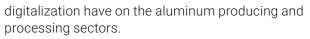


All set for 'ALUMINUM 2018'

During the "ALUMINIUM 2018" trade fair, from 9 - 11
October 2018, Düsseldorf, will once again be in the limelight of the global aluminum industry. SMS group is going to focus its trade fair presence in hall 9 (booth number 9C20) on digitalization and on the momentum Industrie 4.0 and



One of the highlights will be the presentation of the Anti Chatter Device for cold rolling mills. This device reduces vibrations occurring in rolling mills, especially in tandem mills. Such vibrations may lead to defects of the rolled stock and damage to the rolling equipment. By reducing the chatter effect, it is possible to increase the rolling speed and the yield while improving the product quality. This pioneering technology is already in use in a first pilot operation. SMS group will also present the X-Shape flatness measuring roll. With its closed roll surface, high-precision flatness measurement capabilities and optical signal transmission, this system plays a key role in cutting-edge measuring and control technology for premium quality cold-rolled aluminum strip.

The data collected by means of intelligent sensor technology is used by SMS group not only to control the plant, but also to digitalize comprehensive production and business processes. An example of this is the PQA® (Product Quality Analyzer), which collects all relevant production and process data, analyzes the data in a continuous manner based on specified rules, provides instructions for action in case of deviations from the



specified quality, and evaluates the products after each process step with regard to their suitability for the next step and the attainment of the quality specified for the final product. All this makes PQA® an essential digital tool for quality management.

In terms of service and maintenance, digitalization opens up new possibilities for the entire life cycle of a plant. "Smart Maintenance Solutions" aim at increasing the availability of the plant and the quality of the final products in a sustainable manner by combining various software solutions. In the future, digital plant structures will provide maintenance and repair teams with centralized access to all relevant parameters. The required information will become available from systems such as eDoc, an electronic parts catalog, the IMMS® (Integrated Maintenance Management System) or Genius CM® (Condition Monitoring). SMS group is also going to demonstrate the link between "smart" data and "smart" training an augmented reality environment. Those participating in training benefit from the use of virtual and augmented reality in the form of enhanced learning. For example, complex maintenance work can be immersed in and experienced much more realistically.

Another momentum from digitalization and Industrie 4.0 takes effect in the field of manufacturing technology. At the trade fair, SMS group is going to demonstrate this by way of the example of 3D-printed components which are characterized by enhanced functionality, reduced weight and/or shorter lead times according to a press release.

Rio Tinto completes sale of remaining coal assets



Rio Tinto has completed the sale of its remaining coal assets in Queensland, Australia, for \$3.95 billion.

The transactions include the sale of Rio Tinto's interests in the Hail Creek coal mine and Valeria coal development project to Glencore for \$1.7 billion, and its interest in the Kestrel underground coal mine to a consortium comprising private equity manager EMR Capital and PT Adaro Energy Tbk for \$2.25 billion.

Rio Tinto chief executive J-S Jacques said "The sale of our remaining Australian coal assets delivers exceptional value to our shareholders. Once again, I would like to thank the many people across Rio Tinto and the communities in which we operate who have contributed to the coal business. I wish them continued success under new ownership."

2018 guidance and tax

To reflect the sale of these assets, 2018 production guidance is updated to 4.0 million tonnes of hard coking coal and 2.5 million tonnes of thermal coal.