



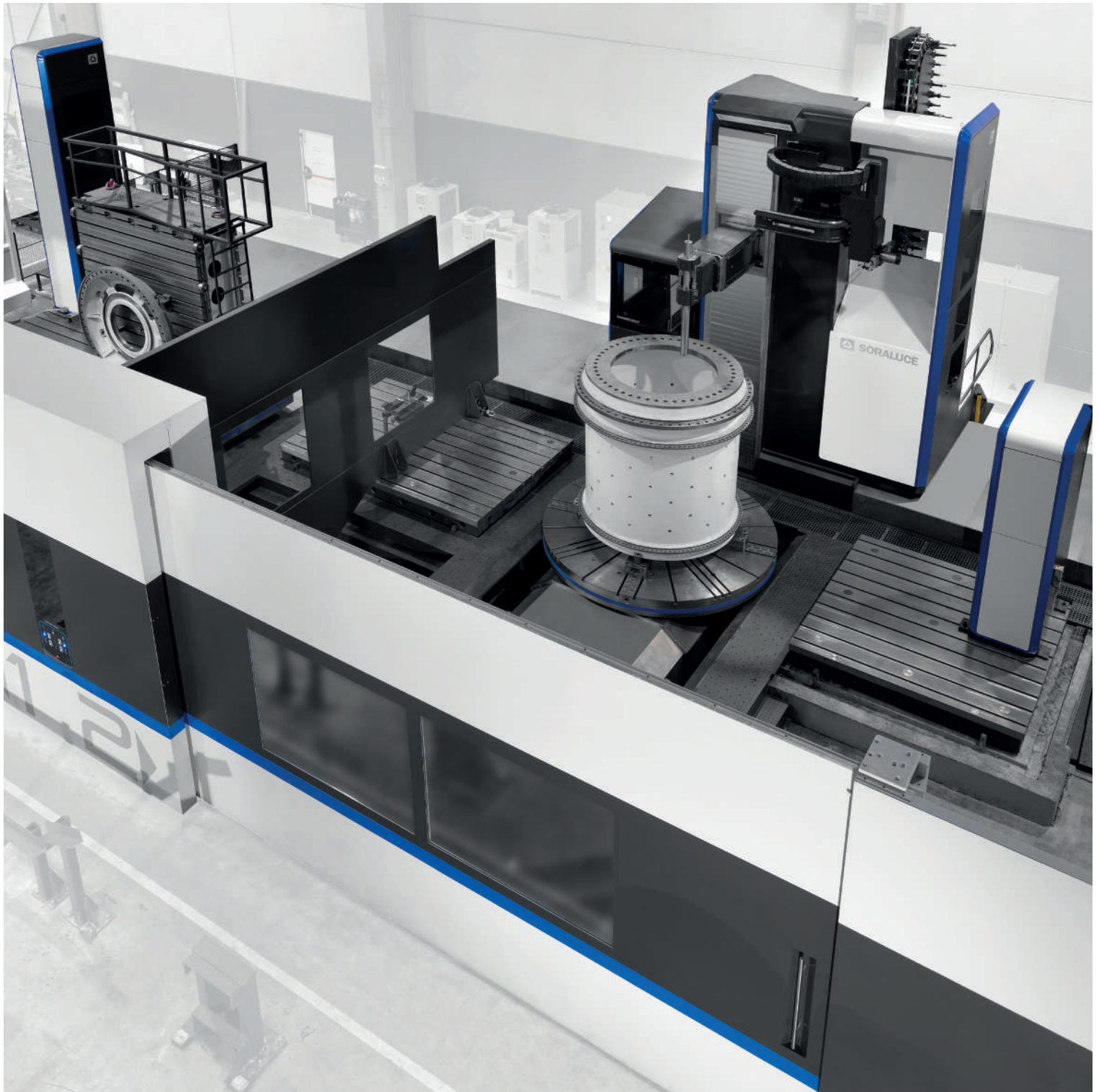
SORALUCE

Setting new standards

NEW
CHALLENGES
NEED SOLUTIONS
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GOIMEK

CUSTOMER EXPERIENCES



CUSTOMER EXPERIENCES GOIMEK

GOIMEK increases its machining capacity with a latest generation SORALUCE multitasking machine

Aitor Alkorta, Managing Director of Goimek:

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It is a solution that offers the highest parameters of productivity in the multitask machining of large parts with high technical complexity, making it possible to machine a variety of shapes and sizes.

