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The Stainless Steel Industry of the EU

Industry Overview

The stainless steel supply and demand in the EU show a similar trend as in Japan, the US, and other developed economies, which began with the recession in 2006, followed by the drop to the lowest point in 2009 and the gradual recovery in 2010. **Figure 1** shows the changes in the stainless steel supply and demand in the EU during 2001-2012. As the capacity bounced back in 2011 to the level achieved before 2008 after the adoption of economy revitalizing measures in the EU, the total production in 2011 was 62.5% higher than that in 2010. The stainless steel production of the EU in 2012 was 7.15 million tons, with 1.03 million tons of imports and 1.46 million tons of exports. In terms of industries that use steel, the construction industry of the EU in 2011 demonstrated growth, however, wide differences were seen in different countries. In the beginning of 2012, the confidence index for the construction industry of the EU continued to fluctuate at the low level. The production of the construction industry in the entire year of 2012 was stagnant with gloomy outlook, as those countries showing better growth in the previous year had been undermined and the tightening of financial policies also influenced the public investment. In addition, the tightening of capital for private sectors also had impact on the expense for the construction of industrial and commercial sectors. The increase of construction activities resulted from renovation while there was slight growth in housing starts. The result in 2013, on average, achieved a better outcome than that in 2012.

It is estimated that by 2014 the construction industry of the EU will begin to recover led by the building sector and the housing starts, and renovation of residential and non-residential sectors will also recover, but the recovery of civil engineering will be slow. The overall result will increase by 2.5%. However, as the proportion of raw building materials in the building cost continues to increase, with company owners' concerns on cost saving, the use of steel may be influenced.

In terms of the automotive industry, its annual growth rate for sales of passenger cars of the EU during 2013 Q1 dropped by 7.7%, which showed weak economic performance especially in Italy and Spain but with strong growth in Central Europe; while there was more pressure for the sales of commercial vehicles. Its annual growth rate for sales in 2012 Q1 declined 9.6%. As for automotive export, which was supported by weak euro and strong performance of U.S. market, it remained stable in 2013 Q1, but was estimated to be stagnant in Q2.

It is estimated that by 2014 there will be improvements for the automotive market including higher customer trust, positive outlook for automotive exports of the EU, and better industrial and financing environments, boosting the sales of commercial vehicles and growth in Central Europe.

Before the emergence of China, the EU was the most important manufacturing region in the world, where the leading stainless steel suppliers like German ThyssenKrupp and Spain Acerinox are based. Although the stainless steel production of China has exceeded that of the EU since 2009, becoming the largest stainless steel supplier of the year, the stainless steel production of the EU still plays a critical role in the world.

Table 1 shows the conditions of stainless steel production in each major country of the EU, with Italy achieving the highest production. In addition, the production of Germany, Belgium, and Spain all demonstrated considerable results.

Since the year-end of 2008, the construction, machinery, automobile, and electronic appliance industries of the EU all have encountered swift downfall, with a continuous drop of capacity utilization for stainless steel. Regarding the machinery industry, though the investment status during 2006 to 2007 was lively and vibrant, the same condition was no longer seen during 2009 to 2010. Plus, some factors existed and made it hard to get loans, and capital available for the investment in factories and

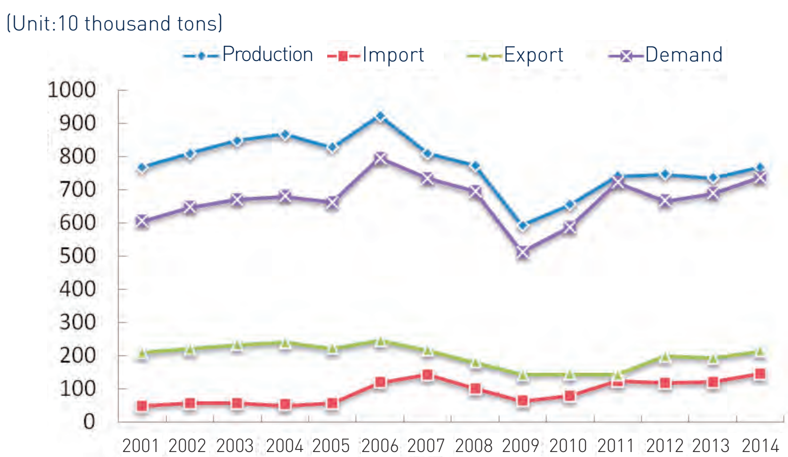

Figure 1. Analysis of Changes In Stainless Steel Supply And Demand of the EU During 2001-2014

