation
- Management of 6 different pipe yards.

**Logistic Partners:** Borusan Logistics (Transportation to USA)  
Borusan Logistics International (USA operations)

On this prestigious project Borusan Mannesmann produced FBE coated 36"-42" pipes according to the client's requirements. The pipes were double jointed to 80 ft (24 m) pipe length. 80 ft pipes were transported with special trucks to 4 other designated pipe yards.

# Project: MOL Natural Gas Transmission Project / HUNGARY-2007

## Operational Highlights



### Project Details

Size:	40"
Total Length:	205 km
Standard & Material:	EN 10208-2, L485 MB
OD Coating:	3 Layer PE acc. to DIN 30670
ID Coating:	Flow Coat Epoxy acc. to API RP5 L2

**Project Owner:** MOL-Hungary

**Scope of Logistics:** DDP transportation to 14 different pipe yards along the pipeline route in Hungary. The logistics scope includes unloading, stockpiling and safe guarding during entire delivery operation

**Logistic Partners:** Borusan Logistics (Transportation to Hungary)  
Borusan Logistics International (Hungary operations)

The following transportation methods have been used simultaneously because of the tight delivery schedule

- 1- Transportation by vessel & barges (45 % of the total quantity)
- 2- Transportation by train (55 % of the total quantity)

Complete handover of the project to the Client was realized in 10 months.



# Project: Baku - Tbilisi - Ceyhan Crude Oil Pipeline / TURKEY- 2005

## Operational Highlights



### Project Details

Size:	34"-42"
Total Length:	194 km
Standard & Material:	API 5L - PSL 2, X65MS
Outside Coating:	3 Layer PE acc. To DIN 30670

**Project Owner:** BOTAŞ, BTC DIRECTORATE

**Scope of Logistics:** Delivery to the pipe yards located at 4 different locations (Kars, Erzincan, Ceyhan and Terminal), including unloading and stockpiling of the pipes.

The following transportation methods have been used simultaneously because of the tight delivery schedule:

- Transportation by trucks (15 % of the total quantity)
- Transportation by train & trucks (85 % of the total quantity)

The project has been completed within a period of 12 months.

This project was one of the most important pipeline projects of its time. Global energy conglomerates, along with the world's top engineering groups took part in this major infrastructure investment, where highest technical, operational and HSE standards were applied.

## Major Large-Diameter HSAW Reference List for the Last Seven Years

COUNTRY	PROJECT OWNER	USAGE	PROJECT DESCRIPTION	QUANTITY	YEAR
MEXICO	TRANSCANADA LLC	GAS	TAMAZUNCHALE EXTENSION PIPELINE 36" X70M OD FBE COATED	12 KM	2013
USA	KINDER MORGAN	GAS	NORTHEAST UPGRADE PROJECT 30" X 70M OD FBE COATED, ID EPOXY COATED	77 KM	2012
USA	ELPASO GROUP - TENNESSEE GAS PIPELINE	GAS	NORTHEAST SUPPLY DIVERSIFICATION 30" X 70M OD FBE COATED, ID EPOXY COATED	12 KM	2011
USA	ELPASO GROUP - TENNESSEE GAS PIPELINE	GAS	300 LINES PIPELINE PROJECT 30" X70M OD FBE COATED, ID EPOXY COATED	212 KM	2009
USA	SOUTHERN NATURAL GAS PIPELINE GROUP	GAS	ELBA EXPRESS PIPELINE PROJECT 36" - 42" X70M OD FBE COATED	313 KM	2007
USA	ELPASO GROUP - TENNESSEE GAS PIPELINE	GAS	MLV 20 GAS PIPELINE PROJECT 36" X65 M OD FBE COATED	13 KM	2007
AUSTRIA	EVN AUSTRIA	GAS	EVN WESTRAIL PROJECT 32" L485MB OD PE COATED, ID EPOXY COATE	57 KM	2011
BELGIUM	FLUXYS - BELGIUM	GAS	BEN AHIN BRAS PIPELINE PROJECT 20" L415MB OD PE COATED, ID EPOXY COATED	49KM	2011
DENMARK	ENERGGINET.DK	GAS	ELLUND EGTVED PROJECT 32" L485MB OD PE & PP COATED, ID EPOXY COATED	95 KM	2011
FRANCE	GRTGAZ	GAS	ARC DE DIERREY GAS PIPELINE PROJECT 48" L485MB OD PE COATED, ID EPOXY COATED	61 KM	2012
FRANCE	GRTGAZ	GAS	HAUTS DE FRANCE II GAS PIPELINE PROJECT 48" L485MB OD PE COATED, ID EPOXY COATED	17 KM	2012
FRANCE	GRTGAZ	GAS	F72 LE MANS PIPELINE PROJECT 36" L485MB OD PE COATED, ID EPOXY COATED	2 KM	2009
HUNGARY	MOL GROUP	GAS	CROATIAN TRANSIT PIPELINE 32" L485MB OD PE COATED, ID EPOXY COATED	209 KM	2009
HUNGARY	FGSZ	GAS	FGSZ PIPELINE PROJECT 28" L450MB OD PE COATED, ID EPOXY COATED	49 KM	2008
HUNGARY	MOL GROUP	GAS	GAS PIPELINE PROJECT 40" L485MB OD PE COATED, ID EPOXY COATED	205 KM	2007
HUNGARY	MOL GROUP	GAS	GAS PIPELINE PROJECT 32" L485MB OD PE COATED, ID EPOXY COATED	55 KM	2007



