

Izhorsky Trubny Zavod

Integrated complex on production of big diameter pipes



30 November 2007

SeverStal

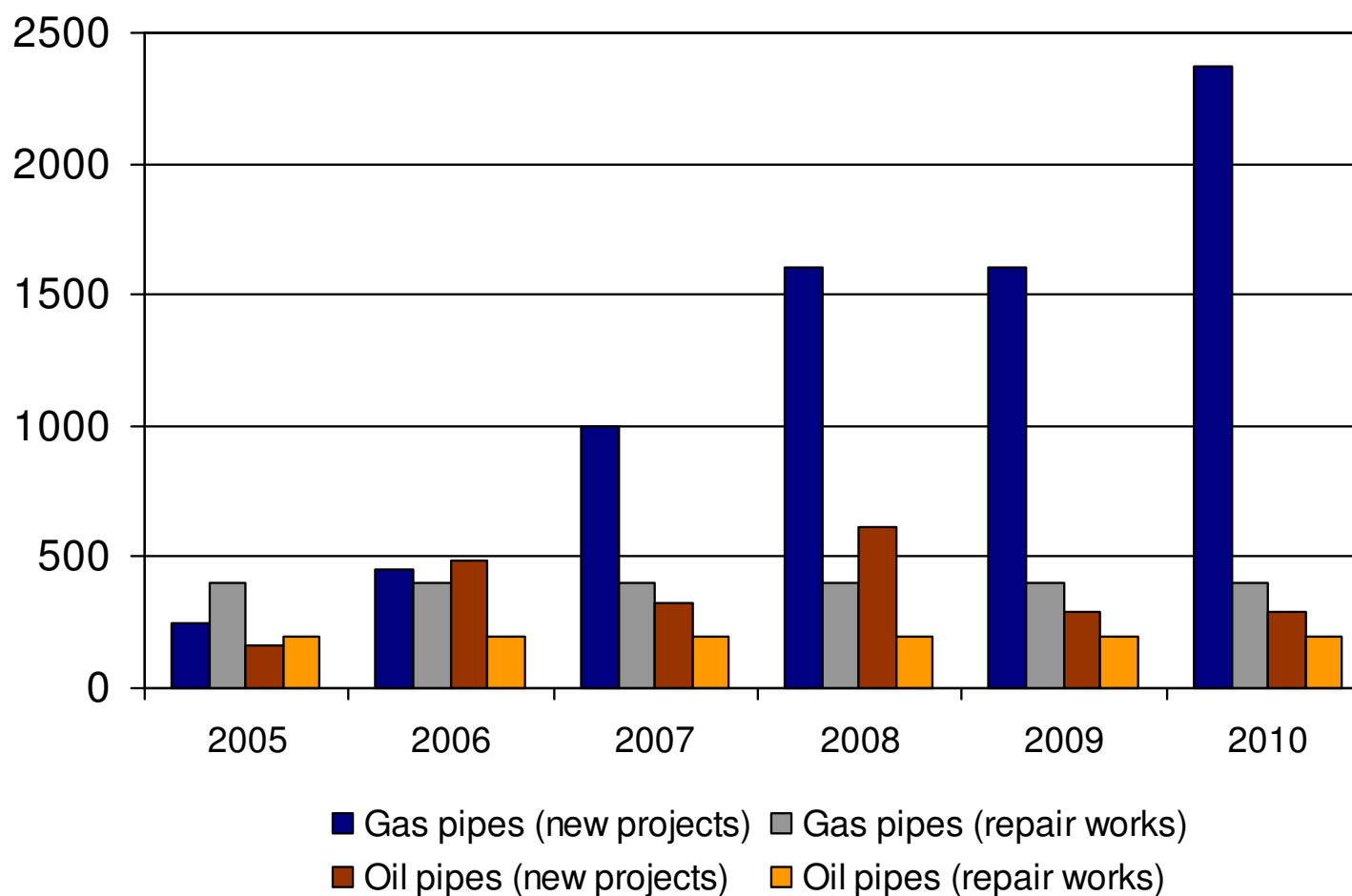
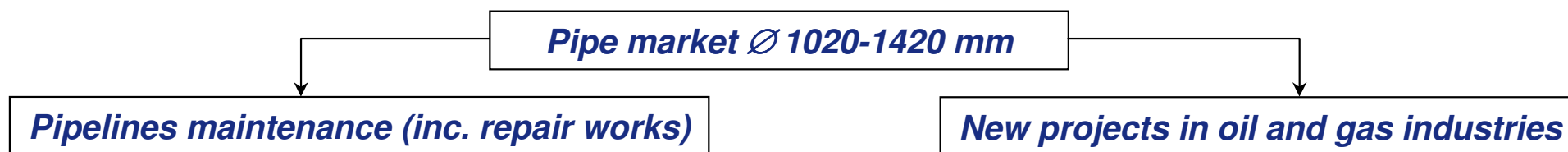
Agenda

