

in this issue:

interview	Iñaki Bañuelos	1
article	Fagor Automation at AMB'10	2
news	Stanford University	12
	4 linear encoders at Hanland	12
article	Fagor Automation in Germany	3
article	Himmelmann	3
	Weiss	3
interview	Erich Widmayer	4
agenda	This week in Stuttgart	4



Hall 4 · Booth 4D 34

Fagor Automation GmbH
Leonhard-Weiss-Str. 34
D-73037 Göppingen

Tel.: 0049 (0) 7161 15685 0
Fax: 0049 (0) 7161 15685 79

www.fagorautomation.com



FAGOR AUTOMATION

INTERVIEW WITH IÑAKI BAÑUELOS OF FAGOR AUTOMATION SPAIN

“For Fagor Automation, product quality has always been the cornerstone of business success”



A new edition of the AMB, one of the most important European exhibitions for the machine tool sector. Fagor Automation is present, as in previous editions, with new solutions and business opportunities. Iñaki Bañuelos, Commercial Director of Feedback / DRO Fagor Automation, describes to us the situation and impact of the novelties of the company and its competitive advantages on the international scene, which “has changed the modus operandi of the industry.”

This AMB 2010 brings together the most relevant manufacturers and distributors in the world and Europe, where they present their latest developments, technology and services. Does the machine tool sector have specific peculiarities today? Have they changed in recent years?

The economic crisis that began in 2008 and from which now we seem to begin to emerge, has definitely changed the way to act in the Machine-tool sector. Those companies that once bet on technological development, integrated safety on the machines, environmental care, etc. coupled with the presence anywhere in the world, are the ones that survive in an industry with increasingly more bidders at competitive prices. No less important is the shift in demand to Asian countries: the consumption of machine tools in this area is currently about 60% of global consumption, whereas 10 years ago was 25%.

At this exhibition we present the integral solution in absolute feedback, displaying the absolute linear solution on steel tape, the absolute linear solution in glass and the absolute angular solution. What is the most valued by your customers? or, is the fact of offering the three solutions together what they appreciate most?

From my point of view, rather than highlighting one of the solutions, the most important thing is the technological evolution for each development. In a world where technology advances rapidly, the ability of a bidder to adapt to the needs of its customers is key to their future. Products with absolute feedback have a growing demand for its best features. And this is faithfully reflected in the development of absolute tape-based linear encoder, product in which Fagor Automation is a pioneer worldwide, being the only one offering this solution for great lengths (30 meters at this

time). This is a clear indication of Fagor's bet on technological advances and the future.

The AMB 2010MH will be good to keep in direct touch with different public of Fagor Automation. What do your customers value the most? proximity, after-sales support, your capability of innovation, etc.?

We believe that, in trade relations, never a single factor is determinative. They always talk about quality-price as the key variable, but there other constraints that determine the buying decision: global network, innovation, customer proximity and ,at this time, delivery time. For Fagor Automation, product quality has always been the cornerstone of business success” To this we add our extensive network, which allows us to always be close to the customer, the ability to bring innovative products to the market, flexibility to adapt the delivery time to customer needs and the right price, a combination of factors that make our offer extraordinarily attractive.

You are a multicultural company implemented with your own branch offices in 18 countries around the world and with knowledge of the various scenarios, how do you see the German and European markets in recent years?

Market globalization has brought a new world scenario in trade relations. Today we speak of globalization as a factor for success, but at Fagor Automation we believe that it must always be accompanied by the local approach. The certainty that the customer is going to find a solution to his needs wherever he installs his machine is essential to gain his loyalty. And this message is particularly significant in Germany, a country whose model of success is based on the export of high quality products. Fagor Automation's contribution to its customers with its wide sales-service network is proof of that. More than 80% of Fagor Automation sales come from exports.

Fagor Automation has been characterized in recent years for its efforts in brand image, both corporate and product, are you taking significant new things, in this regard, to this edition of AMB?

The booth has a modern look according to the personality of our company and to our innovative spirit. The booth layout and the communication elements used are fresher and better represent our character. We have emphasized our new things: in CNC, the new 8065 CNC with an interactive presentation that describes in detail all the utilities of the CNC and lets the user interact with it as if it were real. And in Feedback, the three absolute solutions: Linear steel tape, linear glass and angular encoder. ■

In Germany, now and from the beginning

It is quite a pleasure for Fagor Automation to exhibit at this new edition of the AMB due to its international prestige and because it is another opportunity to be close to you.

All of you, our customers, have always been and are the reason why we are here today showing our advances and evolution.

