



INTERPIPE

**Interpipe – global producer focused on
oil and gas industry**

Interpipe committed to safety

- **Interpipe key priority:** health, safety and well-being of its employees in all of the Company's business activities.
- **Interpipe has identified** the hazards and risks associated with its activities and invested substantial financial and organizational resources to minimize and eliminate these risks.
- Interpipe has opened **Common Medical Centre of Interpipe (CMC)**, which introduced a systematic approach to providing medical assistance to all the employees of the Company.
- **Interpipe provides safe working conditions** according to international norms and standards of OHSAS 18001 and ISO 14001.

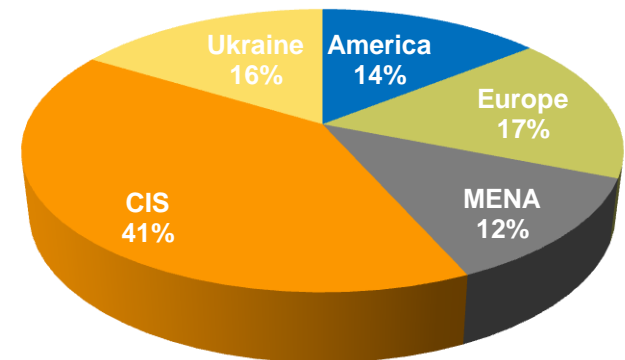


Interpipe corporate safety man

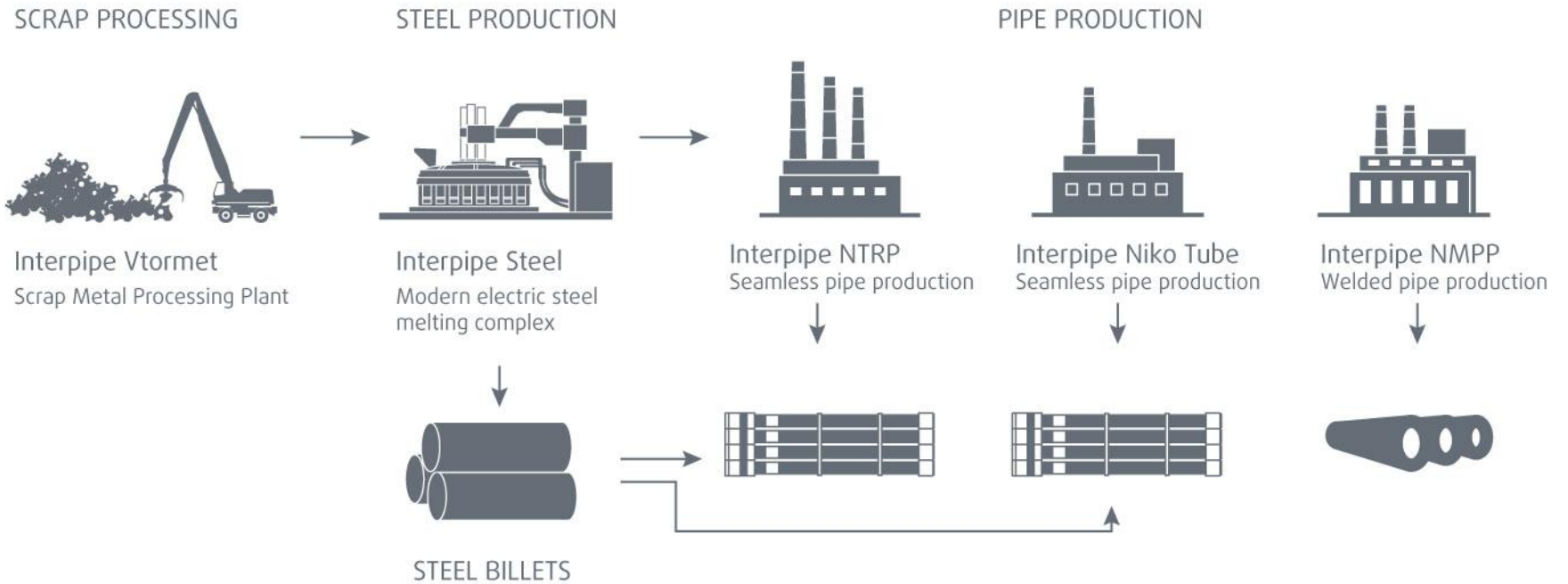
Interpipe at a glance. 2014

- **Global steel pipe producer:**
Seamless pipes – 571 thousand tons
Welded pipes – 132 thousand tons
- **In-house steel production:** 890 thousand tons
- **Interpipe employees:** 12 thousands people
- **Revenue:** 781 million USD
- Vertically integrated structure **with 5 high efficiency mills**
- **Trade offices** in seven countries
- **Logistically** well connected to key markets in CIS, MENA and Europe
- **Qualified** by major oil & gas companies
- **Customers** in 80 countries