- » *The main producers of Large Diameter pipes*
- » *Demand forecast on Russian Large diameter pipes market*
- » *Constant purchases of gas and oil companies for repair works*
- » *ITZ Basic information*
- » *Summary*
- » *Geographic position of the mill*
- » *Dynamics of project development*
- » *Pipe welding mill technological operations scheme*
- » *Pipe coating mill technological operations scheme*
- » *Primary advantages of the project*
- » *Priority projects of key consumers*
- » *Certificates*

The main producers of Large Diameter pipes

	Available capacity (thousand tons per year)		Grade of resistance by API 5L	Max of wall thickness, mm	Max of length of pip, m	Type of weld	Capability for applying of inner coating
	Total	Including 1020 – 1420 mm diameter with outer coating					
Vykusinsky steel mill	1400	400	up to X 100	48	12	One weld	Yes
Volzhskiy Trubny Zavod	965	500	up to X 80	22	12	spiral weld	In project
Chelyabinsky truboprokatny zavod	1580	400	up to X 80	24	12	One weld – up to 820 mm; Two welds – up to 1220 mm	No
Hartvizsky truboprokatny zavod	1500	600	up to X 70	28	12	Two welds	Yes
Izhorsky Trubny Zavod	450	450	up to X 100	40	18	One weld	Yes

Demand forecast on Russian Large diameter pipes market (thousand tons)



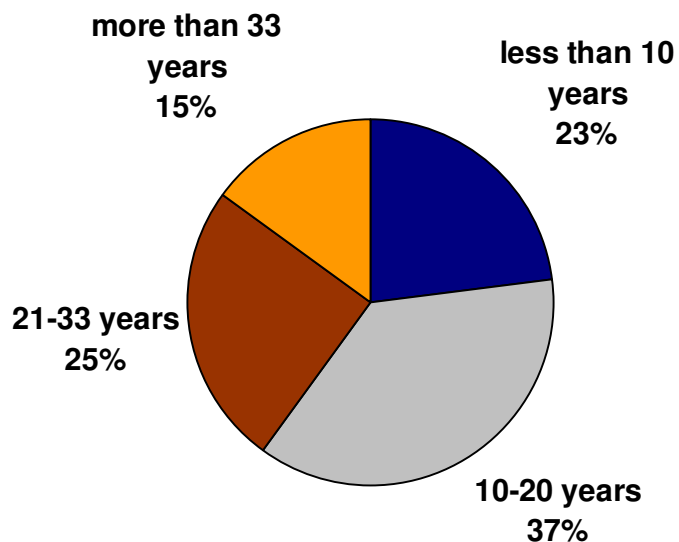
Demand forecast on Russian Large diameter pipes market

Estimate demand, Thousand tons	2005	2006	2007	2008	2009	2010
Gas pipes, total	650	850	1400	2000	2000	2775
Oil pipes, total	360	685	525	815	490	490
Total	1010	1535	1925	2815	2490	3265

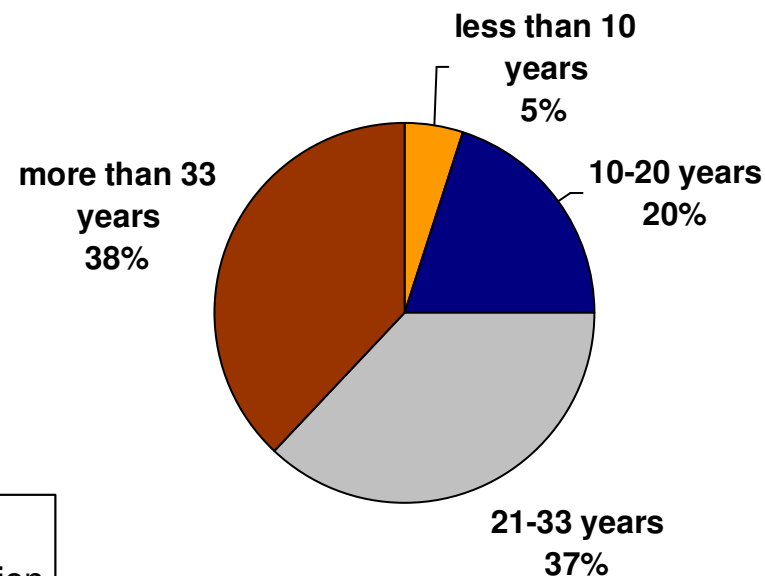
- » ***Under the realization of planned gas and oil projects (inc. repair works), expected demand growth on large diameter pipes since 2006, will exceed 3.2 mln. tons in 2010***
- » ***The most dynamic developing segment – 1220 -1420 mm diameter pipes***
- » ***The higher demand is expected in gas industry***

