

Challenges and Opportunities for Carbon Steel Wire Rod Producers in the EU Fasteners Industry

by CRU International

Introduction

Production of fasteners is an important source of demand for carbon steel wire rod. Demand for fasteners in Europe is more exposed to automotive output and less exposed to construction than total end-use demand for wire rod, and so the relative strength of the automotive industry compared to construction in the Eurozone has driven an increasing share of wire rod consumption to be directed to the fasteners industry.

Meanwhile, import competition in the European fasteners market has intensified in recent years, and the removal of anti-dumping duties against fasteners from China in 2016 has further intensified this competition. However, the market is highly segmented in terms of product quality, and trade data suggests that Europe is a key global producer of high quality fasteners, and that import competition occurs largely in the low quality tiers of the market. Thus, producers of high carbon and alloyed wire rod stand to gain the most from the potential growth of the European fasteners industry. In this Special Feature, we investigate these features of the fasteners industry in light of the opportunities and challenges that exist for carbon steel wire rod producers.

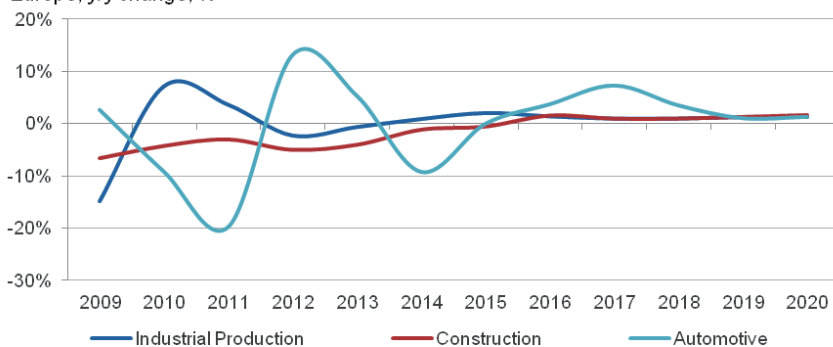
Fasteners Production's Share of Wire Rod Demand Has Grown

According to Eurostat data, EU28 sold production of carbon steel fasteners was 2.5 Mt in 2015, up from 1.6 Mt in 2009, while total consumption of wire rod was 17.2 Mt in 2009 but just 18.6 Mt in 2015. The fastener industry's post-GFC recovery has clearly been much stronger than the steel industry's recovery, and thus fastener production has accounted for a growing share of wire rod demand in Europe since 2010.

While the construction industry in the Eurozone has been in a downturn for the past several years, industrial production growth, especially vehicle production, has been relatively strong (see Chart 1). Another noteworthy point is that 2012's peak in automotive production corresponds to a peak in fasteners production growth. Assuming a 5% yield loss in the production of fasteners from wire rod, fasteners production's share of total wire rod consumption increased from 10% to 14% from 2009 to 2015.

Chart 1: The fasteners market is less exposed to the construction industry than the wire rod market

Industrial production and construction output in the Eurozone and vehicle production in Europe, y/y change, %

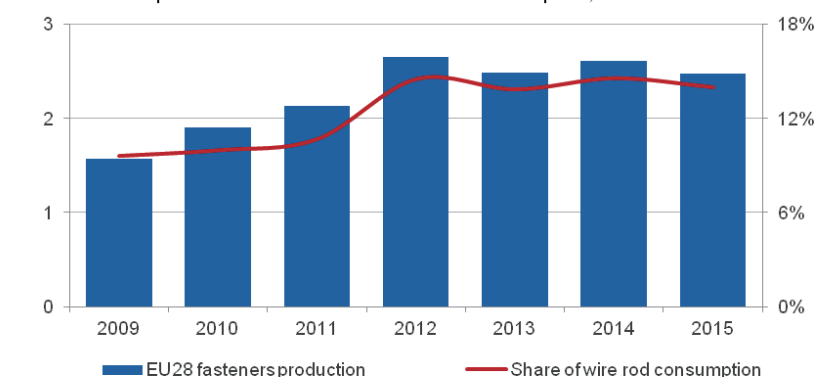


Data: CRU, OE.

Chart 2: Fasteners production has outpaced wire rod consumption

LHS: EU28 sold production of fasteners, Mt

RHS: Fastener production share of EU28 wire rod consumption, %



Data: Eurostat; CRU. Note: Assumes a 95% yield rate from wire rod to fasteners.

(see Chart 2). The relative strength of fasteners production compared to wire rod demand over this period indicates that the fasteners industry is less exposed to the construction sector than the wire rod industry. Moreover, the auto sector is a key source of fasteners demand in the EU.