COUNTRY	PROJECT OWNER	USAGE	PROJECT DESCRIPTION	QUANTITY	YEAR
POLAND	GAZ-SYSTEM S.A.	GAS	VARIOUS GAS PIPELINE PROJECTS 28" & 32" L485MB & L555MB OD PE & PP COATED ID EPOXY COATED	262 KM	2011 2012
SLOVAKIA	EUSTREAM SLOVAKIA	GAS	SLOVAKIA - HUNGARY INTERCONNECTOR GAS PIPELINE PROJECT 32" L485MB OD PE COATED, ID EPOXY COATED	26 KM	2012
TURKEY	BOTAŞ	GAS	KESAN GAS PIPELINE PROJECT 36" X65M OD PE COATED	100 KM	2012
TURKEY	CHINA TIANCHEN ENGINEERING CORP.	GAS	BOTAS SALT LAKE UNDERGROUND GAS STORAGE 36" X65M OD PE COATED, ID EPOXY COATED	24 KM	2010
TURKEY	OMV	GAS	OMV SAMSUN GAS PIPELINE PROJECT 24" X65M OD PE COATED, ID EPOXY COATED	53 KM	2010
TURKEY	BOTAŞ	GAS	TURKEY GREECE PIPELINE 36" X65M OD PE COATED	180 KM	2005
TURKEY	BOTAŞ, BTC DIRECTORATE	OIL	BAKU - TBILISI - CEYHAN PIPELINE 34" - 42" X65MS OD PE COATED	193 KM	2005 2004
ALGERIA	CAMEG	GAS	GAS PIPELINE PROJECT 28" X70M OD PE COATED, ID EPOXY COATED	97 KM	2013
ALGERIA	PETROFAC BP-STATOIL SONATRACH (JV) (END USER)	GAS	IN-SALAH GAS SOUTHERN FIELD DEVELOPMENT PROJECT 24" - 32" X70 OD PE COATED, ID EPOXY COATED	134 KM	2011
ALGERIA	SONATRACH	GAS	GR4 PIPELINE PROJECT 48" X70 OD PE COATED, ID EPOXY COATED	305 KM	2009
ALGERIA	CAMEG	GAS	GAS PIPELINE PROJECTS 20" - 28" X70M OD PE COATED, ID EPOXY COATED	171 KM	2009 2008
ALGERIA	SNAMPROGETTI	GAS	LZ2 HASSI R'MEL - ARZEW PIPELINE 24" X60M OD PE COATED	476 KM	2007
ALGERIA	SONATRACH	GAS	GZ1 HASSI R'MEL - MEDAREG PIPELINE 40"X60M OD PE COATED, ID EPOXY COATED	234 KM	2006
ALGERIA	SONATRACH	CRUDE	NK1 PIPELINE PROJECT 30" X60M OD PE COATED	665 KM	2005

## Major ERW Reference List for the Last Five Years

COUNTRY	PROJECT OWNER	USAGE	PROJECT DESCRIPTION	QUANTITY	YEAR
COLOMBIA CONGO, GABON CAMEROON	PERENCO	OIL & GAS	3" - 12" LONGITUDINALLY WELDED (ERW) STEEL PIPES GRB - X52M, PE COATED, ZAPLOK END	865 KM	2013 2008
TURKEY	TPAO, BOTAŞ, AKSA	OIL & GAS	2" - 12" LONGITUDINALLY WELDED (ERW) STEEL PIPES GRB - X42M - X52M, PE COATED, API 5L, BEVELED END	796 KM	2012 2009
TUNISIA	STEG	GAS	4" - 8" LONGITUDINALLY WELDED (ERW) STEEL PIPES X42M - X60M, PE COATED, BEVELED END	125 KM	2012
IRAQ	TOVI COMPANY	GAS	10" LONGITUDINALLY WELDED (ERW) STEEL PIPES X52M - X60M, PE COATED, BEVELED END	32 KM	2012
ROMANIA	OMV-PETROM	GAS	3" - 4" LONGITUDINALLY WELDED (ERW) STEEL PIPES L245NB, PE COATED, BEVELED END	125 KM	2012
LIBYA	ENKA	GAS	12" LONGITUDINALLY WELDED (ERW) STEEL PIPES GRB, PE COATED, BEVELED END	25 KM	2012
CAMEROON	SNH CAMEROON	GAS	12" LONGITUDINALLY WELDED (ERW) STEEL PIPES X60M, PE COATED, BEVELED END	19 KM	2012
EGYPT	WASCO, FAYUM. TAQA GROUP	GAS	6" - 12" LONGITUDINALLY WELDED (ERW) STEEL PIPES X52M, PE COATED, BEVELED END	75 KM	2012
CROATIA	EVN CROATIA	GAS	8" - 12" LONGITUDINALLY WELDED (ERW) STEEL PIPES L290NB-L360NB, PE COATED, BEVELED END	26 KM	2012
SWEDEN	PALAB	GAS	2" - 5" LONGITUDINALLY WELDED (ERW) STEEL PIPES S460MH, BARE, BEVELED END	320 KM	2011 2012
NIGERIA	OILSERVE LTD	GAS	12" LONGITUDINALLY WELDED (ERW) STEEL PIPES X65M, PE COATED, ZAPLOK END	28 KM	2011
AZERBAIJAN	BP	GAS	8" LONGITUDINALLY WELDED (ERW) STEEL PIPES X42M, PE COATED, API 5L, BEVELED END	10 KM	2009





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