Source: ERAMET/ compiled by ITIS Project, MIRDC.

facilities was sure to reduce, resulting in substantial decrease in stainless steel demand and causing great impact to the machinery industry the EU had been proud of for long. It is lucky, however, that the financial crisis has been effectively controlled since 2010 and the stainless steel production of the EU during 2009-2011 could be greatly improved due to the economy revitalizing policies proposed by the German government and the growing demand for automotive, chemical, and heavy industry machines in China.

Table 1. Stainless Steel Production of Major Countries in the EU

(Unit: thousand tons)

Country	2009	2010	2011	2012	2013
Austria	31	53	58	59	54
Belgium	1,042	1,293	1,230	1,175	1,142
Finland	722	999	1,002	980	975
France	202	276	306	302	300
Germany	1,324	1,510	1,490	1,475	1,420
Italy	1,210	1,583	1,538	1,484	1,450
Spain	674	844	798	810	800
Sweden	446	546	553	520	510
UK	224	267	334	310	300
Slovenia/Poland/Czech	84	100	118	117	128

Note: Data for 2013 are projected values. Source: ERAMET/compiled by ITIS Project, MIRDC.

Table 2 shows the most recent changes in the stainless steel imports and exports of the EU. Although the European debt crisis burst out in the beginning of 2010, causing the imports and exports in 2011 and 2012 to be less than those in 2009, ERAMET expected that the data in 2013 would demonstrate gradual recovery in the EU. Stainless steel in the EU was mainly imported from Belgium, Sweden, France, China, Spain, and Germany, most of which are countries within the EU; while the other manufactured in the EU was mainly exported to Germany, Italy, France, UK, and the Netherlands, all of which represented over 50% of the total exports.

Table 2. The Most Recent Stainless Steel Imports and Exports of the EU (by value)

(Unit: EUR thousands)

	Year	2009	2010	2011	2012	2013 (F)
Export value	Stainless steel billets (7218)	2,546,689	1,889,402	1,654,576	1,482,134	1,639,039
	Stainless steel hot-rolled coil (7219)	18,335,280	14,953,247	13,856,357	12,677,262	13,823,458
	Stainless steel cold-rolled coil (7220)	3,071,899	2,279,613	2,270,564	20,50,010	2,089,170
	Stainless steel hot-rolled rod (7221)	1,058,992	847,411	782,922	695,036	782,744
	Other stainless steel rod (7222)	4,062,877	3,346,738	3,272,241	3,110,245	3,236,846
	Stainless steel wire (7223)	659,858	589,083	686,981	589,830	684,589
	Total (7218~7223)	29,735,595	23,905,494	22,523,641	20,604,517	22,255,846
Import value	Stainless steel billets (7218)	1,107,799	1,297,029	1,166,984	1,007,847	1,136,850
	Stainless steel hot-rolled coil (7219)	15,625,466	12,318,654	11,598,143	10,501,074	11,284,707
	Stainless steel cold-rolled coil (7220)	2,299,793	1,768,930	1,677,060	1,512,890	1,632,141
	Stainless steel hot-rolled rod (7221)	946,928	670,150	809,293	63,9387	803,376
	Other stainless steel rod (7222)	3,185,860	2,637,997	2,665,441	2,448,571	2,614,986
	Stainless steel wire (7223)	856,306	667,470	747,808	663,110	732,178
	Total (7218~7223)	24,022,152	19,360,230	186,64,729	16,772,879	18,204,238
Net import value	Stainless steel billets (7218)	-1,438,890	-592,373	-487,592	-474,287	-502,189
	Stainless steel hot-rolled coil (7219)	-2,709,814	-2,634,593	-2,258,214	-2,176,188	-2,538,751
	Stainless steel cold-rolled coil (7220)	-772,106	-510,683	-593,504	-537,120	-457,029
	Stainless steel hot-rolled rod (7221)	-112,064	-177,261	26,371	-55,649	20,632
	Other stainless steel rod (7222)	-877,017	-708,741	-606,800	-661,674	-621,860
	Stainless steel wire (7223)	196,448	78,387	60,827	73,280	47,589
	Total (7218~7223)	-5,713,443	-4,545,264	-3858912	-3831638	-4,051,608

Source: Customs data from the EU and USA, compiled by ITIS project of MIRDC.