In the next couple years, given that automotive output will continue to outpace construction in the Eurozone, the fasteners' share of wire rod consumption has scope to increase further. From 2019, modest but steady growth in both the automotive and construction industries should support growth in fastener's production. Overall, the fasteners industry will remain a strong end-use market for wire rod producers.

Europe Mostly Makes High Quality Fasteners, Importing Lower Grades

The fasteners market is highly segmented in terms of product quality: European countries tend to produce and export high quality fasteners and import low quality material. To illustrate this emphasis on high quality products in Europe, we take as an example "steel hexagon bolts with heads": in the EU, 90% of exports of these bolts are high quality high carbon material with a tensile strength over 800 Mpa and a yield strength over 640 Mpa (i.e. a carbon steel bolts property class of at least 8.8).

The top five fastener producers in the EU28 (according to 2015 sold production) are Germany, Italy, France, Poland, and Spain (see Chart 3). Germany alone accounted for 41% of total EU28 sold production in 2015, while Italy accounted for 32%. Although the EU28 is a net importer of fasteners, the region nevertheless exports 450-500 kt of fasteners annually to a wide variety of destinations, with the largest markets being China and the United States. Germany and Italy are the third and fifth largest exporters of fasteners in the world (by quantity), but Germany was actually a small net importer of fasteners in 2014 and 2015. The large volumes of both imports and exports of fasteners coming in and out of the EU reflect the two tiers of quality that define the fasteners market.

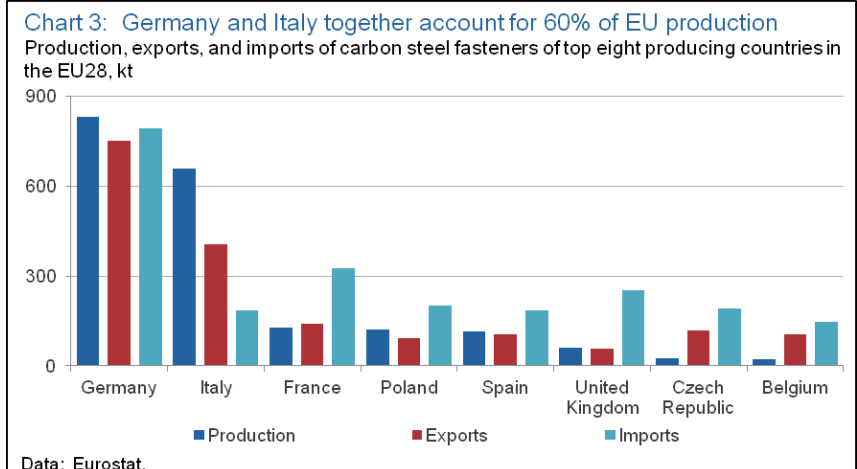
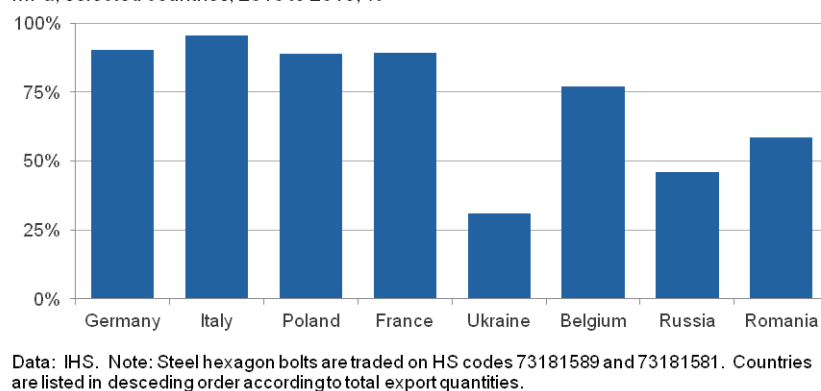


Chart 4: EU countries tend to export high quality fasteners
Share of total exports of steel hexagon bolts with heads that have a tensile strength ≥ 800 MPa, selected countries, 2010 to 2015, %



In the case of carbon steel bolts, screws, and nuts, the property class of 8.8 (i.e. tensile strength of at least 800 MPa) is an important threshold: fasteners of class 8.8 and above are generally considered "high quality" material. In terms of the quality of wire rod required to manufacture fasteners, for bolts with a tensile strength less than 800 MPa (i.e. property class below 8.8), low to medium carbon wire rod is sufficient, but bolts of property class 8.8 and above require medium to high carbon or alloyed steel which is often quenched and tempered.