This progress would not be possible without your trust. With you, we have grown and you have helped us become more reliable and closer, more international and to increase our knowledge. You are the force that thrusts us to keep innovating.

Thanks to all that and to you, we can present our novelties at this edition of AMB: the new 8065 CNC and the leading solutions in “Absolute” feedback that we hope will be as exciting and helpful to you as developing them has been to us.

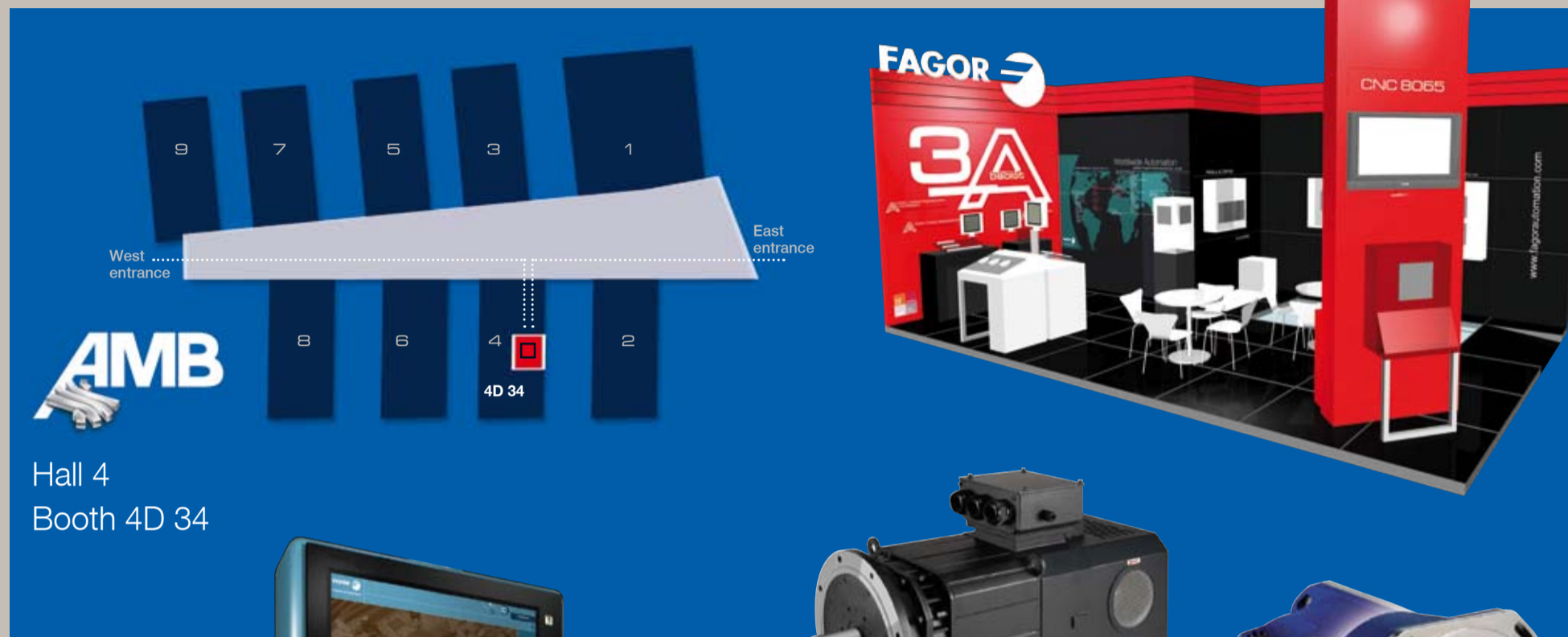
It is an honor, also, that Germany is our meeting point: country where Fagor Automation opened its first international subsidiary, inaugurated in 1981. ■



Pedro Ruiz de Aguirre
General Manager

Integral solutions for complex machines: Large and with high-end features

In its more than 30 years of existence, Fagor Automation has given solutions to all kinds of machines, from the simplest looking for flexible operation and production to the most complex with very high technical and productive demands.



During the AMB exhibition, Fagor Automation is going to present their latest advances in control and measurement systems showing a qualitative leap in the technology used to provide integral solutions to high-end machines. There are three main products to point out:

8065 CNC: Friendly as always; more powerful than ever

The new CNC combines the operating and programming experience of the 8055 and the technological power of the 8070. The 8065 CNC makes it easy to set up all kinds of machines. It offers tools to manage any type of standard kinematics. It also offers volumetric compensation which is becoming a common demand in the search for high machining accuracy. While machining, it permits detecting and correcting in 3D the minor mechanical imperfections that the

machine may have and obtain high-precision parts. Another novelty of the 8065 CNC is the adaptive control that detects the machining conditions of the tool such as consumed power, temperature of the tool tip, how fast the tool is wearing and part surface finish. All this data is processed and both the axis feedrate and the spindle speed are adapted for machining under the best conditions in order to achieve maximum productivity and longest useful life of the tools.

