



Overall view of the annealing shop

Buderus Edelstahl is expanding its production capacity

The medium-term prospects for steel as a material remain positive, notwithstanding the current financial market crisis that is now impacting on the steel producing and processing industry. Buderus Edelstahl is responding to this long-term trend by expanding its production capacity.

Market environment

Buderus Edelstahl is engaged in industries for which the environment remains positive, with its commitment to forged steels for toolmaking, gearmaking (especially for wind energy), generator and turbine shafts for power generation plant, and general machine building – sectors that are as yet hardly affected by the financial market crisis. The product range is completed by rolled billets, which are an important element in the scrap and alloy cycle within the works. Buderus Edelstahl GmbH also supplies its sister companies Buderus Edelstahl Band and Buderus Edelstahl Schmiedetechnik. These two companies are also still enjoying growth, especially with integration into the Böhler-Uddeholm AG corporate group.

Crude steel capacity

Crude steel production has now reached its technical and regulatory limits, so extensive action is required. The company's application to expand its approval limit from 480,000 tonnes a year to 650,000

tonnes a year is currently being considered by the authorities. Buderus Edelstahl is meanwhile conducting an environment compatibility review on its own initiative, to establish an agreed position on the scope of documentation likely to be required to substantiate the environmental impact.

On the technical side, it is necessary to increase electrical power consumption, so the company has connected itself to the high-voltage grid (380 kV) via a separate substation. Power consumption is currently limited by an energy consumption computer on a quarter-hourly cycle. These longer energy draw times in the melting furnaces boost melting performance. The casting pit capacity will then be adapted to the demands of the ingot formats required. A scrap stockyard is being established in Dillfeld to secure our supply of input stock, with a projected rail link to the steel mill.

8,000 tonne forging press

Buderus Edelstahl has been operating a 2,000 tonne and a 5,500 tonne press for many years. The larger of the two presses in

particular has been operating on a rotating shift basis, i.e. 3 shifts a day, 7 days a week. With the steady increase in the proportion of large forgings, the compression force of this press is now approaching the limits required to form the steel. In view of this and the outstanding growth prospects for forgings for power station construction (generator and turbine shafts), an 8,000 tonne press was ordered from SMS in March 2008, capable of exerting a force of 10,000 tonnes in swaging mode.

Heat treatment

The increased quantity of forgings also has to be heat-treated. Consequently the existing heat treatment shop is being extended, and new annealing furnaces built.

Machine shop

Whereas some of the additional forging output is shipped directly after finishing and outgoing goods inspection (this applies in particular to tool steels and engineering steels), shafts require pre-machining on lathes. Accordingly the turning lathe capacity is being expanded, with the installation of a total of three new lathes.

Logistics and infrastructure

This increase in production volume has to be underpinned by a robust infrastructure. The plan includes building a shared works

Rotary boring machine in action



access point in Dillfeld for heavy goods vehicles, to reduce the burden on the city of Wetzlar of vehicle movements generated by Buderus Edelstahl GmbH and the other associated companies Buderus Edelstahl Band, Buderus Edelstahl Schmiedetechnik, Buderus Gießerei and Buderus Spezialguss. This will significantly reduce fine dust pollution in the urban area despite an overall increase in traffic volume, albeit in the proximity of the motorway.

Timetable

The press has been scheduled so that the first product deliveries will be in the second half of 2010. Conversion of the steel mill will by then have advanced to the point that the new press can be supplied with new ingots. The final steel mill expansion stage will then be completed in the years 2010/11, subject to official approval.

In addition to these measures, the local water authority standards require upgrading the mill's flood protection and that of the Lahn/Dill delta area. This will require extensive earthworks to lower the downstream area by 80–150 cm, and raise the level on the south side. This work is already in hand, and will be completed in 2009.

When all measures have been completed, Buderus Edelstahl will have a significantly strengthened presence in its core markets, and will be able to produce on an

Drilling the hole for the pile foundation



enhanced cost and environment basis with its upgraded infrastructure. New products will then also be added to the existing portfolio. Buderus Edelstahl is already

working with customers on developing these steels, so the year 2010 will be an interesting and exciting year for all involved.

Gießen District Governing Council 25. 8. 2008 – Press Release

www.rp-giessen.hessen.de

Buderus intends to significantly expand its steel mill capacity in Wetzlar. District Governing Council anticipates public approval proceedings in early 2009 – company carries out environmental impact review voluntarily.

The steel market is booming – and this is evident in the classic mining town of Wetzlar. Buderus Edelstahl GmbH now wishes to invest significantly in the steel mill near Hermannsteiner Str., increasing its capacity from 480,000 to 650,000 tonnes a year, the Gießen District Governing Council now reports.

This is good news for the future of the location and the jobs it provides, but the expansion of capacity of course also raises the question of environmental effects. This will ultimately be decided in environmental approval proceedings planned for the first half of next year at the Gießen District Governing Council.

The current state of planning is for Buderus to submit approval documents at the end of this year, so that the proceedings can take place in the first half of 2009. There is also provision for public participation. The Council anticipates that this expansion of capacity will also entail downstream processes for other parts of the business.

Since the project will involve renovating older plant, the Gießen specialists anticipate that there will be no adverse change for population and environment despite the increase in production capacity.

The Council President Wilfried Schmied sees another important prospect for Wetzlar in the company's decision, "When a company invests so heavily in a location, it sees long-term prospects there – which includes the numerous jobs associated with it. This is good news for Wetzlar and for the region."