

# **THE EUROPEAN ENGINEERING STEEL INDUSTRY**

## **Research Report**

EXECUTIVE SUMMARY

February 2010

This research report reviews the European engineering steel bar sector. Within Europe coverage is centred on Western, Central and Eastern Europe. By engineering steel, reference is made to the carbon, alloy and free-cutting grades of so-called rolled ‘special bar quality’ or SBQ steels. Although there is no single definition, engineering steel can be defined as steel that moves [rotates, twists or bends] rather than stays still whilst in use – usual applications extend to crankshafts, gearbox gears, suspension arms, automotive springs and hydraulic components.

Across Europe, 53 producers of engineering steel [in bar form] are identified. With a handful of these plants having engineering steel bar capacity at or over 500kt/year (facilities that are located in Germany and in Eastern Europe), average European plant scale is close to ~240kt with the smallest average size (~135kt) being found in Central Europe. Severstal / Lucchini, Ovako, Mechel Group and ArcelorMittal lead SBQ supply in terms of the number of production sites owned. Metalloinvest and Tata Corus are also significant if assessments are made of installed capacity. Total European output of all 53 facilities is assessed at ~8.4 mt of production in 2009 with Germany, Romania and Russia leading production in each of the three European regions under study. The grade orientation of this production is estimated at ~63% carbon, 31% alloy and 6% free-cutting steels.

European engineering steel trade volume for the period 2007-2009 was investigated. The data indicate Western Europe as a significant importer and Eastern Europe as a significant exporter of SBQ for the period 2007-2009, with Central Europe closer to balance in 2008 and 2009. Looking at individual countries, Germany dominates trade as a main importer; Russia is notable as a major exporter.

European demand for engineering steel bar is estimated at 8.2mt. This is for 2009, against a world consumption estimate of ~34mt. The European demand of 8.2mt is some 37% down on 2007 consumption levels of ~13mt, with SBQ demand especially hard-hit in Western Europe. SBQ demand collapses since 2007 are assessed as near to ~50% in Western Europe, under 10% in Central Europe but intermediate in Eastern Europe, recent patterns in automotive output being largely responsible for these changes.

Looking forward, with year 2009 consumption very much seen as the ‘low point’ in European engineering steel demand for the period 2007-2013, a slow recovery is foreseen in European SBQ demand. This recovery, whilst not anticipating overall European recovery to 2007 demand volumes until after 2012, assumes much faster recovery in Central Europe [by 2010] and in Eastern Europe [by 2011], with recovery of 2007 production levels in Western Europe only expected around 2014. Gradual relocation of automotive component manufacture to modern large-scale plants in the lower labour cost countries of Central and Eastern Europe is the principal factor shaping this recovery in favour of the former Eastern bloc states.

A number of industry scenarios are outlined for the European engineering steel sector across the medium term. These include supply side consolidation in Germany; passive exit from SBQ production by marginal suppliers wishing to optimise their product mix; large-scale SBQ facility investment in Central Europe; medium-scale SBQ facility investment in Kazakhstan; selected engineering steel asset sales in Romania; outright SBQ business disposals by some of the volume steelmakers; and facility restructuring at selected sites. Probabilities are assigned to each of the scenarios – reduction of competition in engineering steel production through European M&A activity or plant closure with relocation and / or through passive exit from SBQ steel production are judged as high probability outcomes.

For further information, please visit <http://www.steelonthenet.com/SBQ>