Pipe sales by regions, tons. 2014

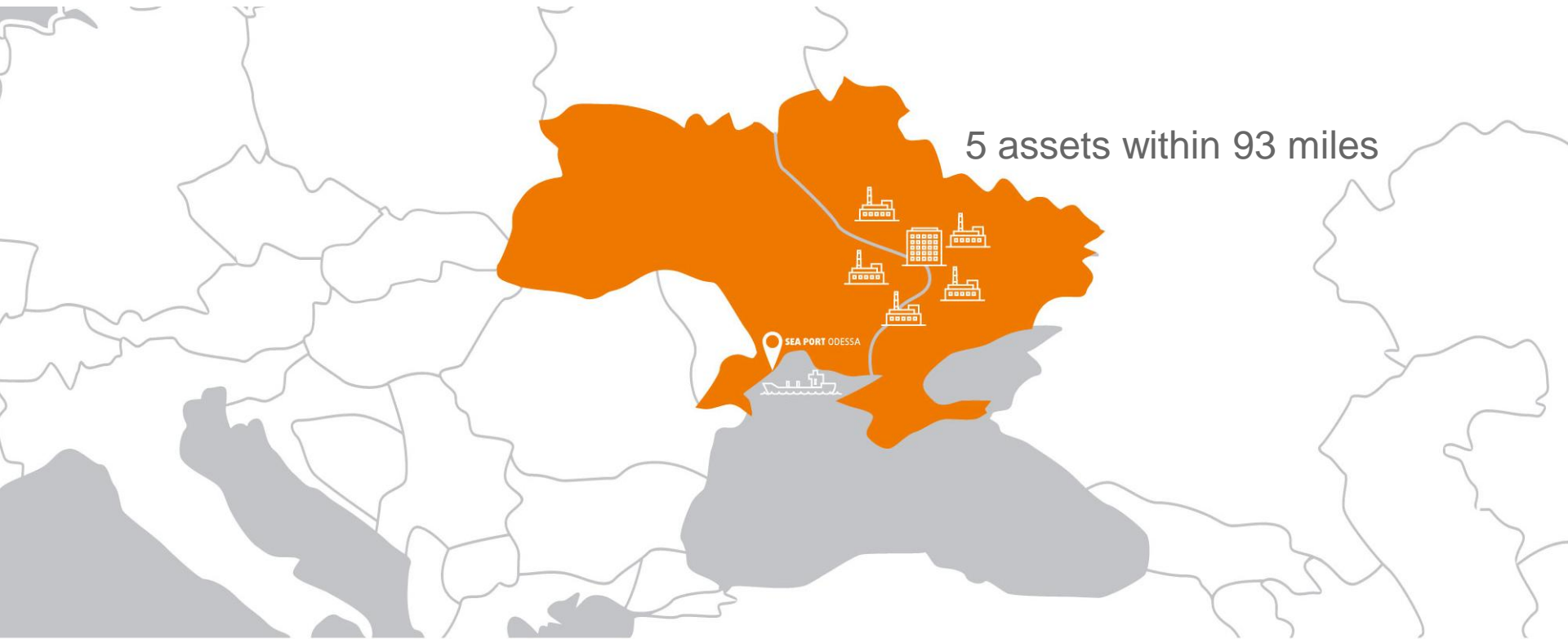


Vertically integrated operations



100% self sufficiency for seamless pipe production

Favourable location and compact layout of production assets

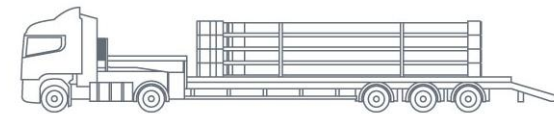
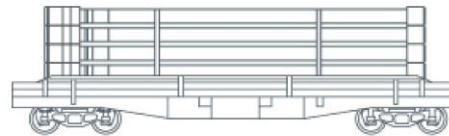
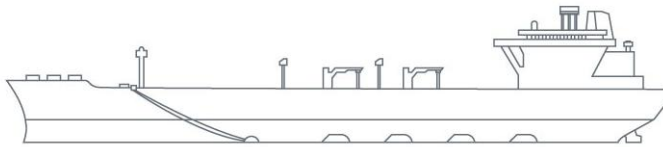