Trade data under 8-digit HS codes can provide an indication of what proportion of EU fasteners exports can be deemed "high quality" (though we note that a worldwide comparison is not possible because these 8-digit codes are not used universally). At this detail level, "steel hexagon bolts with heads" are divided into two categories: those with a tensile strength < 800 MPa (HS 73181581) and those with a tensile strength ≥ 800 MPa (HS 73181589). Together, these two trade codes represent 15% and 22% of total fasteners exports from the EU28 and the top five EU producing countries, respectively. In the EU, the share of exports under these two codes that have a tensile strength ≥ 800 MPa is about 90% or higher for most European countries. In comparison, the equivalent share for CIS countries such as Ukraine and Russia is less than 50% (see Chart 4). This trade pattern is another indication of the maturity and global significance of the European fasteners industry.



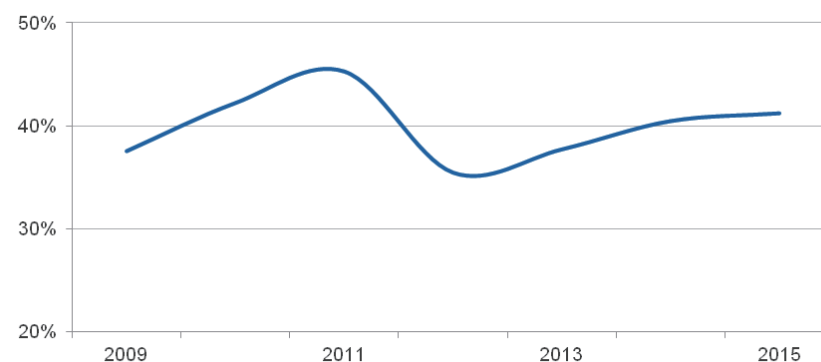
Fasteners Imports Mostly Impact Low Quality EU Production

Nevertheless, domestic European fasteners producers face some challenges, especially in the low-quality tiers of the market. Although the EU28 imposes a third country duty of 3.7% on imports of fasteners, the import share of apparent consumption has increased notably over the past several years, from 25% in 2012 to 41% in 2015

(see Chart 5). The largest importers of non-EU produced fasteners are Germany and Italy. Taiwan accounts for about a third of all EU28 fasteners imports (by quantity), and China, India, and Vietnam together make up about another third.

Following the removal of anti-dumping duties on Chinese imports in February 2016, which had been in place since January 2009, the Chinese share of EU28 fastener imports increased four percentage points to 27% in 2016 (see Chart 6). The duties, which in 2012 were extended to cover Malaysia following a circumvention investigation, were renewed for a further five years in 2015 after an expiry review. However, after a long back and forth process of appeals and cross-appeals in a WTO Dispute Settlement Process regarding this trade case, the WTO ruled in China's favour on 12 February 2016. Essentially, the WTO objected to the methodology used by the European Commission to calculate the dumping margin and prove injury to the domestic industry resulting from dumping. With no legal basis to maintain the duties, the European Commission repealed them on 26 February 2016, although it expressed openness to receiving a new complaint which could lead to a new anti-dumping or anti-subsidy investigation.

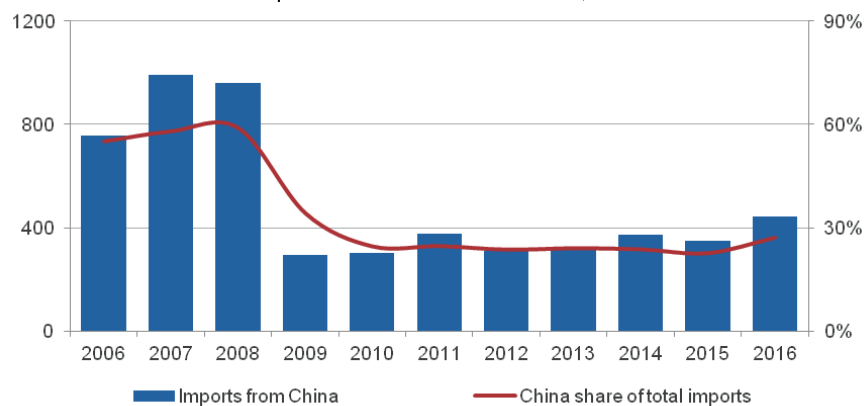
Chart 5: Import competition in low quality fastener markets is strong
EU28 import share of apparent consumption of carbon steel fasteners, %



Data: Eurostat.