Table 3. The Most Recent Stainless Steel Imports and Exports of the EU

(Unit: ton)

	Year	2009	2010	2011	2012	2013 (F)
Export	Stainless steel billets (7218)	601,955	592,868	347,182	446,587	535,559
	Stainless steel hot-rolled coil (7219)	5,752,769	5,637,413	4,361,500	5,141,236	5,465,179
	Stainless steel cold-rolled coil (7220)	837,488	720,222	538,153	658,532	668,489
	Stainless steel hot-rolled rod (7221)	287,177	271,807	165,903	259,983	240,244
	Other stainless steel rod (7222)	873,875	814,641	561,697	726,546	837,004
	Stainless steel wire (7223)	109,269	108,655	92,980	122,591	141,692
	Total (7218~7223)	8,462,533	8,145,606	6,067,415	7,355,475	7,888,167
Import	Stainless steel billets (7218)	269,532	378,903	242,838	314,007	356,587
	Stainless steel hot-rolled coil(7219)	4,903,607	4,691,955	3,349,463	4,340,402	4,483,126
	Stainless steel cold-rolled coil (7220)	589,908	577,644	420,181	521,058	519,282
	Stainless steel hot-rolled rod(7221)	261,756	216,390	148,846	249,090	257,016
	Other stainless steel rod (7222)	721,006	766,834	466,236	619,498	781,209
	Stainless steel wire (7223)	178,483	156,715	112,676	155,729	177,819
	Total (7218~7223)	6,924,292	6,788,441	4,740,240	6,199,784	6,575,039
Net import	Stainless steel billets (7218)	-332,423	-213,965	-104,344	-132,580	-178,972
	Stainless steel hot-rolled coil(7219)	-849,162	-945,458	-1,012,037	-800,834	-982,053
	Stainless steel cold-rolled coil (7220)	-247,580	-142,578	-117,972	-137,474	-149,207
	Stainless steel hot-rolled rod(7221)	-25,421	-55,417	-17,057	-10,893	16,772
	Other stainless steel rod (7222)	-152,869	-47,807	-95,461	-107,048	-55,795
	Stainless steel wire (7223)	69,214	48,060	19,696	33,138	36,127
	Total (7218~7223)	-1,538,241	-1,357,165	-1,327,175	-1,155,691	-1,313,128

Source: Customs data from the EU, compiled by ITIS project of MIRDC.

Table 4. Average Unit Prices of the Most Recent Stainless Steel Imports and Exports of the EU

(Unit: EUR/Kg)

	Year	2009	2010	2011	2012	2013 (F)
Export unit price	Stainless steel billets (7218)	4.23	3.19	4.76	3.31	3.06
	Stainless steel hot-rolled coil (7219)	3.19	2.65	3.17	2.46	2.53
	Stainless steel cold-rolled coil (7220)	3.67	3.17	4.21	3.11	3.13
	Stainless steel hot-rolled rod (7221)	3.69	3.12	4.71	2.67	3.26
	Other stainless steel rod (7222)	4.65	4.11	5.82	4.28	3.87
	Stainless steel wire (7223)	6.04	5.42	7.38	4.81	4.83
	Total (7218～7223)	3.51	2.93	3.71	2.80	2.82
Import unit price	Stainless steel billets (7218)	4.11	3.42	4.80	3.20	3.19
	Stainless steel hot-rolled coil (7219)	3.19	2.63	3.46	2.41	2.52
	Stainless steel cold-rolled coil (7220)	3.90	3.06	3.99	2.90	3.14
	Stainless steel hot-rolled rod (7221)	3.62	3.10	5.43	2.56	3.13
	Other stainless steel rod (7222)	4.42	3.44	5.71	3.95	3.35
	Stainless steel wire (7223)	4.80	4.26	6.63	4.25	4.12
	Total (7218～7223)	3.47	2.85	3.93	2.70	2.77

Source: Customs data from the EU, compiled by ITIS project of MIRDC.