Constant purchases of gas and oil companies for repair works

Gas companies



Oil companies



Set time-limit for long distance pipelines operation in Russia is 33 years

- » Length: **153** thousands km (94,3 thousands km)*
- » Total weight: **50** mln. tons (43,3 mln. tons)*
- » *(1020-1420 mm assortment)

- » Протяженность: **49** thousands km (21,1 thousands km)*
- » Total weight : **12** mln. tons (9,6 mln. tons) *
- » *(1020-1420 mm assortment)

Basic information

- » *Mill-5000 can produce steel plates with thickness 10 300 mm and width 1500 ... 4800 mm, mostly for the nuclear power plants, petrochemical industry and other.*
- » *The made renovation of Mill-5000 let the repetition work plates for the pipe production*
- » *Maximum rolling force on Mill-5000 is 9 thn. tn.*
- » *Dimensions of finish products:*

- » **Dimensions of strip:**

- » *thickness, mm 10.....50*
- » *width, mm 1500.....4600*
- » *length, m 4.....24*
- » *weight, tn up to 32*

- » **Dimensions of plates :**

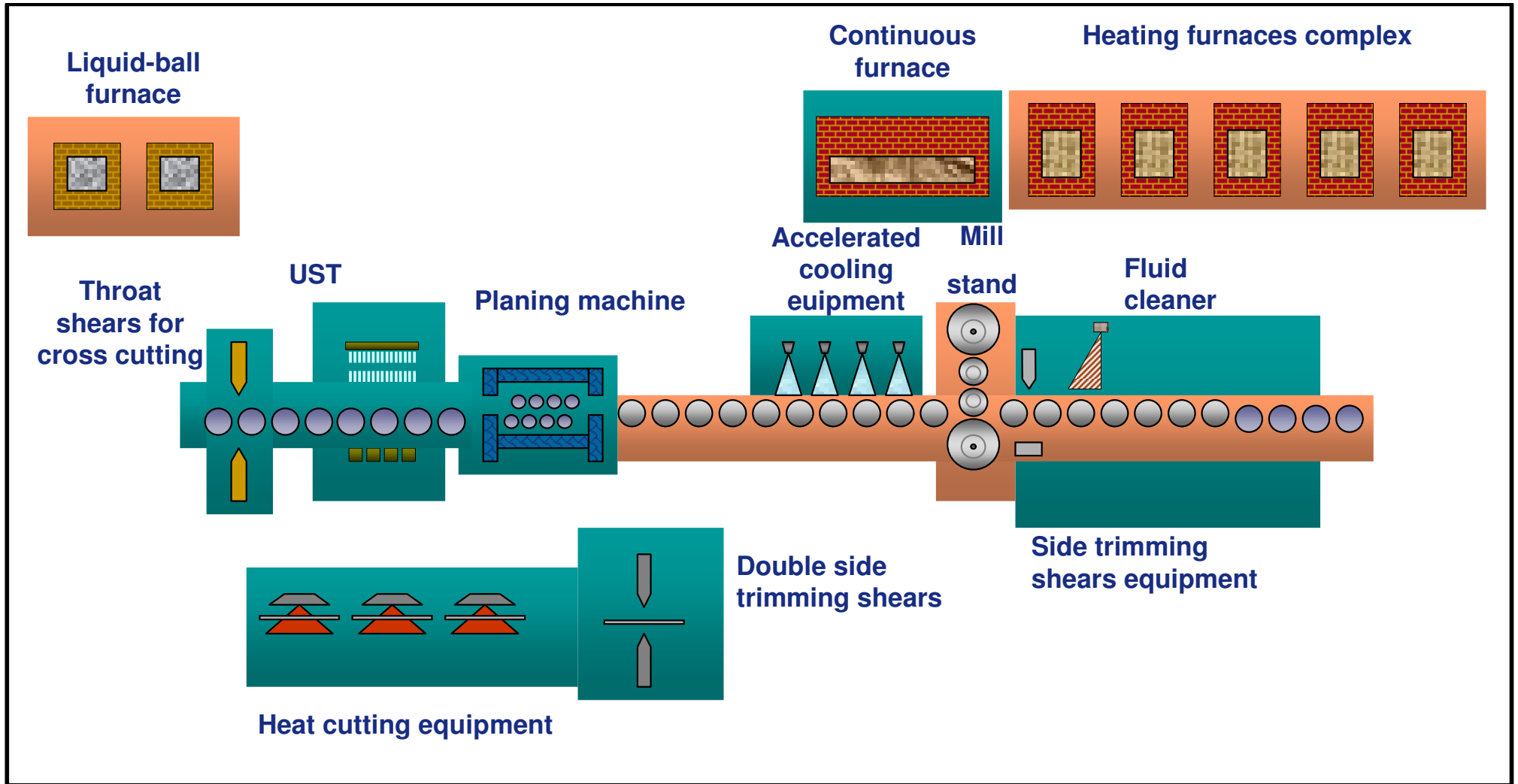
- » *thickness, mm 51.....300*
- » *width, mm 1700.....4800*
- » *length, m 4.....15*
- » *weight, tn up to 60*