Chart 6: Imports from China increased 27% y/y in 2016

LHS: EU28 imports under HS 7318 from China, kt
RHS: Share of total EU28 imports under HS 7318 from China, %



Data: IHS.

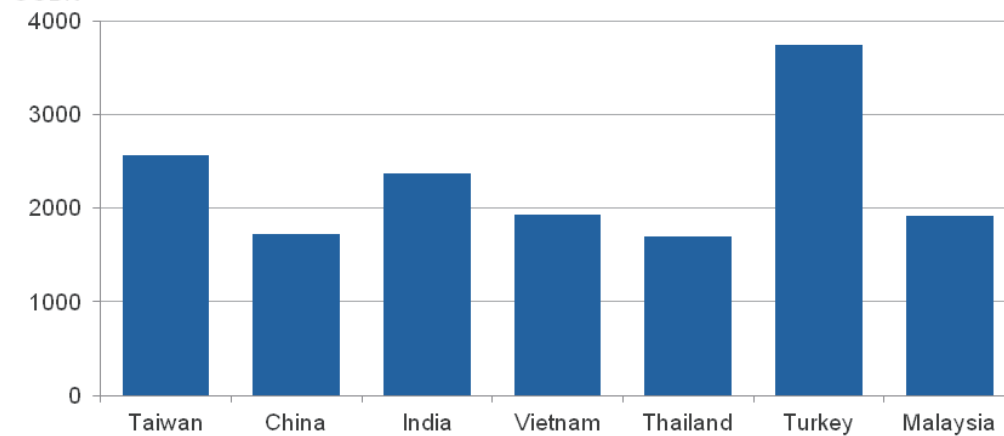
The WTO ruling objected to the methodology used in the anti-dumping investigation, but didn't reject the possibility that Chinese fasteners have been dumped in the EU; however although the EC has the power to initiate an anti-dumping investigation on its own, after receiving this ruling from the WTO it is unlikely to do so without a formal complaint from the domestic industry. Moreover, given that imports from China have been suppressed by the duty since 2009, a new case would lack strong historical data to prove injury to the domestic industry and

would therefore need to be based on an imminent threat of recurrence of dumping or injury. Initiating a new investigation on imports of Chinese fasteners is therefore not without some obstacles, though some industry participants remain optimistic that the EC is supportive of the idea.

When the EU re-instated an import surveillance system for steel products on 31 May 2016, they widened the scope compared to previous systems to include fasteners. The surveillance system speeds up the EC's ability to notice a change in trade patterns, which is the primary basis for establishing an anti-dumping or anti-subsidy investigation, and so many took this move as an indication that the EC is serious about re-establishing trade barriers against Chinese fasteners. So far, however, no new trade cases against steel fastener imports have been announced. EU imports of fasteners from China increased 27% y/y in 2016 to 442 kt; import levels were the highest they've been since the duty was imposed, but remained well below levels seen before 2009 (see Chart 6). Meanwhile, the average unit price of these imports was significantly lower than imports from Taiwan, India, and Vietnam (the other main suppliers of low quality fasteners to the EU market) (see Chart 7).

Chart 7: Imports from China and Thailand were the most competitively-priced options in 2016

Average unit value of 2016 EU28 imports under HS 7318 from top six partner countries, USD/t



Data: IHS.

Conclusion

Representing a seventh of all carbon steel wire rod consumed in the EU, the fasteners industry will remain a key market for European wire rod producers. However, the repeal of the duty on Chinese fasteners has potential to shake up the EU market, presenting challenges for

producers in Taiwan, India, and Vietnam as well as European producers of low quality fasteners. European producers of high quality fasteners, though, will be insulated from any increased competition in the low tiers of the market and will therefore remain a robust source of demand for wire rod. Accordingly, producers of medium to high carbon and alloyed wire rod stand to benefit most from the potential of this end-use sector. ■

SCREWS & NAILS

- Masonry screw. Self-Drilling screw. Roofing screw. Chipboard screw
- Roofing Coil Nail. Drywall Nails. Concrete Nails. Common Nails. Bulk Nails.....
- Small box package (1lb, 5lb, 100/200/500/1000 pcs per box) are welcome



GINFA WORLD CO., LTD.

8F-3, No.185, Fu Kuo Road, Tsuo Ying Dist.,
Kaohsiung, Taiwan 813

Tel: 886-7-557 6562

E-Mail: gifa@ms15.hinet.net

<http://www.fastener-world.com.tw/ginfa>

Fax: 886-7-557 5598

<http://www.ginfa.com.tw>

