



25 YEARS OF BELEC
PRECISION + INNOVATION



INTRODUCTION

“We are pleased to look back at 25 years of company history this year and to present a brochure to mark the occasion.”

In the course of 25 years, an idea birthed in a cellar has turned into an established international company. Moving into our new building at Harderberg in 1986 was a brave and maybe somewhat crazy thing to do. The idea of marketing spectrometers developed by us giving the whole thing a proper structure by founding a GmbH-type company was to bear fruit. In those days the small team of four staff only produced around five spectrometers a year and only for German customers. Since then we have constantly grown and today we can look with pride at a large team and an established customer base both in Germany and in over 40 countries worldwide.

Our company's success is founded on expertise and competence, the commitment of every single employee, hard work and, not least, our sense of belonging and an extremely good team spirit. All this is felt by our customers and long-term partners from various industries who rely on the overall “Belec” package and who

value both our flexibility and our service.

We will do our utmost to continue to remain innovative in future, provide products which best meet our customers' needs and to be successful with our team. We look forward to continuing the good cooperation with our customers, partners and team.

This company brochure is a ‘thank you’ to all our business partners and to all Belec staff, as well as being a reflection of our efficiency which we are pleased to present to you.

Jürgen Berstermann
Managing Director



COMPANY HISTORY

These days the use of mobile metal analysers is taken for granted. Sparking probes facilitate the measuring of samples difficult to access. Special trolleys ensure mobility in production halls and stability on uneven ground. What is required is accuracy, speed and easy handling. Quality is essential.

When the story of the mobile spectrometer began, there had only been laboratory spectrometers which were so large that they filled an entire room. Material samples had to be transported to the spectrometer and this led to their partial destruction. Inexplicable material faults created a riddle.

It was this problem which occupied the laboratory team working with our founder Willi Berstermann at the steel works in Georgsmarienhütte. The demands of industry, important know-how and the essential spirit of invention in those involved at that time set the whole thing in motion. After spectrometers were first

developed and constructed in smaller dimensions, it was finally the inventive spirit of a small team which, in 1972, produced the world's first mobile spectrometer. The news of this innovation soon spread.

After that independence was but a short step for Willi Berstermann. It all started together with his sons and two close friends. At first orders were completed in Berstermann's own cellar, but an increase in orders meant that they needed more space and in 1986 the first company building was obtained in the Harderberg district.

Today Belec can look back at 25 successful years. The team has grown, production halls have been built, markets developed, crises overcome and successes celebrated. All this was set in motion by one idea, which is still around today



PRODUCTS

“For our customers we produce mobile and stationary spectrometers to analyse and identify materials. Using special technology, with our equipment it is possible to identify precisely the elemental composition of metallic materials such as iron, aluminium or copper.”

Belec Compact Port

The Belec Compact Port is a unique mobile variant for material analysis. In compact form the spectrometer combines the qualities of larger laboratory spectrometers. Whether this is in a steelworks, large pressure vessels or pipes, extensive production halls, at construction sites or scrap yards, the particularly flexible operational capability, ease of use and high degree of measuring accuracy of our portable analysis equipment impresses all our customers.

Different types of sparking probes make precise material analyses including the determination of the quality or a rapid mix-up check (PMI) possible. These allow the operator to carry out the analysis directly on the material without any damaging taking of samples. To do this, the equipment is simply taken as close as possible to the sample to be analysed and it gets to work. A measurement takes only seconds. The customer then receives the analysis report just by pressing a button – and reads it on the screen or in paper form. This is documentation made easy!



Stationary spectrometers are usually preferred when a fixed set-up is advantageous, for example in cases of melt analyses of cast material, series analyses of small parts and whenever a sample has to be re-used for other checks. Stationary Belec spectrometers have a spark stand. A well-prepared sample should be prepared in such a way that the smoothed surface covers the opening in the spark stand so that air cannot enter the argon-filled sparking chamber during the sparking process. We offer adapters for small samples and those which do not have a flat surface. In this way we get the best conditions for an optimal analysis result.

Belec Vario Lab

The Belec Vario Lab is an all-rounder. The device combines numerous unique abilities and is unbeatable in analysis accuracy and stability of measured values. A sparking probe expands the static function of the equipment which is useful for the analysis of large, bulky and indestructible samples. An additional sparking stand equally extends operating flexibility and can lighten the workload and help save time for the operator. This variant is especially to be recommended for customers who have to carry out the analysis of samples of different bases in the trace range. The Belec Vario Lab is a reliable tool for the most varied of uses and suitable for all types of analytical tasks.