ARTICLE

GOIMEK, a specialist in machining precision parts, has increased its fleet with a SORALUCE FS-16000 multitasking machine. With this purchase, the company, which belongs to DANOBATGROUP, plans to broaden its range of customers to other market sectors such as wind energy.

It is a multitasking solution, a completely versatile solution oriented towards maximising productivity, with the capacity to carry out milling and turning operations with the same machine. The machine will enable GOIMEK to achieve the highest profitability parameters in the machining of large pieces of high technical complexity, with the possibility of machining a variety of shapes and sizes.

It is a large capacity machine regarding both the size of parts and the type of operations it is able to carry out. With a longitudinal travel of 16,000 mm, a vertical travel of 3,600 mm and a cross travel of 1,500 mm, the machine includes two workstations with two SORALUCE design and manufacturing tables, one for milling operations with a rotary travelling table of 3000 x 2500 mm W: 2000 mm and rotary travelling turning table of Ø 3000 mm W: 2000 mm, both with a capacity for parts of up to 40 tonnes.

The SORALUCE FS multitasking machine makes it possible to carry out different machining processes, including turning, milling, boring, drilling and threading, with a single machine for multiple components of different sizes and shapes with efficiency and precision. For these purposes it has the new SORALUCE H100 milling and turning head, a continuous 5-axis head designed from machining complex surfaces with the capacity to carry out high-precision interpolations and high-speed indexing of articulations. The SORALUCE H100 head offers high cutting capacity with 46 kW of power, 1530 Nm torque in S1 and 7000 rpm. The head incorporates a spindle blocking system that makes it possible to carry out turning operations.

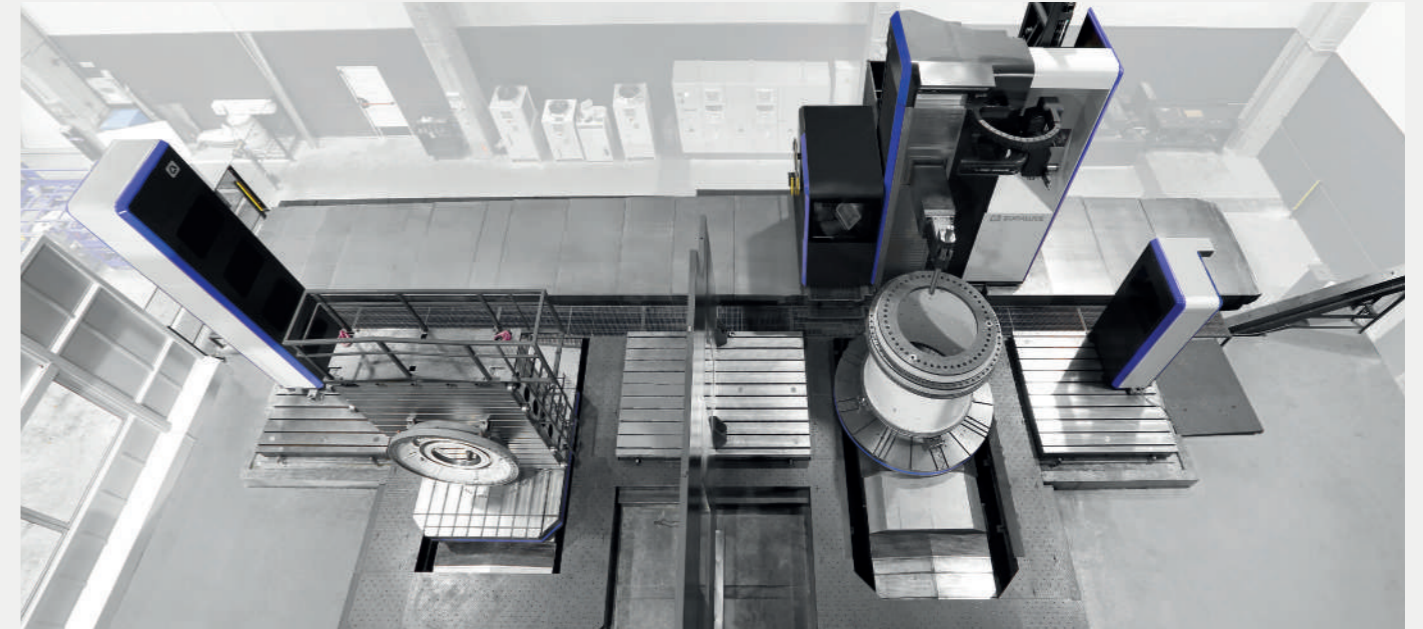
In addition, the machine includes two other heads, a horizontal SORALUCE H62 of Ø 195 mm and 480 mm length and a SORALUCE TH02 head for internal turning