5 assets within 93 miles

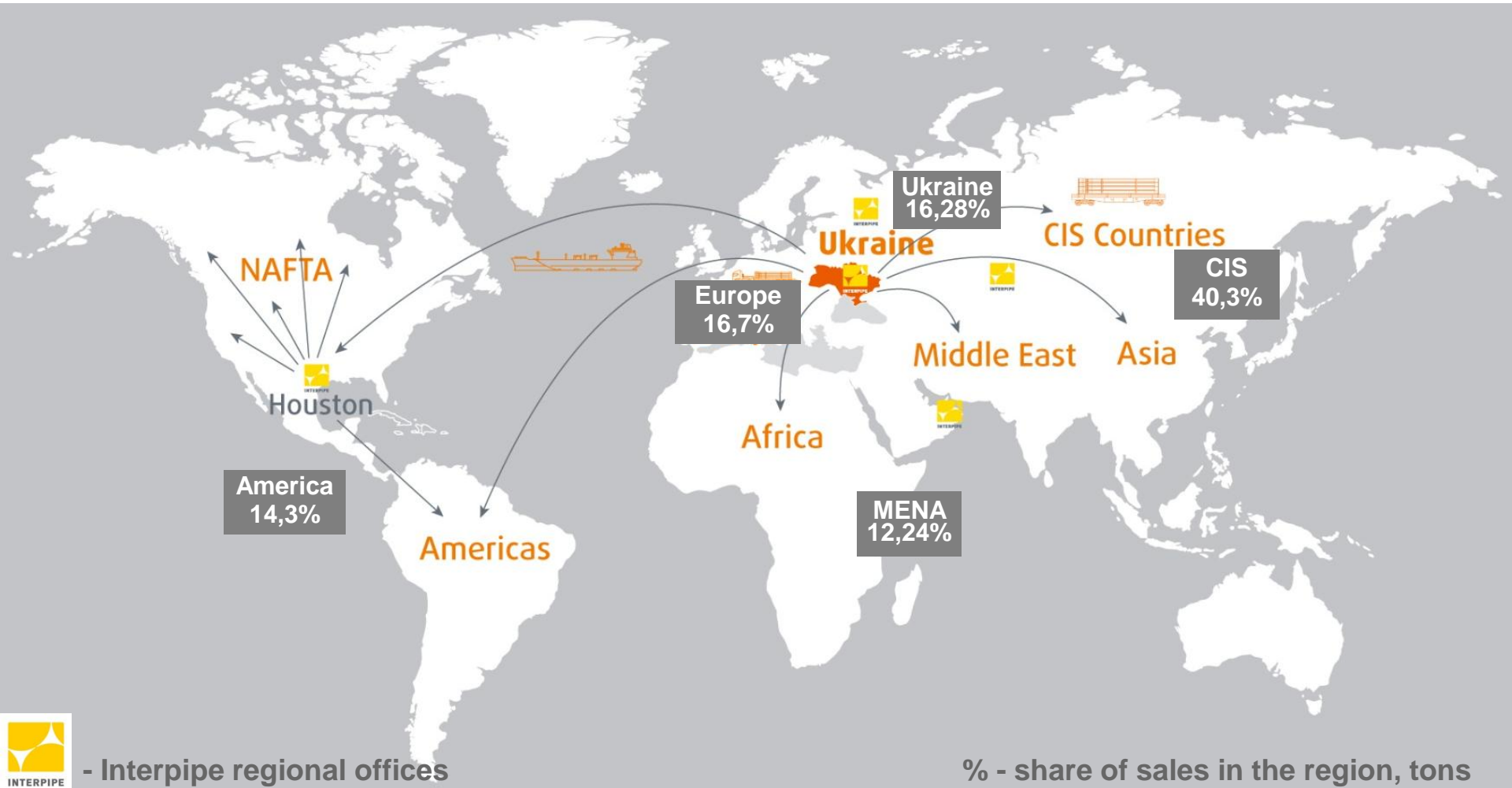
■ Proximity to river and sea ports

■ Developed railway infrastructure in the region

■ Good transport hub



Strong expertise at the key markets. 2014



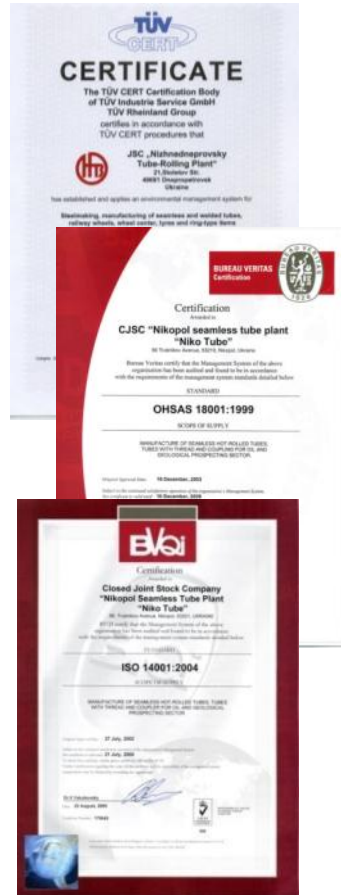
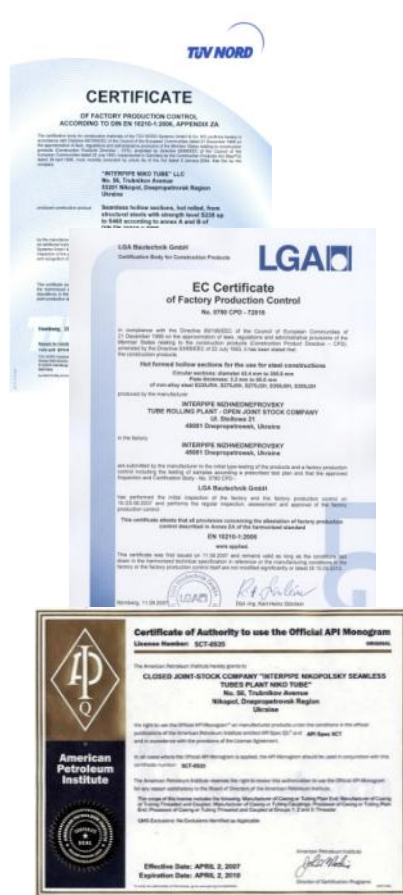
- Interpipe regional offices

% - share of sales in the region, tons

 Interpipe Ukraine	 North American Interpipe	 Interpipe Europe SA	 Interpipe Central Trade GmbH Germany	 Interpipe Middle East	 Interpipe Russia
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Commitments to quality approved with international certification



- Quality management system according to ISO 9001 and API Q1.
- Environmental management according to ISO 14001.
- Occupational Health and Safety according to OHSAS 18001.
- Pipes are produced according to API 5L, API 5CT, ASTM, EN (DIN), GOST and customer specifications.
- Regular cooperation with leading 3rd Party inspection companies (Tuboscope, Bureau Franke International, Moody International, SGS, Bureau Veritas, Inspectorate Ukraine) for product & process qualification, orders in-process inspection, harbour activity survey.

Qualified by major international oil & gas companies



إحدى شركات مؤسسة البترول الكويتية
A Subsidiary of Kuwait Petroleum Corporation



شركة أبوظبي للعمليات البترولية البرية (أدكو)
Abu Dhabi Company for Onshore Oil Operations (ADCO)



**SLYM
PETROLEUM**



INTERPIPE QUALITY IMPROVEMENT PLAN

2012-2014

CAPEX
Start-up of state-of the-art steel making facility. Steel grade flexibility, short delivery time, high quality (impurities and cleanliness control) of the pre-material for seamless pipe production.
Installation of various new NDE systems (UT, FL, EC, MPI).
Installation of new OCTG and Line pipe finishing equipment.
OPERATIONAL
Improvement of water circulation system and quenching unit at Heat Treatment Line of INTERPIPE NTRP – major CASING heat treatment facility.
Implementation of hardenability control based on statistical methods – feedback to equipment adjustment and heat treatment process improvement.
Implementation of statistical control for mechanical properties and NDE yield – feedback loop for rolling and heat treatment improvements.
Better steel grade engineering – higher hardenability.
Launching statistical database for collapse testing – ability to offer High collapse P110 casing.
Introducing from January 1 st , 2015 inspection for the US market by TUBOSCOPE VETCO GERMANY inspection team in Ukrainian Mills. Available upon customer’s request.