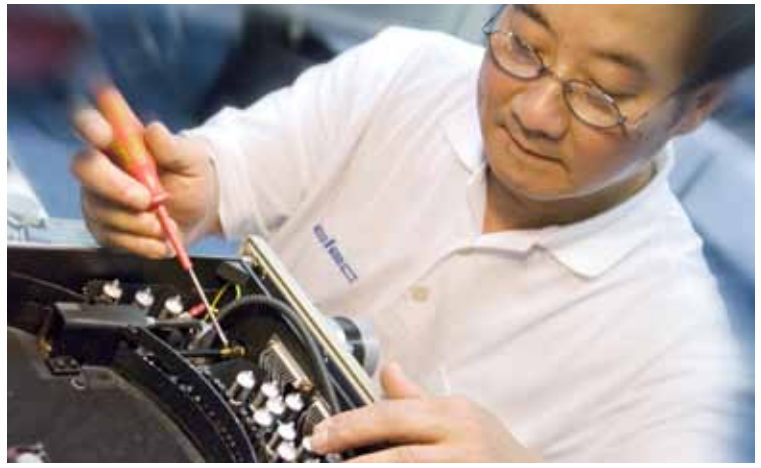




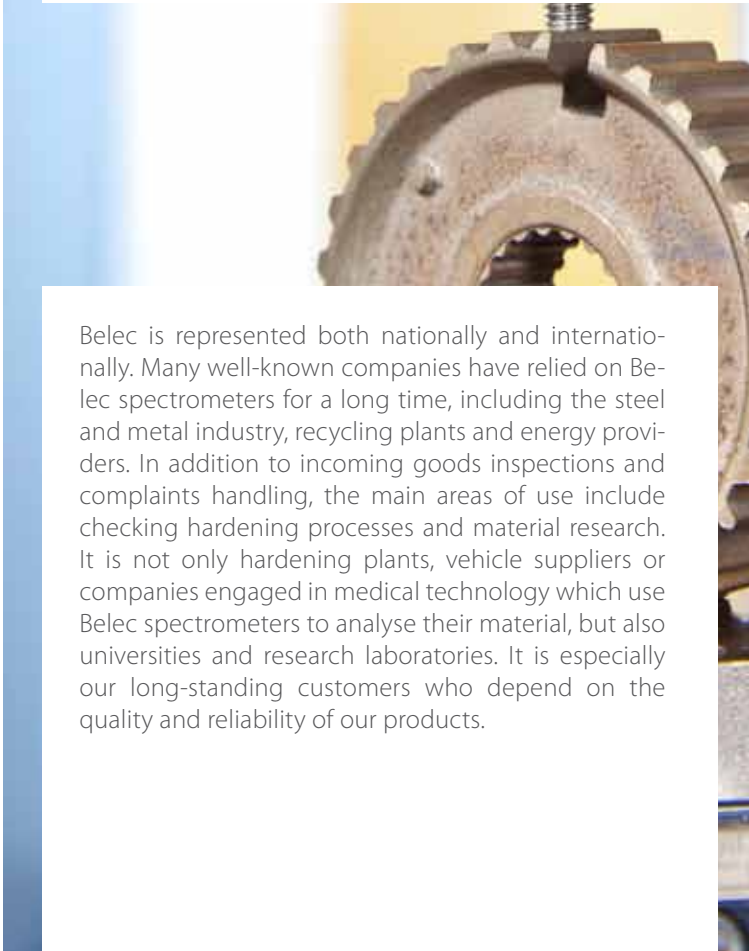
Belec Lab 3000s

The Belec Lab 3000s is the compact stationary device that fits on any desk. The partly standardised configuration of the inert gas breathed spectrometer optics and the optimisation of the most frequently required analysis applications are what make the device attractive for many of our customers. At the same time, the Belec Lab 3000s guarantees the operator a high degree of efficiency and accuracy of analysis. The device can be set up on a suitable work station together with useful accessories. This compact variant is very popular in the laboratories of many of our customers.





BELEC WORLDWIDE



Belec is represented both nationally and internationally. Many well-known companies have relied on Belec spectrometers for a long time, including the steel and metal industry, recycling plants and energy providers. In addition to incoming goods inspections and complaints handling, the main areas of use include checking hardening processes and material research. It is not only hardening plants, vehicle suppliers or companies engaged in medical technology which use Belec spectrometers to analyse their material, but also universities and research laboratories. It is especially our long-standing customers who depend on the quality and reliability of our products.

"For over 20 years the Institute for Material Testing of the TÜV NORD Group in Hannover has been carrying out worldwide contract analyses for its clients using the Belec Compact Port. The reliability, accuracy and reproducibility of the mobile emission spectrometers have resulted in all laboratory locations of the TÜV NORD Group being equipped with mobile emission spectrometers from Belec."

Dipl.-Ing. Gregor Hülmann, Official Expert
 TÜV NORD EnSys Hannover GmbH & Co. KG
 (Institute for Material Testing)

"Material mix-ups are totally unacceptable in our industry. With the Belec spectrometer we play it safe."

Dipl.-Ing. Andreas Studinski, Quality Control Manager
 Schmiedag GmbH & Co. KG
 (Die forging company)

"I would recommend Belec to anyone, because they are excellent products."

Thomas Heinz, Quality Control
 Craco GmbH
 (wearparts)



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