

Rolling engineering and consultancy

Parkegate Ltd is an established engineering and consultancy company which, in its 16 years of operation from its Poole, UK offices, has developed a wide range of expertise in the aluminium processing sector.

Now part of the SMS Siemag group, Parkegate provides engineering consultancy and design services for the aluminium industry covering hot, cold and foil rolling mills and a range of process lines, from upgrades to the bespoke design and build of new mills and lines. Ironing rolls and strip dryness systems are amongst the special products within the portfolio. Engineers at Parkegate have a particular wealth of experience in the upgrading of rolling mills, whether this is to improve an existing operation or in conjunction with a used plant opportunity, where equipment is often upgraded when relocated.

The reasons for mill upgrades include product quality improvement, extension of product range or simply a need to increase productivity. Whatever the reason, Parkegate has both the process and design expertise to help producers realise the full benefits of a mill upgrade. Recent activity in the international market place has seen significant contracts for Parkegate with Hindalco, one of the major players in the aluminium sector. Hindalco Aluminium, owners of the Novelis Group and the largest aluminium producer globally, have chosen Parkegate for two of their major expansion projects in India.

New hot line

At Hiralud in Orissa, Hindalco are establishing their flagship Indian plant based around their existing aluminium smelter.



Hindalco hot roughing mill installation in progress at Hiralud, India.

Parkegate were awarded the contract as mill builder/mill engineers for the new hot line which will be the first in India to produce can body for the beverage can-stock market. This new line will be based on the upgrade of the former Novelis Rogerstone UK hot line with 15,000 tonnes of equipment being relocated from the Rogerstone site (South Wales) to Orissa. Design and manufacturing phases are now complete and installation is underway at

site with startup of the modernised line scheduled for early 2013.

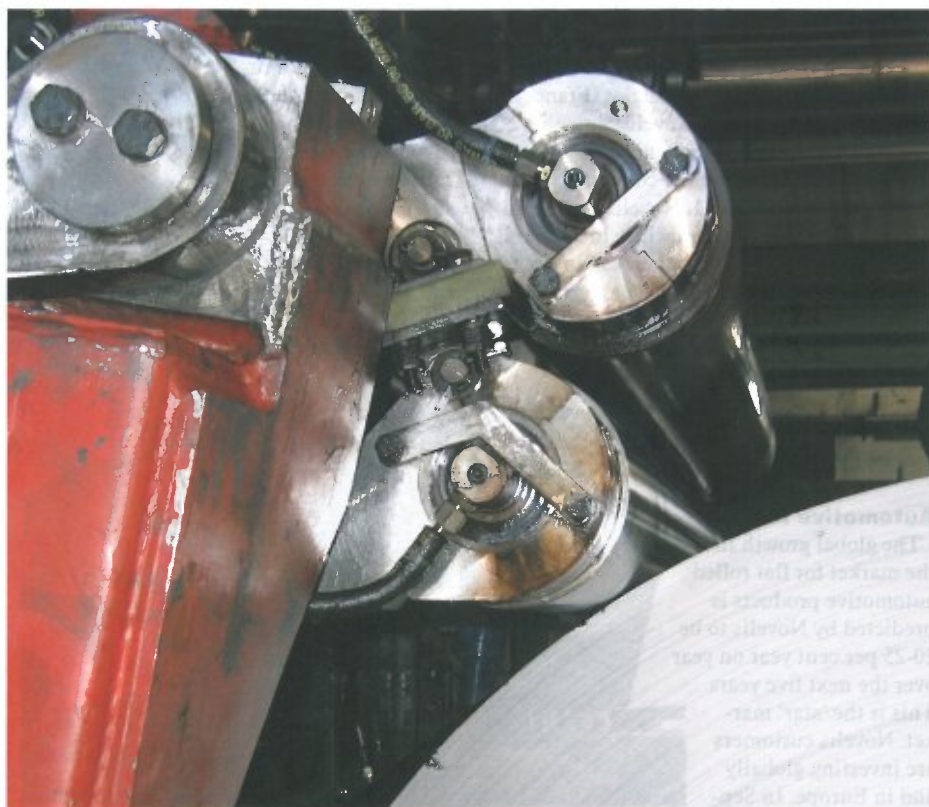
Foil mills

At the Hindalco site in Mouda near Nagpur in Maharashtra, Parkegate are providing engineering and consultancy services for the upgrade of two foil mills. These mills were formerly installed at the Novelis plant in Bridgnorth, UK. The scope of work for the upgrades includes both coil size and width increases which were engineered by Parkegate, who have also been responsible for the supply of selected items of equipment sourced from the UK. Parkegate also provided commissioning supervision services for the startup of the mills, which successfully saw the first coil on the roughing mill in March 2012, followed by the finishing mill in July 2012.

Another recent upgrade project for TLM-TVP in Šibenik, Croatia addressed a need to roll thicker products to satisfy new market demands. A preliminary assessment of the mill identified the need to increase the rolling torque and tensions, as well as update a number of equipment items. With new change speed gearboxes, new decoiler/coiler head shafts, new ironing roll and various other improvements, the mill is now capable of rolling thicknesses more than double the original mill specification.

Upgrading of existing equipment is often a cost effective and viable alternative to new equipment. Productivity and quality improvements can be achieved, giving the opportunity for higher added value production and the potential to expand the product range and add new products.

Reader Reply No.55



Dual roll ironing roll, part of Parkegate's range of constant force ironing rolls.