Protective Measures for Steel Imposed by the EU Since the Financial Crisis in 2008

Measure	Date of Initiation	Product	Defendant	Result
Antidumping	2007.9.	Welded tubes and pipes of iron or non-alloy steel	China, Russia, Belarus	Definitive duty (2008.12)
Antidumping	2008.2.	PSC wires and strands (certain pre-and post-stressing wires and wire strands of non-alloy steel)	China	Definitive duty (2009.5)
Antidumping	2008.5.	Wire rods	China, Moldova, Turkey	Definitive duty (China) (2009.4)
Antidumping	2008.7.	Seamless pipes and tubes, of iron or steel (certain)	China	Definitive duty (2009.10)
Antidumping	2008.11.	Hollow sections (welded tubes, pipes and hollow profiles, etc.)	Turkey, Ukraine, Belarus	Terminated (2009.9)
Antidumping	2010.4.	Stainless steel bars (certain)	India	Definitive duty (2011.4)
Antidumping	2010.8.	Stainless steel seamless pipes ad tubes	China	Provisional duty (2011.6)
Antidumping	2011.6.	Seamless pipes and tubes of iron or steel (certain)	Belarus	
Safeguards	2009.11.	Angle steel, U-steel, H-beam steel		
Antidumping	2008.11.	Stainless steel cold rolled sheet metal	China, the EU, Japan, Korea, Thailand, Taiwan, USA, South Africa	Definitive duty (excl. Japan) (2009.11)
Antidumping	2008.11.	Hot-rolled sheet metal	China, Indonesia, Iran, Japan, Kazakhstan, Korea, Malaysia, Philippines, Romania, Russia, Saudi Arabia, Thailand, Turkey, Ukraine, South Africa	Terminated (2009.8)
Safeguards	2009.4.	Hot-rolled sheet metal		
Antidumping	2010.1.	Seamless pipes and tubes	China	
Antidumping	2010.4.	Stainless steel hot-rolled sheet metal	The EU, Korea, Taiwan, USA, South Africa	
Antidumping	2010.8.	Stainless steel cold–rolled sheet metal	China, the EU, Korea, Ukraine, USA	
Antidumping	2008.11.	Steel	China, Malaysia, Taiwan	Investigation Terminated (2009.9)
Antidumping	2009.4.	Hot-rolled sheet metal coil	Korea, Malaysia	Definitive duty (2011.2)
Antidumping	2009.6.	H type and I type steel	China	

Source: OECD database, compiled by ITIS project, MIRDC.

New Product Technology

In terms of low-nickel stainless steel, Swedish Sandvil used advanced smelting technology to manufacture "Sandvik Bioline High-N" for medical use without secondary smelting; Swiss Thomann also developed Rex734 stainless steel with the nitrogen content up to 3.8%. Regarding the new nickel-free austenite stainless steel with nitrogen content, Japan uses electro slag remelting with nitrogen pressurizing to manufacture Fe-24Cr-2Mo-1.5N as well as adopts nitrogen adsorption/absorption treatment to manufacture Fe-24Cr-2Mo-(0.62~0.92)N and Fe-24Cr-(0.65~0.88)N. shown as **Picture 2**.

Pic. 2 High-N Stainless Steel for Medical Use of the EU

Nikel free stainless steel bone screw   Nikel free stainless steel osseous lamella

Source: compiled by MII-ITIS of MIRDC.

Conclusion and Outlook

The steel market in the EU is still in recovery to the level before 2008 when the financial crisis caused severe recession. The steel demand of the EU in 2011 was still 20% lower than that in 2007. Since the steel market of the EU is quite open, it is highly sensitive to the subtle increasing market demand and can immediately stimulate global steel trade with the EU. However, the imports of steel have caused severe injury to domestic steel manufacturers of the EU. Accordingly, EUROFER supports legitimate trade policies, which can effectively ensure free access to the market (via free trade zone, elimination of trade barriers of steel refining materials and steel by diplomacy and laws, and reciprocal governmental procurement) and fair trade (via strengthening of antidumping measures and reconsideration of the current trade safeguards in the EU.), etc.