List of projects 2012 -2013 aimed for quality improvement

No.	Project	Manufacturer	Mill	Product	Shop	Process	Year of completion
	Construction of EAF meltshop for round billets and blooms	DANIELI (turnkey project)	Interpipe Steel	Prematerial - round billets and blooms		Steel-making, continuous casting	2012
1	Installation of Non-Destructive Examination (EMI +UT) and mill ends cut-off line at primary finishing area	FOERSTER; GE INSPECTION; REIKA	Interpipe Niko Tube	Line Pipes, Casings	Plug Mill 12" Finishing	Non-Destructive Control	2012
2	Installation of plain end pipe hydro tester	BRONX TAYLOR WILSON	Interpipe Niko Tube	Line pipes, J/K55/N80t1 casing	Plug Mill 12" Finishing	Hydro testing	2012
3	Installation of Pipe end bevelling lines	REIKA	Interpipe Niko Tube	Line Pipe	Plug Mill 12" Finishing	Beveling	2012
4	Installation of coupling buck-on unit	AMC ENGINEERING	Interpipe Niko Tube	OCTG (tubing,casing)	Thread shop	Coupling buck-on	2012
5	Descaling unit in continuous mandrel mill	Local	Interpipe Niko Tube	Pipes	Continuous mandrel mill	Heat Treatment	2012

List of projects 2012 -2013 aimed for quality improvement

No.	Project	Manufacturer	Mill	Product	Shop	Process	Year of completion
6	Installation of rotary hearth furnace for billets heating	TENOVA LOI	Interpipe Niko Tube	Seamless Pipe	Plug Mill 12" Rolling Mill	Heating of billets	2013
7	Finishing line, including automated Non-Destructive Examination (EC+EMI)	FOERSTER; LINSINGER; REIKA; PRESTAR	Interpipe Niko Tube	Seamless Pipes	Continuous mandrel mill	Pre-Finishing	2013
8	Installation of UT testing machine, wet MPI line after heat treatment	Local	Interpipe NTRP	Casing, Line Pipes	Oil&Gas Pipes Shop	Non-Destructive Control	2012
9	Installation of 2 wet MPI units for couplings	Local	Interpipe NTRP	Casing/ Couplings	Oil&Gas Pipes Shop	Non-Destructive Control	2012
10	Installation of 2 coupling buck-on unit	AMC ENGINEERING	Interpipe NTRP	Casing	Oil&Gas Pipes Shop	Coupling buck-on	2013
11	Installation of Eddy Current test unit after heat treatment line	Local	Interpipe NTRP	Pipes	Oil&Gas Pipes Shop	Non-Destructive Control	2013

