

TITAL® - NEWS-FLASH

The titanium and aluminum investment casting specialist TITAL GmbH has been successfully certified by Airbus according to GRAMS (General Requirements for Aerostructure & Material Suppliers). TITAL has met all the requirements on the first try to become a supplier for the new Airbus passenger plane the A350XWB. According to the auditors, the certification was completed with above-average results for an initial audit.

TITAL® - STATEMENT



Why is the direct contact to the end customer of strategic importance?

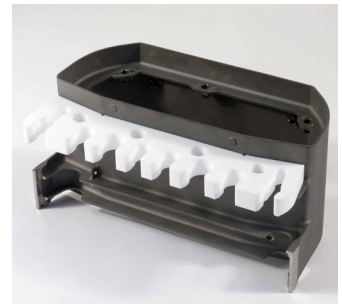
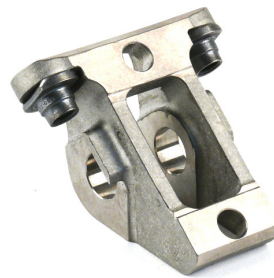
Philipp Jerusalem, Director Sales and Marketing: "Only during direct discussions with the end customer great cost saving potential can be determined. TITAL acts as a general contractor for Snecma and they now achieve substantial savings through reduced supplier management costs. As we deliver the components ready for assembly, Snecma does not have to deal with the management of numerous machining and assembly suppliers anymore. The procurement and material planning processes become much more streamlined and efficient. Furthermore, all parties involved benefit from the shortened communication channels and decision routes".

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TITAL as a strategic supplier - how customers can save time and money

TITAL has positioned itself more and more as a strategic supplier. After TITAL was recently certified by Airbus France for machining and assembly work on titanium castings, the Bestwig company now performs assembly work for the French engine manufacturer Snecma. Less than three years ago Snecma requested quotations for a project comprised of 28 titanium engine components and one aluminum component.

The purpose of the inquiry was to reduce lead times, simplify work processes and reduce costs. TITAL completed an extensive qualification process before the customer allowed them to ship machined castings and assembled products. Today TITAL casts, machines and assembles titanium components for the M88 engine which is installed in the supersonic jet fighter Rafale which is manufactured by Dassault as well as parts of the GE



Finished and ready for assembly: castings for aero engines

90 engine family. Snecma delivers a substantial number of components and subsystems for these engines to General Electric. The GE 90 engines are produced for Boeing's long distance aircraft the B777. In the past, TITAL only produced the raw castings and delivered them to different machining companies in France. These companies machined the parts and delivered them to Snecma for assembly. This intermediate

step is now saved. Today TITAL delivers these parts pre-assembled directly to the final customer Snecma. To Snecma TITAL is now listed and appreciated as a tier-1 supplier. Snecma is one of the biggest customers in TITAL's engine sector. In 2009, TITAL has already been certified by Airbus France for machining and assembly work on titanium castings like the ribs for pylons for the Airbus Single Aisle Family.

TITAL's investment casting seminar: Welcome of 600th participant

The titanium and aluminum investment casting specialist TITAL GmbH has now welcomed the 600th participant at its investment casting seminar in Bestwig, Germany. Wolfgang Kummle, Senior Engineer Mechanical Design at Diehl Aerospace GmbH received an engraved casting as a token. Diehl Aerospace GmbH is an aeronautical equipment manufacturer. The investment casting days are sponsored by TITAL free of charge on a local and interna-

tional level as a hands-on seminar for design engineers and product developers. The German-speaking seminars are usually held at TITAL's headquarters in Bestwig, Germany; the international orientated seminars are either held in Bestwig or at the customer's manufacturing facility. TITAL has recently hosted seminars at Embraer in Brazil, the third largest aircraft manufacturer worldwide, Kongsberg in Norway, TAL in Turkey and at XAC in China.

With the regularly scheduled seminars TITAL specifically addresses the needs of development and design engineers from the aerospace industry. Design to cost issues are always the predominant topic of the investment casting days. The next English speaking investment casting seminars take place on April 20-21, 2010, and September 07-08, 2010.

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