- » **Steel grades:**

- » *breaking point up to 1200 MPa*
- » *strength class up to X100*

Basic information

Scheme of renovated objects



Summary

- » ***In July of 2006 JSC "Severstal-groups" has finished construction of the complex on production of big diameter pipes for oil and gas industry which productivity by 2008 will be up to 600 thousand tons of longitudinal single seam welded pipes per year. The concept of the project provided construction of the pipe mill (JSC "Izhorsky Trubny Zavod") and reconstruction of the Rolling Mill -5000 (Sheet Rolling Shop No.3 of JSC "Severstal") located on one industrial space in Kolpino district of St.-Petersburg.***

As a result the continuous technological chain was created: the slab made on JSC "Severstal" in Cherepovets goes on wide rolling mill-5000 of sheet rolling shop No.3, further plates are made from the slab and then plates go into pipe mill of JSC "ITZ" where of the big diameter pipes are made from these plates.

- » ***Shareholders of the company***

- *100% shareholder – JSC "Severstal"*

- » ***Budget of the project***

- *The amount of investments into construction of the pipe mill is about \$300 million*

- » ***Characteristics of the product***

- *pipes with one longitudinal weld seam*
- *outer diameter 610-1420mm (24"-56")*
- *maximum wall thickness – 40mm*
- *maximum pipe length – 18,3m*
- *steel grade of raw material – X80 (in future – X100)*
- *outer three layer coating*
- *inner coating*

- » ***Capacity of the mill***

- *Izhorsky Trubny Zavod – up to 600 000 tons of pipes with coating per year*

Geographic position of the mill



» The mill is situated in Kolpino, Saint-Peterburg on the area of JSC “Izhorskiye Zavody”

» The production is situated in the area with developed transport infrastructure (seaport, river ports, railway stations)



Dynamics of project development

- » *January, 2004 – contract with SMS Meer GmbH (Germany)*
- » *March, 2004 – the beginning of works on the building site of the mill*



March, 2004

Dynamics of project development

- » ***February, 2005 - signing up the contract for producing, shipping and installation of the equipment for the mill of outer coatings with CRC-Evans International Pipelines, Inc. (USA)***
- » ***March, 2005 – signing up of the agreement between the governor of Saint-Peterburg V.Matvienko and general director of “Severstal-group” A.Mordashov about strategic alliance between Severstal and Saint-Peterberg, where project was named as a strategic invest project №1 in Saint-Peterburg and “Severstal-group” and “Izhorsky trubny zavod” received the status of strategic investors of St. Petersburg till 31.12.2009.***
- » ***August, 2005 – General director of “Gazprom” daughter company “Gazcomplectimpex” Valery Golubev and Chairman of Directors Border of “Izhorsky Trubny Zavod” Igor Kostin have signed the cooperation agreement between companies on period 2006-2007. The aim of agreement is providing of Gazprom by gas pipes in diameters 1020-1420 mm.***

Dynamics of project development

October, 2005 – beginning of shipment and settling up of the equipment



December, 2005 – signing up the contract for producing, shipping and installation of the equipment for the mill of inner coatings Selmers Technology (Netherlands)

SeverStal

Dynamics of project development

14th of July, 2006 – Commissioning of the mill took place at presence of the President of the Russian Federation Putin V.V.