Key actions of Interpipe improvement plan 2015 heat treatment of casing

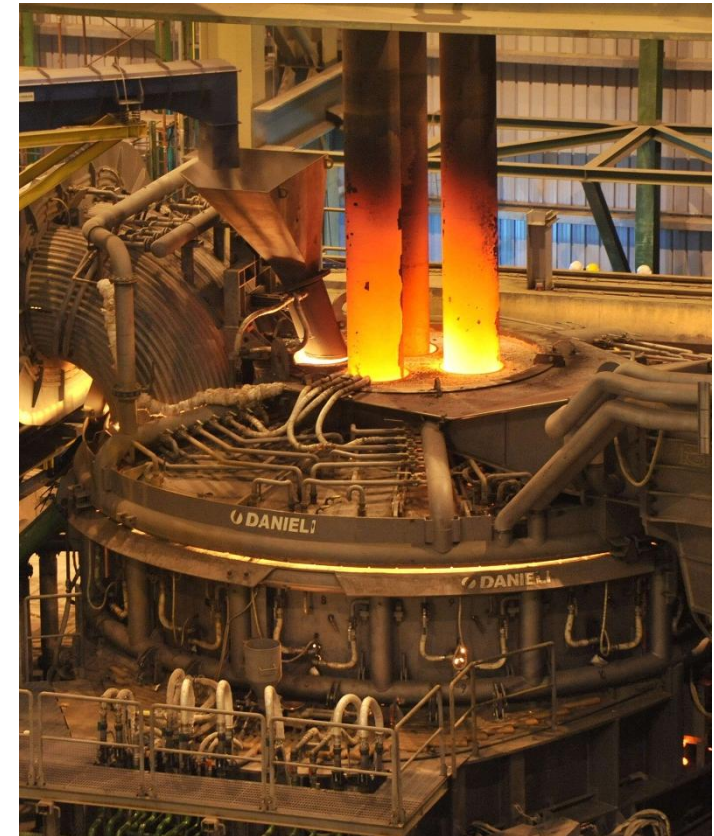
Operational	
February 1 st , 2015	Adjustment of the heat treatment parameters was implemented. This included setting up of: a) specific range of quench water flow; b) adjustment of tempering temperature in order to receive the yield strength values in the middle of API 5CT allowed MIN/MAX span.
May, 2015	Revamping of the handling system of austenitization furnace and quench system – targeting better pipe centering in the furnace and quench system aiming to improve the uniformity of heating/quenching.
From May 26 th , 2015	There are following modifications in place to the internal heat treatment process procedure: a) increase of test frequency for both tensile and Charpy (if SR.16 specified) – two set of samples per 100 joints (first sampling at the beginning of the lot/second sampling at the end of lot heat treatment); b) implementation of data recording and analysis via industrial controller (temperature parameters of austenitizing and tempering, water pressure and flow).
By July 15 th , 2015	New design of the quench rings are prepared, specifically addressing the quenching of 5.5 (the smallest size for INTERPIPE casing line at NTRP). New set of rings to be manufactured by July 15 th , 2015 and tested within Q3 of 2015.
2015	Trials of proprietary steel grade, targeting better hardenability due to microalloying, (B-Ti) and alloying (Cr-Mo), but providing higher Charpy due to lower carbon content.
2015	Trial lots are scheduled for production for Grades L80, P110, Q125 in OD's 5.5 (20 and 23 ppf) and 9.625 (52.90 ppf).

Production facilities of Interpipe



State-of-the art steel mill Interpipe Steel

- **Scrap Processing capacity of Interpipe Vtormet: 1,35 mln tons per year**
- Scrap collection network of **11 sites** in 7 regions of Ukraine
- **Modern scrap processing equipment** supplied by Sennebogen, «AKROS HENSCEL» (Germany) and hydraulic press cutters (Europe)
- **Steel making – Greenfield Interpipe Steel** built by **DANIELI** in 2012
- **Investment: 700 million USD**
- **Annual capacity: 1.32 million tons** of round billets per year
- Actual production in 2014 - **886 thousand tons of steel**
- **Interpipe Steel has flexibility** to make clean steel with no limits to utilize vacuum degassing



Key seamless mills – OCTG and line pipes

Mill	INTERPIPE NIKO TUBE		INTERPIPE NTRP		
Product/Mill	Mandrel mill	Plug Mill	Plug mill	Pilger mill	Assel mill
Tubing	2 3/8" - 3 1/2"				
Casing	4 - 4 1/2"	7 - 13 3/8"	5 - 7"		
Line pipe	1.315 - 4 1/2"	6 - 12"	2 3/8" - 5/8"		
Coupling stock				7 - 13 3/8"	2 3/8" - 6 5/8"
Mechanical Pipe				6 - 16"	2 3/8" - 7"

In house heat treatment, NDE, upsetting and threading lines for tubing and casing

Interpipe Niko Tube. Production facilities

Production in 2014: 300 000 tons

- **Floating mandrel mill**
OCTG in acc. with API 5CT
Diameter: 1.9" – 4 1/2"
Line Pipe in acc. with API 5L
Diameter: 1.315" – 4 1/2"

- **Plug mill**
OCTG in acc. with API 5CT
Diameter: 6 5/8" – 13 3/8"
Line Pipe in acc. with API 5L
Diameter: 6" – 12"