Servo systems: High power motors

In order to meet our customers' demands, Fagor Automation now offers more high-torque axis motors and high-power spindles. For axis motors, the range of the FKM family now goes up to 115Nm for large machines that require higher motor torque. Likewise, this type of machines need to move large spindles and that's why new FM9 spindle motors have been created to further complete the FM7 motor range with power reaching 130 kW in S1.

3Absolute: Solutions from Fagor Automation

Fagor Automation has manufactured linear and rotary optical encoders for the machine-tool sector from the very beginning. Optical technology has always been preferred over other technologies due to their high quality and optimum performance. Throughout the years, Fagor Automation has polished several aspects of the design of their linear encoders to offer, today, one of the highest-quality linear encoders on the market. This opinion is shared by their customers

through independent tests run using both incremental and absolute technologies.

AMB visitors will be able to enjoy the presentation of the new absolute encoder LA, with a measuring length of up to 30 m, the longest on the market. It has been designed and manufactured by Fagor Automation to provide solutions to the machine-tool world. Fagor Automation presents also the absolute angular encoder that integrates existing technologies with new technologies to deliver a product with absolute performance that fully covers the needs of position for the machine-tool industry.

So, starting with the CNC, going through the servo drives and reaching the measuring systems, Fagor Automation offers an integral solution for all kinds of machines. Choosing Fagor Automation allows you to have a single interlocutor for designing your machine and they will make it easy for you to integrate their products. ■

news



Stanford University turns to the precision of Fagor Automation encoders

The Stanford Linear Accelerator Center is a pioneer research facility in the field of astrophysics, photovoltaic science, molecule accelerator and research on physical particles. This center is affiliated to

US department of Energy and is also the headquarter for 3km-diameter accelerator ring, one of the largest in the world.

The SSRL (Stanford Synchrotron Radiation Lightsource) is located inside this facility. This facility uses 20, high accuracy absolute linear encoders from Fagor Automation.

This lab is supplier of synchrotron radiation i.e. X rays produced by the electrons that circulate through a ring at near-light speed. This beam of X-rays is used to investigate the behavior of the molecules and atoms of materials with extraordinary properties. This is a very important activity for our society because the basis of new technologies today is the creation of new materials that may have considerable impact in areas like environment, future technologies, health or education.

4 linear encoders of 48 m and 42 m are already at Hanland, China

Fagor Automation has recently sold to the Chinese company Hanland, two 48m linear encoders and two 42m linear encoders for their machines.



With this project, they foresee to maintain the existing tight cooperation with them.

Hanland Machine Tool Group Co.Ltd., is a large key company in the Chinese national machine-tool industry. They have been developing, designing, manufacturing and selling precision products for more than 40 years. Hanland products has got more than 60 awards from national, ministries and commissions. It is a reference in precision machine tools, such as vertical machining centers, boring mills, milling machines, horizontal drilling machines and EDM machines.

Haland is known for its "high technology, excellent quality and even better service" and became the famous brand in customers with good selling in China and abroad. ■

Fagor Automation in Germany since 1981

- 1981** The Spanish company Aurki S. Copp. opens its first subsidiary (in Germany). With the first employer, Mr. Theo Heidenreich, Aurki takes up the business as a department of ULARCO Industriecommerz GmbH. On the German market, Aurki sells Digital Readouts (DRO) and linear scales.
- 1982** Aurki signs a contract with UVA Unverzagt GmbH who has the exclusive rights to sale this kind of products in Baden Württemberg. Beside this, Aurki starts to sell the products through some of the dealers of the IMATEC Group.
- 1983** Aurki S. Copp. starts a co-operation with the GE in Germany. Under the names „Mark Century One“ and „Mark Century One Plus“, GE starts selling Aurki's CNC's.
- 1984** With the first service technician for DRO products and the first employee in the administration, the Aurki department starts to grow.
- 1987** Aurki finishes the joint venture with GE, to take up sales activities within the CNC sector on its own. A service technician for CNC products and an employee in the CNC administration are recruited.