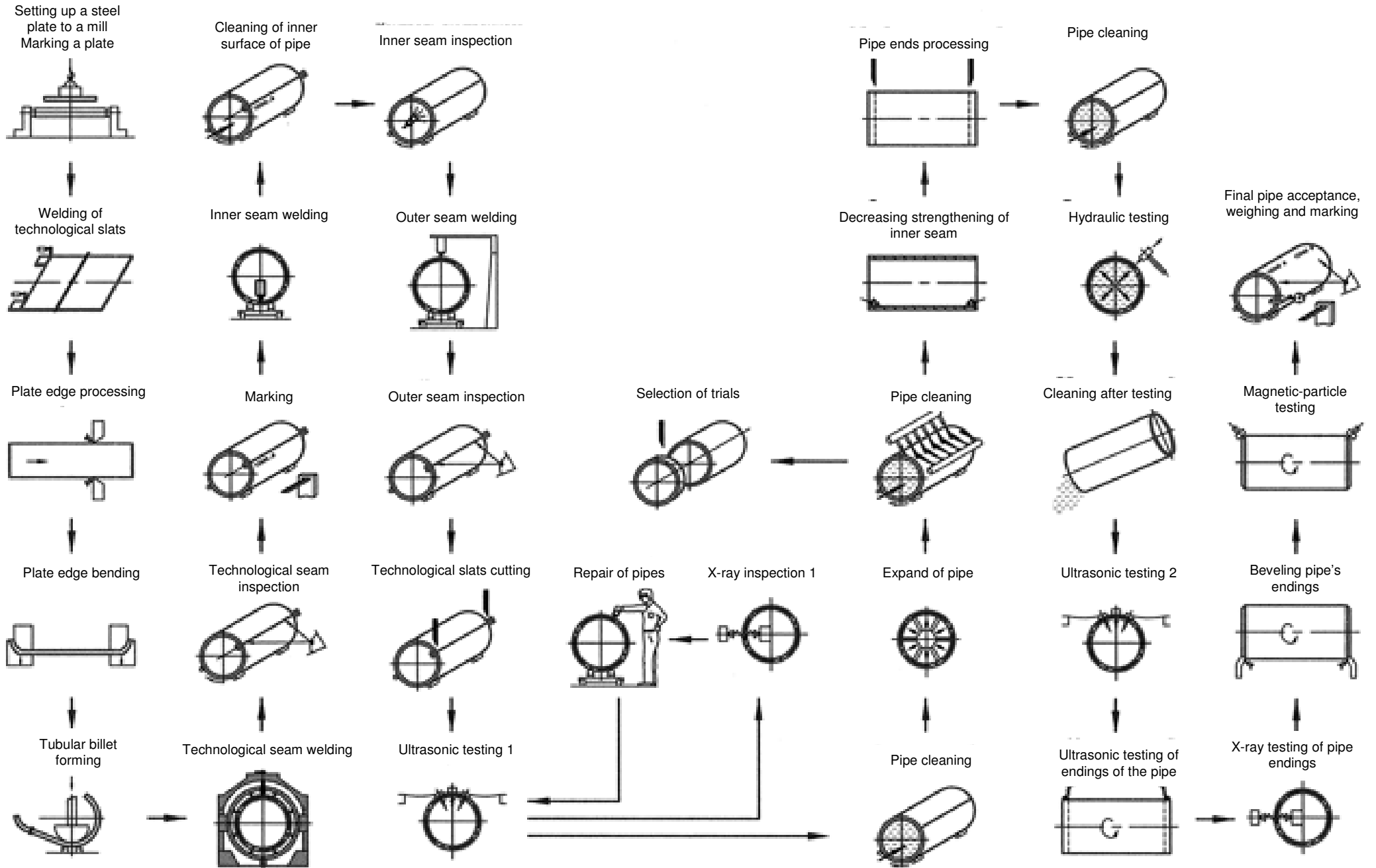


SeverStal

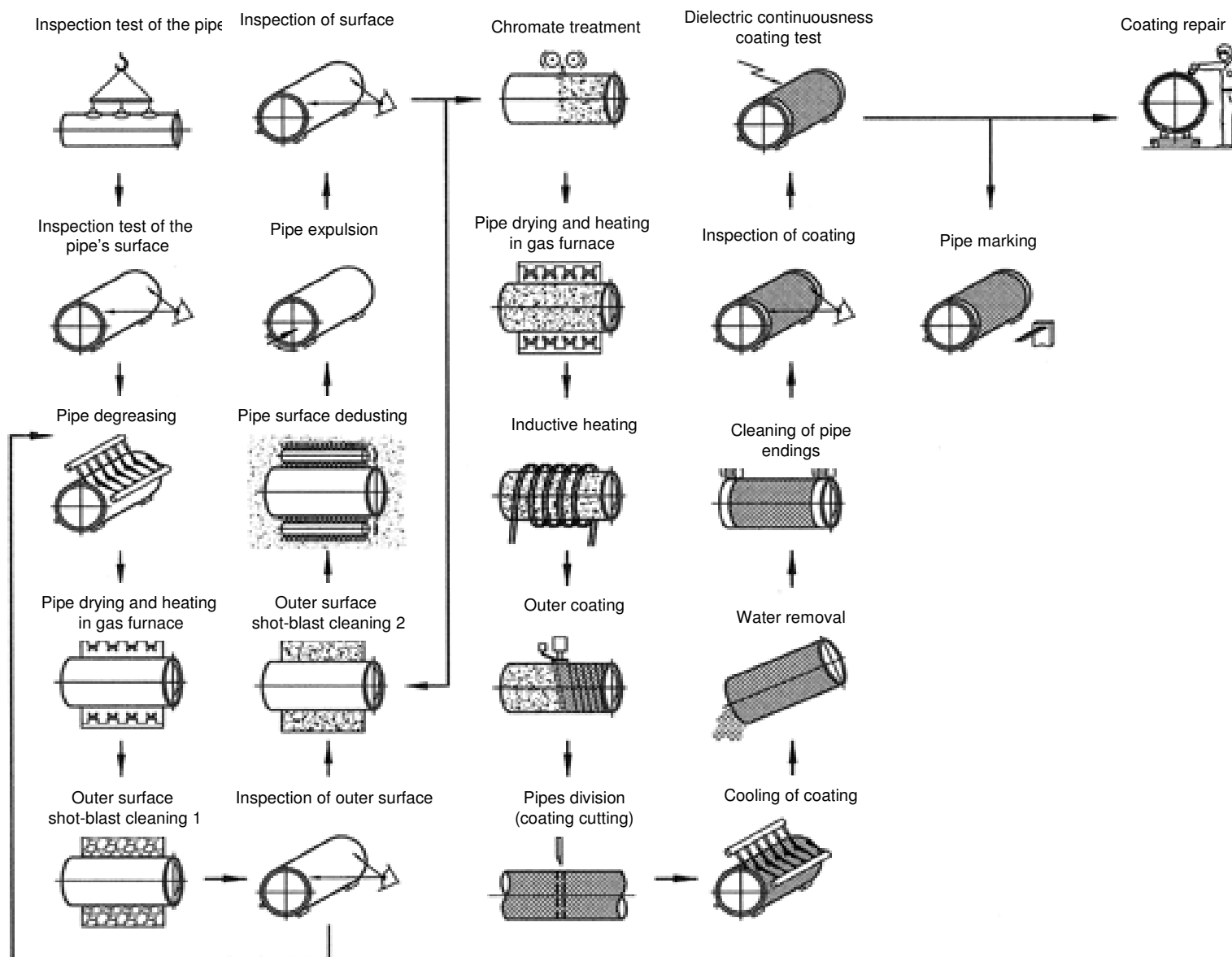
Dynamics of project development



Pipe welding mill technological operations scheme



Pipe coating mill technological operations scheme



Primary advantages of the project

» **Mill “5000”**

One of the advantages of the project is the closeness of the mill “5000” of JSC “Severstal”. This allows to create continuous technological chain: Severstal’s slabs – mill “5000” plates – ITZ pipes, to fit key customers requirements. For today mill “5000” is already producing steel plates of grades X70. By now there are working out technologies of producing steel plates of grades X80, and further – X100.

