

FOR LEVEL, LOW-TENSION BLANKS

SHEET METAL SPECIALIST DEUMU DEPENDS ON THE PRECISE AND EFFICIENT PEAK PERFORMER PART LEVELING MACHINE FROM KOHLER

Sheet metal blanks and welded assemblies made of different steel materials are a specialty of Deutsche Erz- und Metall-Union GmbH (DEUMU) a subsidiary of Salzgitter AG in Salzgitter. Further processing requires that the manufactured parts be as level and low-tension as possible. To ensure this, the company uses a Peak Performer part leveling machine from KOHLER Maschinenbau GmbH.

Steel and metal processing companies across all industries have been facing the same challenges for years: customers are placing tighter demands on quality, speed, and flexibility, while international competition is becoming tougher and more intense as a result of ongoing globalization. Numerous steel distributors are therefore evolving from pure suppliers into flexible service providers and manufacturing partners.

Deutsche Erz- und Metall-Union GmbH (DEUMU for short) is a long-standing expert in this field. The company's areas of expertise include the processing of steel scrap, logistics and purchasing services, as well as steel processing. As a fully owned subsidiary of Salzgitter AG, today the DEUMU steel processing business unit employs around 70 people and generates sales of roughly 18 million euros per year.

Extensive machinery for sheet metal processing

DEUMU uses an extensive portfolio of machinery to manufacture the desired products in the required quality. Two plasma and oxy-acetylene flame cutting systems respectively, a five-axis chamfering robot for weld seam preparation, a continuous blasting system, as well as various press brakes are all in operation at the site. With the Peak Performer 130P.2000 from KOHLER, the company also has a state-of-the-art, high-performance part leveling machine at its disposal.

DEUMU mainly processes sheets made of structural steels such as S355, high-strength fine-grained structural steels such as S700 and S960, and wear-resistant special structural steels. "The parts are cut from sheet metal plates on the plasma or oxy-acetylene torch lines and then cleaned and blasted," says production manager Thomas Kleinwechter. DEUMU also levels entire sheet metal plates on its machinery prior to

delivery to the customer's premises, after which these are cut to size.

Consistently high product quality thanks to part leveling

"Consistently high quality is essential for our customers," emphasizes Kleinwechter. "We therefore work according to the provisions set out in numerous certifications and approvals, such as ISO 9001, ISO 14001, ISO 18800, and railroad approval." Extensive demands are consequently also placed on the levelness of the manufactured parts: The tolerance is usually below one millimeter per meter. Leveling is therefore a pivotal step in the process chain. "Following this process, the parts are not only level, but also exhibit less tension," explains Kleinwechter. "This delivers us decisive advantages when it comes to further processing, for example higher fitting and repeat accuracy during edging as well as significantly reduced distortion during welding."

The company used a mechanical part leveling machine for this purpose for decades.

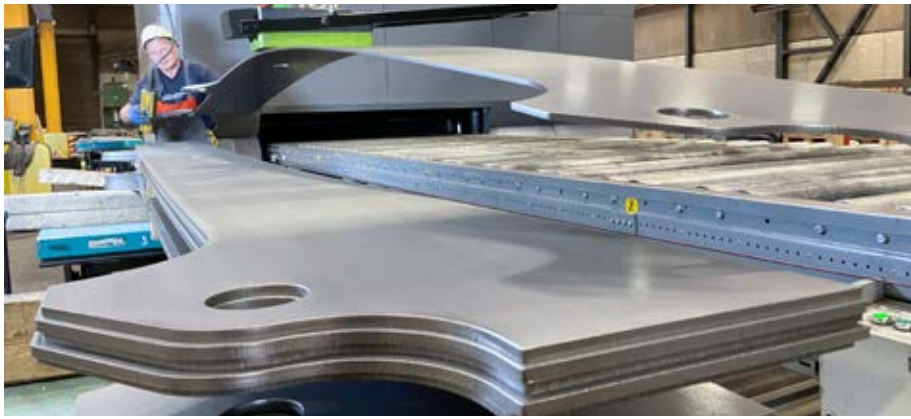
However, the machine had become rather outdated and was no longer able to satisfy today's requirements. "It had been apparent for a long time that we needed to make a change," recalls Kleinwechter.

Part leveling machine with numerous advantages

With the Peak Performer range, which has enjoyed many years of success, KOHLER offers high-performance and energy-efficient part leveling machines for numerous applications. These machines are used in particular for leveling parts, blanks, and whole sheet metal plates.



Around 400 tons of material are leveled at DEUMU every month on average.



Depending on customer requirements, DEUMU produces blanks or complete welded assemblies, which the company can also machine and paint.

The machine boasts a range of future-oriented technical features: The leveling rollers, for example, are powered by a direct drive. This increases energy efficiency, reduces wear, and makes it possible to level larger cross sections. This means that leaks are not an issue, the drive is insensitive to temperature fluctuations, and the lower power consumption also makes it extremely environmentally friendly.

” **Hydraulics are not required in this system.**”

Thomas Kleinwechter,
Production manager at DEUMU

A further advantage of the Peak Performer is its advanced cleaning system for easy cleaning of the leveling rollers and supporting rollers. This allows both the upper and lower leveling units to be extended by electric motor. When extended, all components can be cleaned very easily.

The electromechanical leveling gap control patented by KOHLER ensures consistently good leveling results and therefore also compliance with the quality requirements at DEUMU. “The arguments in favor of the Peak Performer impressed us across the board,” says Kleinwechter. “Furthermore, the exchange of information between us and KOHLER was brisk from the outset. We received answers to all our questions, and KOHLER was able to demonstrate the required leveling quality beyond doubt through various tests in the in-house leveling center. So we knew exactly what to expect from the machine.”

Individually integrated into the existing production setup

The responsible people at DEUMU therefore resolved to replace the existing part leveling machine with a KOHLER Peak Performer 130P.2000.

Production manager Thomas Kleinwechter is more than satisfied with the outcome of the

Machine and material facts

Part leveling machine:

- Peak Performer 130P.2000
- Direct drive for the leveling rollers free of hydraulics
- Advanced cleaning system for leveling rollers and supporting rollers
- Electromechanical leveling gap control
- Intelligent overload protection
- Reversible leveling rollers
- Extra-wide supporting rollers
- Roller path inlet side / outlet side: 6,000 mm respectively

Material to be leveled:

- Sheets of structural steels, high-strength fine-grained structural steels, and wear-resistant special structural steels
- Width: Up to 2,000 mm
- Material thickness up to 40 mm
- Quantity: Up to 400 tons per month
- Levelness requirement: 1 mm per meter

project: “The Peak Performer has brought us even greater quality improvement than we would have expected,” he sums up. “After around two years in multi-shift operation, we are totally convinced that we made the right decision.”

Your contact person at KOHLER:

Jens Schendekehl
Head of Sales Export Part Leveling Machines
Phone: +49 7821 6339 – 256
Jens.Schendekehl@kohler-germany.com