

## Press release Starrag 04-2020

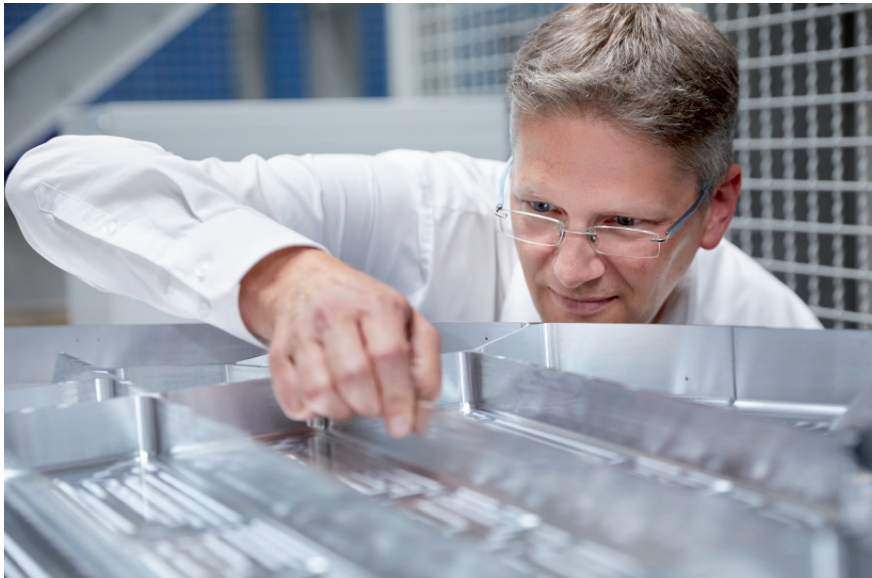
Starrag flexible manufacturing system ECOSPEED F 2040 successfully implemented at Premium AEROTEC  
A cutting duo in action...



**The most advanced pool of machines** in Europe has recently acquired a Starrag ECOSPEED F 2040 FMS, which comprises two linked machining centres.

### Varel, Germany

Starrag machining centres with parallel kinematics have proven themselves a worthy addition to one of Europe's most advanced machine pools. This was reason enough for the aircraft supplier Premium AEROTEC to opt once more for highly dynamic five-axis simultaneous cutting with a tripod head for their plant in Varel. This increasingly revolutionary technology is also used in the new ECOSPEED F 2040 Starrag manufacturing system, which comprises two linked machining centres.



**Christian Welter**, Head of Large-Part Production at Premium AEROTEC.

*„In this tender, we once again saw that the dynamism of the ECOSPEED machine is still in a league of its own“.*



**Envelope machining:** The angled milling head makes it possible to carry out special cutting and drilling operations such as envelope machining, which was previously done afterwards on a different machine.

For Premium AEROTEC, Europe's biggest aircraft manufacturer, cutting pocket corners with an only slightly inclined land is a routine task that requires the angular position to be changed. While standard fork-type milling heads typically make huge swivel movements to do this, the tripod heads used in the ECOSPEED have significantly faster and more dynamic machining capabilities. Due to these advantages, there are now 13 ECOSPEED centres in use in Varel.

*“In addition to their reliability, it was the high overall dynamism of the ECOSPEED machines that won us over“*, explains Christian Welter, Head of Large-Part Production at Premium AEROTEC. *“This is why we chose two ECOSPEED F 2040 machines as our latest investment, which have been linked to create a flexible manufacturing system.“* This is the newest highlight of Hall 8, where Starrag machining centres with a drive power of 120 kW currently take centre stage. An angled milling head that can be changed automatically now enables aluminium workpieces measuring up to four metres long to be machined on the FMS – not just completely but in a single clamping position too.

Linked systems are the preferred choice at the Varel plant. *“We want to keep set-up separate from actual machining“*, says Welter. *“And this works extremely well with the new ECOSPEED F 2040 FMS, where we have operators work at separate set-up stations.“* The new flexible manufacturing system (FMS) consists of two ECOSPEED F 2040s, a conveyor system with double loading trolley, a ground-level set-up point and storage for machine pallets measuring 2,000 mm x 4,000 mm. The machining centres operate at a nominal output of 120 kW and a nominal speed of 30,000 rpm. The duo enables highly dynamic five-axis simultaneous machining with up to 1-g acceleration and a

maximum jolt of 250 m/s<sup>3</sup>. The FMS boasts an angled milling head with an HSK A63/80 interface. This head can be changed automatically and receives tools from the tool change system automatically too. The angled milling head also carries out cutting and drilling operations, which used to be done on a machine supplied by a competitor of Starrag. To keep the footprint small, save space and facilitate maintenance, auxiliary units and control cubicles are installed on a peripheral platform above the conveyor system.

But what is it that is particularly appealing about this latest investment, especially in the context of the Starrag claim *Engineering precisely what you value*? For Welter, the principal advantage is the level of performance that can already be seen from this highly dynamic pairing, despite the fact that it has only recently been introduced as part of series production – resulting in a 10 to 15 % reduction in running time in comparison to older ECOSPEED systems.

### **Premium AEROTEC company profile**

Premium AEROTEC GmbH is a manufacturer of structures and manufacturing systems for aircraft construction (10,000 employees, turnover around EUR 2.0 billion) and has its headquarters in Augsburg, Germany. The company was formed in 2009 when the EADS plant in Augsburg was merged with the Airbus Deutschland plants in Nordenham and Varel. The production facility in Varel (near Wilhelmshaven) plays an important role: The plant was established in 1936 as an engine factory (engine overhauling, spare parts production for truck and aircraft engines). Today it employs around 1,600 staff and produces nearly 5 million components a year, making it one of the world's leading high-tech sites for aircraft construction. The company helped to develop the Varel Aeropark, which is now home to the supplier Thyssen-Krupp Aerospace Germany GmbH and the Ausbildungszentrum Varel (AZV) national training centre, where Premium AEROTEC production specialists are trained.

[www.premium-aerotec.com](http://www.premium-aerotec.com)

### **Company profile Starrag High-precision machine tools for greater productivity**

Starrag Group is a global technology leader in manufacturing high-precision machine tools for milling, turning, boring and grinding workpieces of metallic, composite and ceramic materials. Principle customers are internationally active companies in the Aerospace, Energy, Transportation and Industrial sectors (Industrial Components, Luxury Goods, Med Tech). In addition to its portfolio of machine tools, Starrag Group provides integrated technology and maintenance services that significantly enhance customer quality and productivity.

The umbrella brand Starrag unites the product ranges Berthiez, Bumotec, Dörries, Droop+Rein, Ecospeed, Heckert, Scharmann, SIP, Starrag, TTL and WMW. Headquartered in Rorschach/Switzerland, the Starrag Group operates manufacturing plants in Switzerland, Germany, France, the UK and India and has established a network of sales and services subsidiaries in the most important customer countries.

The shares of Starrag Group Holding AG are listed on the SIX Swiss Exchange.

### **For further information**

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