» **Pipe length**

Competitive advantage of Izhorsky trubny zavod (pipe mill) is a possibility of producing unique product for Russian oil and gas transportation companies – pipes with length of 18,3 m, what allows to decrease costs of trunk pipelines building.

» **Technological equipment**

Production and shipment of equipment is carried out by the leaders of world machinery building industry:

- *for pipe welding equipment – by SMS Meer GmbH (Germany);*
- *for outer coating equipment – by CRC-Evans Pipeline International, Inc (USA);*
- *for inner coating equipment – by Selmers (Holland).*

» **Transportation**

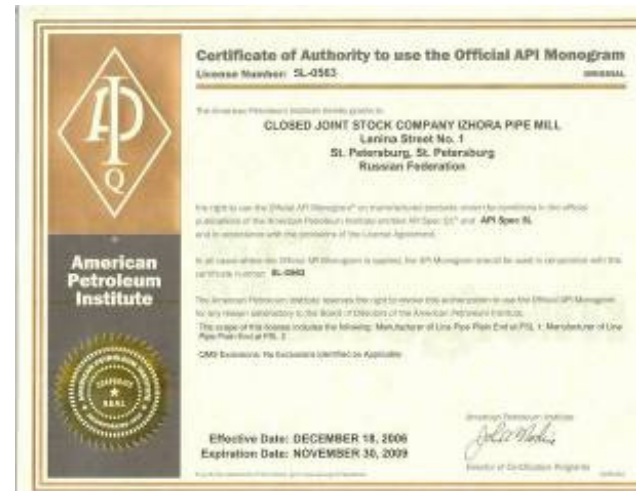
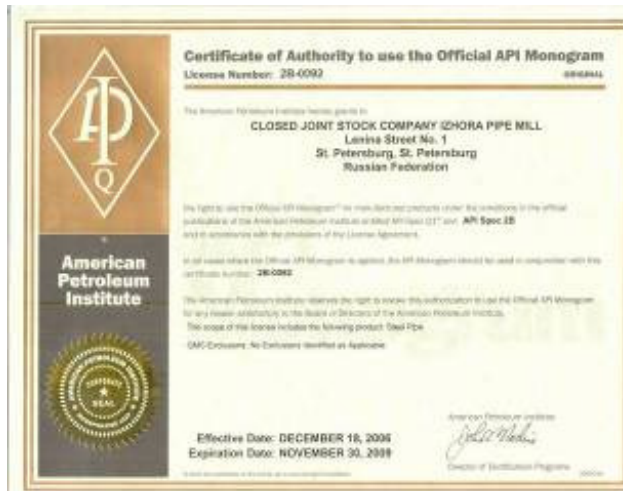
Well developed infrastructure in the region (seaports, railways, highways) is also one of the advantages of the project.

Priority projects of key consumers

Company	Project	Lenght, km	Number of lines	Total lines lenght	Diameter, mm	Total weight, thous. tons	Realization time	Average requirement thous. tons/year
Gas pipelines								
Gazprom	SRTO-Torzhok	1600	1	1600	1420	1000	2004 - 2007	250
Gazprom	SEG (Gryazovec - Vyborg)	917	2	1834	1220	1200	2006 – 2011	200
Gazprom	SEG (Gryazovec - Grayfsvald)	1189	2	2378	1220	2200	2007 – 2010	550
Gazprom	Yamal - Torzhok	2451	2	4902	1420	3000	2010 – 2015	500
Gazprom	SHGKM - Teriberka	563	2	1126	1067	960	2008 – 2010	320
Gazprom	Teriberka - Volhov	1365	1	1365	1420	1100	2010 – 2013	275
Gazprom/TN K-BP	Kovyktinskoe - Zabaykalsk	2000	1	2000	1420	1600	2008 - 2010	530
Oil pipelines								
Transneft	BTS (3 turn)	708	1	708	1020	320	2005 – 2006	160
Transneft	Tayshet - Skovorodino	2000	1	2000	1220	975	2006 – 2008	325
Transneft	Skovorodino – Perevoznaya bay	2168	1	2168	1220	870	2008 - 2010	290

- » **Starting of the most of these projects planned on 2006-2010**
- » **Main part of gas projects consider to use 1420 mm pipelines**
- » **Main part of oil projects consider to use 1220 mm pipelines**

Certificates



SeverStal