- 1989** The German company ULARCO Industriecommerz GmbH changes its name to FAGOR Industriecommerz GmbH. The Aurki department is renamed FAGOR Automation.
- 1990** Both the market and the department grow. Further employees are appointed. In these days, FAGOR Automation has three sales people, two people in administration and two service technicians.
- 1991** The new product line „CNC 8050“ is launched on the market. By the end of the year, there are 8 employees working for the department.
- 1992** To complete its product line, FAGOR starts a joint venture with Baumüller. Fagor Automation starts a co-operation with EDE and Wollschläger.
- 1994** The joint venture with Baumüller is finished. In the field of linear scales, leading machine manufacturers start working with FAGOR.
- 1995** As the leading company, Fagor Automation introduces linear scales with connected cables on the market.
- 1997** FAGOR starts with its own product line of motors and drives.
- 2005** Fagor Automation separates from FAGOR Industriecommerz GmbH and becomes the independent company Fagor Automation GmbH.
- 2007** Fagor Automation GmbH moves to its own office.
- 2008** Fagor Automation GmbH has now 10 employees.

ALL THE STAFF WILL WAIT FOR YOU AT THE BOOTH



- | | |
|--|---|
| 1_ Reinhard Steckhan.
DRO Sales Manager | 7_ Hakan Kiziltan.
DRO Service Technician |
| 2_ Jürgen Krauß. CNC Sales Manager | 8_ Iñaki Golmaio.
CNC Applications Engineer |
| 3_ Asier López.
CNC Area Sales Manager | 9_ Katharina Holecek. Administration |
| 4_ Stephan Schroller. DRO Sales | 10_ Sandra Salazar.
DRO Sales Assistant |
| 5_ Erich Widmayer.
Application and Service Manager | 11_ Nancy Spieth. CNC Sales Assistant |
| 6_ Jens König. CNC Service Technician | 12_ Albert Janovsky. Warehouse |

CUSTOMERS' EXPERIENCE Paul Himmelmann company report



Mr. Martin Himmelmann, Mr. Werner Kretschmer

The company Paul Himmelmann Werkzeug- und Maschinenbau was founded in 1970. It is located in Großenlüder near Fulda, Germany.

Today a staff of 96 employees manufactures milling and turning work pieces for different industries. The product range includes tubes for deep drilling for the geothermic energy sector and underground survey, drilling heads, tubes and accessories, cylinders for the paper industry, parts for water mills, special design parts and repair services.

For the last 14 years Paul Himmelmann Werkzeug- und Maschinenbau has been working with machines which are equipped with FAGOR CNC8050/55 numerical controls. The manufacturer of the machines is A. und O. Kretschmer, Sulzheim, Germany. Due to

their high stability and extraordinary flexibility the semi frontal turning machines HFDM 45 and HFDM 55 from A. und O. Kretschmer are the ideal equipment for Paul Himmelmann Werkzeug- und Maschinenbau. Together with the FAGOR 8055 CNC they build the perfect equipment for the manufacturing of single parts and small series. The machine operators of Paul Himmelmann Werkzeug- und Maschinenbau appreciate especially the easy operation and programming of FAGOR CNC's. The extremely short drawing-to-part time together with the high flexibility of the FAGOR components result in a considerable reduction of manufacturing cost. This is a factor which is highly appreciated by Mr Martin Himmelmann, Managing Director of Paul Himmelmann Werkzeug und Maschinenbau. ■

WEISS circular grinding systems

Founder and CEO Bernd Weiss looks back on 30 years of experience in circular grinding systems, and is considered a pioneer in the industry.

After 15 years of employment at KARSTENS Rundscheiftechnik, he founded his own company in 1993, which first specialized in contract manufacturing, and soon carried out general overhauls of Karstens circular grinders.

The company soon achieved an excellent reputation as the go-to company for service and overhaul of these machines, advancing to the "extended workbench". In 2000, Bernd Weiss started development of his own first circular grinder. The resulting machine has been sold more than forty times in Europe.

Three years later, the first automatic system with fully automated loading was presented. The machine portfolio was further completed in 2004 with the smaller circular grinders, available both in manual and automatic models.

After another three years, Bernd Weiss revolutionized the market with a model that was both conventionally and CNC controlled. "This 100% manually controlled grinder that could be started at the push of a button as a fully CNC-controlled machine was well ahead of the market," reminisces Bernd Weiss.



Mr. Weiß

CNC Technik Weiss GmbH has a total of 800 customers around the world. With his experience from countless machine acceptances, Mr. Weiss is well aware of the significance of the trusted KARSTENS machines. That's why he puts retrofit machines onto the old machine beds. With the new FAGOR drive and control systems, a mechanical overhaul, and safety systems that meet today's standards, these machines are just as good as newly manufactured ones.

