

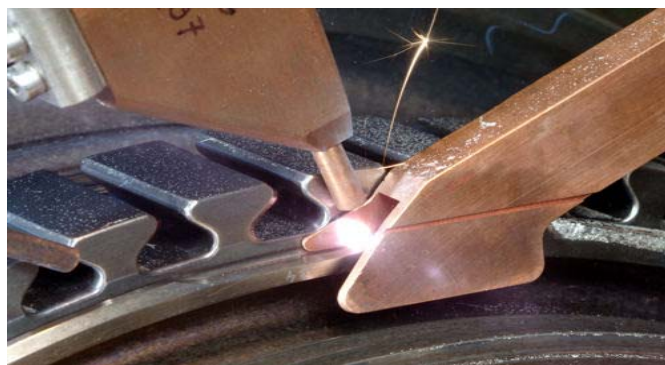
LASER CLADDING KEEPS AERO ENGINES FLYING

Fraunhofer ILT and its industrial partners have developed an innovative and cost-efficient repair technique for engine components.

A laser cladding technique that exploits a novel design of feed nozzle allows the localized repair of aero-engine components made from titanium and nickel-based alloys, or superalloys, which would previously have had to be replaced in their entirety.

The new process uses a laser to generate a local weld pool on the surface of the component. A specially designed powder-feed nozzle then introduces a metal powder composed of a similar material into the molten metal. Once cooled, the resulting layer possesses very similar mechanical properties to those of the original component.

“What is so innovative is that we can take oxidation-sensitive titanium materials and components that have a tendency to distort, and weld them in a precise and reproducible manner without any distortion,” said Andres Gasser, project manager at the Fraunhofer Institute of Laser Technology in Aachen, Germany. [Details](#)



TITANIUM VALVE RANGE EXPANSION

Grupo Compas, a stockist of alloy valves, based in Barcelona, Spain, has recently expanded its distribution range of titanium valves and A182 F44 valves. Titanium valves will now cover grades 7 and 9 in Titanium-Palladium, in addition to the previously covered range of A182 F316Ti valves, as well as forged B367 Gr. 2 and cast B381 Gr. II titanium valves. [Details](#)

TITANIUM MINE BREAKS EVEN

Kenmare Resources has achieved break-even at its Moma titanium mine in Mozambique. The mine is expected to be running at a profit over the next couple of months. Reaching break-even marks a major turning point for the project, which has suffered from production problems while the global recession has also curbed demand for titanium. [Details](#)

VSMPO-AVISMA WINS AWARD

PSC VSMPO-AVISMA Corporation, a producer of titanium ingots and all types of semi-products from titanium alloys, was named one of the winners for the Best Russian Exporters 2008 contest. They won in the category of Best Russian Exporter of the Industry. The contest concerned 17 major industries and had the following nominations: Best Russian Exporter of the Industry, Best Russian Exporter of the Industry to the CIS Countries; and The Most Dynamically Growing Russian Exporter of the Industry. Applications for the contest were considered by the Department of External Economic Relations of the RF Ministry of Industry and Commerce. [Details](#)

ZAPORIZHIA SIGNS SUPPLY AGREEMENT

Zaporizhia titanium magnesium mill state company, which is under the management of the Ukrainian Industry Ministry and representatives of Chinese companies have signed framework contracts for the supply of 200tns of titanium plates by the end of 2009 and the provision of container supplies of 500tns of sponge titanium in May and June 2009. [Details](#)

NORONT TITANIUM DISCOVERY

Noront Resources Ltd has announced the discovery of a new mineralized zone containing significant concentrations of vanadium, titanium and iron on its wholly owned Double Eagle Project in the James Bay Lowlands of northern Ontario, Canada. [Details](#)

ATI 425 TITANIUM ALLOY

ATI 425 titanium is a new titanium product that is an alternative to the most common high-strength titanium alloy. ATI 425 titanium is both hot and cold workable. It is produced by ATI Allegheny Ludlum, ATI Allvac and ATI Wah Chang in a variety of forms, including sheet, coil, strip, precision rolled strip product, plate, seamless tube and pipe as well as cast and engineering products. Duplex annealed ATI 425 titanium plate exhibits good fracture toughness, while cold rolled and annealed ATI 425 titanium sheet has been bent to radii of 2.5 times its thickness. [Details](#)

TITANIUM TECHNOLOGY GOES TO TINSEL TOWN

The importance of titanium technology to the future of Australia's aerospace industry was highlighted at the opening of "Titanium Tuesday", part of the International Light Metals Technology Conference being held on the Gold Coast.

Mike Lyons, who opened Titanium Tuesday on behalf of JSF Team Australia, said Australian industry has the opportunity to manufacture titanium parts for the total JSF production run - significantly more than 3000 aircraft.

JSF Team Australia represents government and industry working together on the JSF Project, with the aim to maximise Australian industry engagement in the vast global JSF supply chain. [Details](#)

REORGANIZATION OF TITANIUM BUSINESS: THYSSENKRUPP STAINLESS TO CREATE HIGH PERFORMANCE MATERIALS UNIT UNDER LEADERSHIP OF THYSSENKRUPP VDM

As part of the restructuring of the ThyssenKrupp Group, ThyssenKrupp Stainless AG is reorganizing its titanium business: The activities of ThyssenKrupp Titanium GmbH are to be transferred to ThyssenKrupp VDM GmbH and combined in a specialized high-performance materials unit. The Stainless group expects the reorganization to provide more growth opportunities for the titanium business. The Supervisory Board of ThyssenKrupp Stainless has now approved this measure. The merger will take effect at October 1, 2009.

At present, titanium operations are carried out in Germany by ThyssenKrupp Titanium GmbH (Essen) and in Italy by ThyssenKrupp Titanium S.p.A. (Terni), both of which are assigned to ThyssenKrupp Acciai Speciali Terni.

The Essen plant melts titanium sponge and scrap into titanium ingots and slabs and processes them into billets, bars and sheet. Further processing to coil, tube and sheet takes place at the Terni facility, with key production steps being carried out by ThyssenKrupp Acciai Speciali Terni. [Details](#)

TITANIUM CONFERENCE A MAJOR SUCCESS

Over 150 delegates from 17 countries attended the European Titanium Conference organised by NAMTEC (the National Metals Technology Centre) that was held recently at the Belfry Golf Club & Conference Centre in Birmingham.

The event, which was held in partnership with the Special Metals Forum and the Titanium Information Group, was designed to cover the latest innovations and developments in this valuable material and provide an insight into the Titanium industry and the opportunities for component manufacturers and suppliers to contribute to this large growth market.



The conference also covered details of technical developments, academic research and market reviews on the industry from across the world and featured keynote speakers from world leading organisations and renowned academic institutions. Dr Alan Partridge, Chief Executive of NAMTEC opened the event, followed by a market overview of general markets for Titanium, as well as the aerospace market, provided by David Hall from RTI International Metals Inc, Dr Laurent Pinto from Airbus and Dr David Rugg from Rolls Royce. The event then took on a global flavour, with an overview of the Russian markets and their aerospace industry along with an overview of the Chinese market for Titanium. Later sessions looked at the welding and joining of Titanium, Titanium in the service of defence, Titanium in biomedical applications, forging techniques and thermo-mechanical processing.

[Details](#)