operations that integrates Silent tools with a diameter of 100 – 120 – 150 mm.

It achieves a high level of automation, with an automatic head changing system and tool changing system with storage capacity for 80 tools. It also includes a Balluf tool identification system.

The modular design of the machine offers excellent versatility and can be equipped with a wide range of optional accessories, making it possible for the machine to adapt to different machining needs with great efficiency and precision. In addition, the machine's concept of moving column allows for pendular machining and the simultaneous machining / loading of parts.

Thanks to the stability and rigidity of its design, precision and productivity is maximised in the machining of large components. The machine, with optimal power and speed, gives superior machining results thanks to its dynamic transmission system and its combined guiding and dampening system.



The machine includes full guarding system which offers greater accessibility thanks to the automatic opening of doors which gives complete frontal and top access to the work area, also fulfilling the function of swarf collection and cooling. In order to offer the operator improved visibility, it has large glazed surfaces. It offers ease of operation, safety and cleaning.

It is a new generation SORALUCE FS. The new SORALUCE generation is based on a complete revision of the machine from the user's point of view, improving operative efficiency and developing a global concept of machine which takes into account the machine, but also the entire work area. The new generation of SORALUCE machines embody SORALUCE's values: reliability, precision and competitiveness, and provides excellent improvements in maintenance, ergonomics, dynamics and safety in the work environment. SORALUCE has launched to the market a new generation of machines which allows a more ergonomic work environment and maximum protection for the operator, for which it has recently received the Red Dot 2016 award for its innovative design.

In addition, the machine includes the latest technologies developed by SORALUCE: such as the DAS, Dynamics Active Stabiliser system, in the process of being patented. It is a device which actively increases the dynamic rigidity of the machines, thus increasing the cutting capacity by up to 300% thanks to the reduction of vibrations during the machining process. The system increases the cutting capacity in general, it improves surface quality and reduces the risk of tool breakage, thus increasing the lifetime of the tool and the machine in extreme conditions. The DAS system has received the Quality Innovation of the Year 2015 and the Best of Industry 2015 awards.

All of these technologies in the new generation of SORALUCE machines are integrated in the new HEIDENHAIN TNC 640 control, a multifunction control prepared for milling and turning work, where SORALUCE integrates its

know-how in technologies, developments, solutions and applications, giving the user precise and reliable control over the machining process.

- «Option 50» - Multitask - Capacity to carry out both milling and turning operations.
- «TCPM» and «M128» option - 5-Axis machining in interpolation.
- Machining in different work areas via **pendular** management.
- **Flexibility** - More than 80 different configurations with combinations between the multiple work areas the machine travel is divided into and the different headers, rotating tables, etc. used.
- «Modemill/Modeturn» Option - makes it possible for the rotating table to behave as a header in the event of having to perform turning operation and as the «C Axis» in the case of milling operations.
- **Paraxcomp and Paraxmode option** - management of parallel axes, enabling the zero to stay invariable, without the need to have to modify the machining program.
- **ITC unity** - 755 for tool management.

The SORALUCE FS-16000 milling-boring machine also includes technological features taken from the «Industry 4.0» concept, which are materialised in a complete package of monitoring based on «cloud computing». It incorporates utilities such as being able to view the state of the machine in real-time with relevant information about the situation of the current machining program and sending emails in the event of it stopping; the creation of reports in sensitive matters for the user such as the production or process, such as energy consumption or the performance of the machining cycles; and the diagnosis of key signals for the maintenance of the installation. All of this using a PC or any mobile device (smartphone, tablet) with simple Internet access.

With all of this, GOIMEK takes a huge step, increasing its machining offerings both for its traditional clients and for new client sectors.