In the area of linear displacement measurement systems, too, CNC Technik Weiss has already relied on Fagor products for 10 years. The high product reliability, technical competence, and short delivery times were the factors that convinced CNC Technik Weiss GmbH to use rotary displacement measurement (encoder) systems from Fagor Automation as well.

Today, CNC-Technik Weiss GmbH, with 30 employees in 1,600 m² of new plant space in Stuttgart, is responsible for more than 250 machines delivered both in Germany and abroad. The basis for that success are absolutely reliable suppliers, as well as the greatest possible flexibility in developing customer-specific systems. The readiness to implement specialized solutions to customer order is also essential for this success.

This is also the basis for the company philosophy: "KNOW WHAT THE CUSTOMER WANTS". ■



Customers of Fagor Automation, one of the main manufacturers of CNC and feedback systems in the world will attend the AMB'10, the international exhibition for metal machining.

Fagor Automation meet again their goal of presenting their new products with better performance and features.

We interviewed Mr. Erich Widmayer, Service Manager of Fagor Automation, in Germany, where this exhibition is being held which is an important reference in Europe.



Fagor Automation enjoys an excellent reputation of permanently providing the Machine-Tool sector with added value. What do Fagor Automation customers value most? Maybe machine setup? After-sales service once the product has been installed?

It is both. Customers who buy CNC Systems from us in Germany value the easy installation and integration of FAGOR products into their machines. Due to that, training effort for the OEM engineers is very low and installation and setup are done quickly. But After Sales Service is also very important. One of the main benefits that FAGOR offers in this area is a direct access of the customer to the FAGOR technicians. The customer does not waste time contacting Service Hotlines.

Fagor Automation excels by being capable of developing specific solutions tailored to their customers' needs. What does "customer support" mean to a company where each product is tailored to each user?

When a customer reports a problem, it is sometimes not easy to figure out what kind of FAGOR product is installed in the machine. Very often even the machine manuals are not available. Here the good and clear structure of the FAGOR CNC's is a big advantage. Even operators with low experience can be guided at the phone in a way that we are able to identify the components quickly.

In case of incidences, what protocols has the German subsidiary team set and what is its relationship with HQ services?

After fixing the problem – and in many cases this can be done on the phone – the defective component is exchanged and repaired afterwards. This means that the customer receives an exchange part, many times already loaded with his parameters. In this way we minimize service time and down time – and consequently cost.

Due to an increasing product variety only the most common spare parts are being held in stock in Göppingen. All the rest is being served directly from HQ. Thanks to the flexible and powerful processes established with HQ even in those cases we are able to deliver the component within the next working day.

Fagor Automation is a company that excels by offering solutions, cooperation, support, security and business opportunities to our customers anywhere in the world. In your 20-year experience as Customer support manager, how do you evaluate customer training? Do your customers appreciate FA's efforts to generate documents to keep them up to date?

Customer training is a key issue for the success of a CNC control. The more familiar the customer is with the CNC the more satisfied he will be. FAGOR Germany therefore offers a wide range of different training, both in our office in Göppingen and on site on the customers' shop floor.

Yours is a multi-cultural company established in 18 countries worldwide, that believes in diversity as an asset, as an opportunity to cooperate with your customers through many channels. Has the German market special peculiarities? How does Fagor Automation satisfy them?

On the German market we have a big portion of imported machines, mainly from Asia, but also from European countries such as Spain, Italy, Portugal etc. Therefore it is crucial to provide a good support and a close relationship to the machine dealer. Thus FAGOR Germany offers special training to the machine dealers' service engineers and has established a direct access to our service staff. In this way we guarantee fast and professional support to imported machines that are equipped with our products. ■



This week in Stuttgart

Stuttgart's Cannstatter Volksfest (Cannstatt Festival) will be taking place at the same time as AMB this year. And that means a great party atmosphere with magnificently decorated festive tents, music, beer steins, roast chicken and plenty of spectacular fairground rides. With seven festive tents, two wine tents, a number of carnival attractions and over four million visitors, this festival is one of the most popular attractions worldwide.

Combine your visit to AMB with a visit to the Cannstatt Festival! On Tuesday 28th, Wednesday 29th and Thursday 30th September 2010, you will receive 1 stein of festival beer and 1/2 a roast chicken for half price upon presentation of the voucher that you can download from www.messe-stuttgart.de/AMB and your AMB admission ticket (plus b 0.60 servicecharge each). Simply redeem the voucher at the cash desk of any participating festival tent.

For groups of 10 or more people, a table reservation is recommended:

www.fuerstenbergzelt.de
www.goেকেlesmaier.de
www.grandl.com
www.klauss-und-klaus.de
www.wilhelmers-schwabenwelt.de