- **OCTG finishing shop:**
 - Heat treatment line
 - 2 up-setters
 - NDE lines (Full Body, full length UT, MPI for special end area)
 - 3 hydrotesters (up 18 000 psi)
 - 4 threading lines
 - 2 coating, marking and bundling lines
 - Coupling shop - 7 CNC threaders
 - Coupling NDE - MPI unit

OCTG in acc. with API 5CT
Diameter: 2 3/8" - 4 1/2" (5" upon request)



Production in 2014: 405 000 tons

- **Plug mill**

OCTG in acc. with API 5CT

Diameter: 4" - 6⁵/₈"

Line Pipe in acc. with API 5L

Diameter: 2⁷/₈" - 6⁵/₈"

- **Pilger mill**

Line Pipe in acc. with API 5L

Diameter: 6" - 14"

Coupling stock in acc. with API 5CT

- **Assel mill**

Coupling stock in acc. with API 5CT

Sizes upon agreement

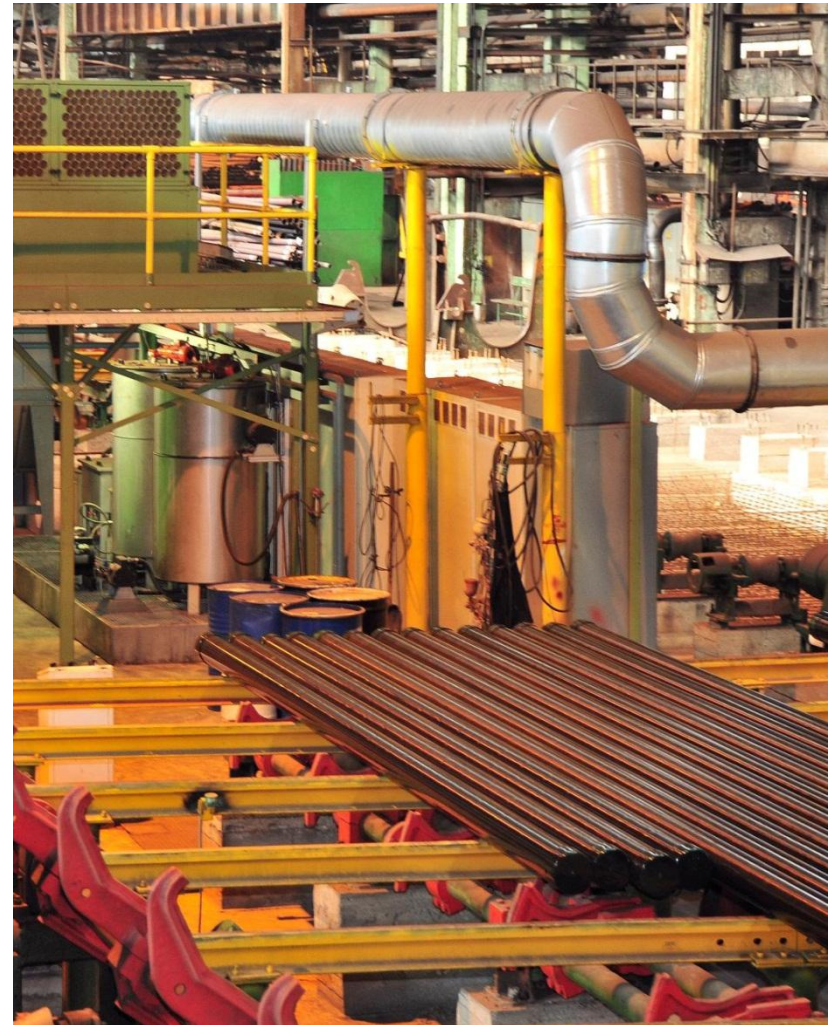
Mechanical and industrial application
pipes in acc. with ASTM A53, A106,
A333, A519

Diameter: 2⁷/₈" - 8"

- **OCTG Finishing - Casing**

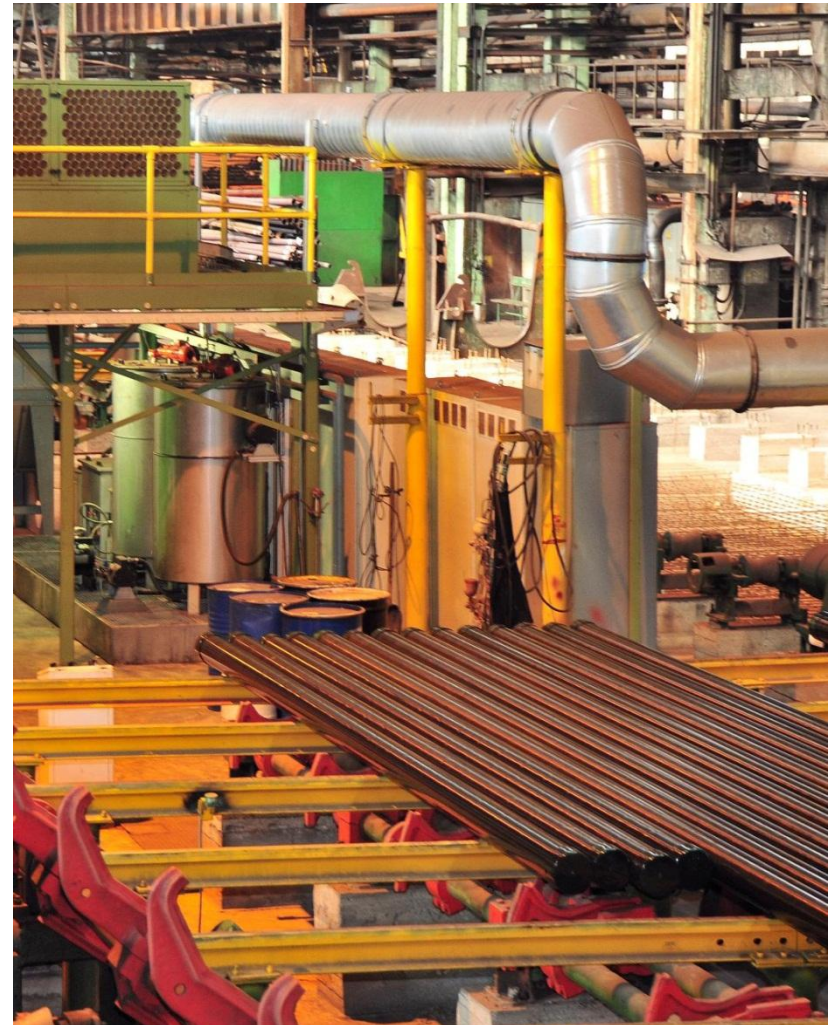
OCTG in acc. with API 5CT

Diameter: 5 1/2" - 13³/₈"



Production in 2014: 405 000 tons

- **Casing Finishing**
OCTG in acc. with API 5CT
Diameter: 5 1/2" – 13 3/8"
 - **Heat treatment line**
Casing
Diameter: 5 1/2" – 13 3/8"
Steel grades: N80Q, L80t1, C90, T95, P110, Q125
 - **Heat treatment line:**
 - NDE lines – Full length, full body UT, second method – EC
 - NDE pipe ends – wet MPI
 - 4 threading lines (including buck-on and hydrotesters)
 - 2 coating, marking and bundling lines
 - Coupling shop – 6 CNC threaders
 - Coupling NDE – 3 MPI units
- Coupling stock**
Diameter: 5 1/2" – 13 3/8"
Steel grades: N80Q, L80t1, C90, T95, P110, Q125



Interpipe NMPP. Production facilities

Production in 2014: 135 000 tons

- **ERW pipe** for oil and gas trunk pipelines and pipelines for industrial application **in accordance with API 5L**
OD: 6” - 21”
- **ERW pipe** for industrial application **in accordance with API 5L**
OD: 1.315” - 4”
- In house **3 layers coating facilities** for both seamless and welded line pipes
OD: 4 ½ “ – 20”



Line pipe coating

Anti-corrosive outer coat layer for all types of steel pipes with one, two or three layers

Annual capacity: 80 thousand tons

Diameter: from 114 mm to 530 mm

Facility: SELMERS, Netherlands.

Types of coating:

- Three-layered polyethylene coating 3LPE;
- Three-layered polypropylene coating 3LPP;
- Two-layered polyethylene coating 2LPE;
- One-layered epoxy coating LFBE.

Line pipe coating is provided **in accordance** with ISO 21809-1, DIN 30670, NFA 49710, ISO 21809-2, CSA Z245.20 SERIES-10, GOST, DSTU, TU



Thank you!

