

New Witte Automation Technology Mobility guarantee

Automated processes require one thing above all: independent and individual concepts. With solution competence for the challenges of the future, backed up by profound experience of decades. With this knowledge advantage, which is unique in fixture building, Witte is increasingly dedicating itself to the large field of automation. With the result of convincing product successes in the application markets around the world (see page 3 "Witte favored once again"). And with newly defined automation solutions such as our Witte mobile structure plate FixBase MDD with multidirectional drive (more on page 2). Witte, is on the move!

Strengthening of the Management Well thought out!

Wholeheartedly involved: The „new“ head in the Witte company management. Since August, Dipl.-Ing. Jens Düffert – longtime managing director of the company – now also co-partner of Witte Barskamp GmbH & Co. KG.

In doing so, he strengthens the management team around company founder Horst Witte and his son Andreas.

Jens Düffert joined the company in 2009 as head of international materials management, and the following year he was given the task of restructuring Witte's market activities in the Asia-Pacific region. In 2011 he was appointed Managing Director of Witte Far East Pte. Ltd., Singapore, as well as the granting of power of attorney for the German parent company.

In 2016 – the mechanical engineer and studied business administrator was meanwhile the commercial director of the Witte headquarters – he was appointed co-managing director alongside Horst and Andreas Witte.

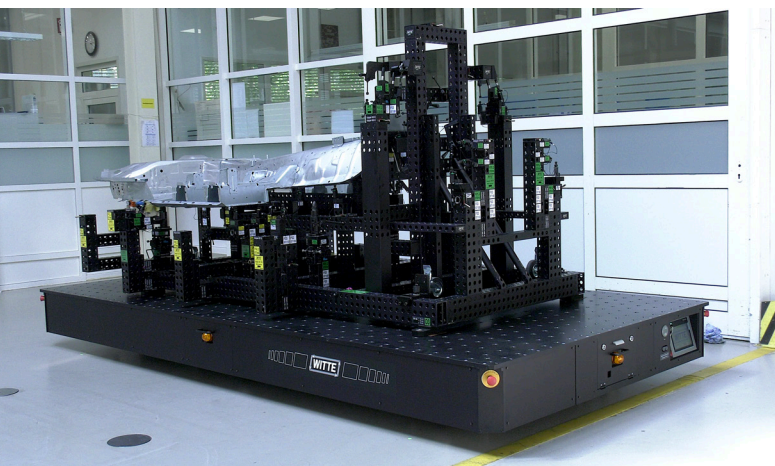
With Düffert's commitment as a limited partner of Witte Barskamp GmbH & Co. KG, the company is emphasizing its increased focus on automated solutions. The graduate engineer also brings extensive experience from his previous professional positions.



New co-partner of Witte Barskamp GmbH & Co. KG: Jens Düffert, previous managing director has been with the company since 2009.

"Automation is undoubtedly the future of clamping and fixing technology. As a system provider with over 50 years of expertise, we have a technological lead that we will be pushing to expand" says Jens Düffert.

The new shareholder sees the expansion of activities in Witte's "PROject" product line, the optionally complete or partial project implementation on behalf of customers, as a further focus.



Witte FixBase MDD: Mobile Structure Plate with Multidirectional Drive

Where would you like to go?

With the multidirectional moveable structure plate FixBase MDD, Witte presents its latest solution for fully automated mobile measuring room equipping and loading option.

FixBase MDD (**M**ulti**D**irectional**D**rive) is based on the tried and tested Witte structure plate system in sandwich type build, supplemented by a newly developed modular drive and control technology. It enables unlimited combination of driving directions.

At the heart of the drive system are eight Mecanum wheels per chassis – four of which are powered – on two air-bearing chassis swing arms each (picture below) for controlled, smooth and balanced starting, moving and decelerating.

Air lifting cushions and Z-positioning ensure complete relief of the wheels, precise lowering of the plate to the Z-position and an exactly leveled position also on uneven ground.

The Witte innovation avoids unnecessary downtimes thanks to charging contacts in the plate and on the floor, which ensure that the on-board batteries are constantly refreshed during the measurement and parking phases.

Due to an open interface and manufacturer-independent compatibility with all common measuring systems, FixBase MDD allows complete integration and subordination in existing user-specific workflow systems. Also a completely autonomous, partially or fully automated setup and operation is possible.



FixBase MDD technology advantages: Points that score

■ Chassis with air lifting cushions and Z-positioning.

Complete relief of the wheels and precise lowering of the plate to the Z position in the rest / placement phases. For

- high repeatable accuracy through perfect form fit,
- exactly leveled also on uneven surfaces – indispensable especially for tactile measurement applications,
- creating a safety distance between the floor and placed plate.

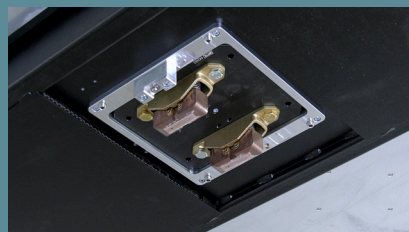
■ Safe positioning via physical guide rails and optical laser spots.

Significantly higher guidance accuracy and reliability because of mechanical features compared to electronic guidance. Recognized to be the best solution even in confined spaces and for optimal use of the measuring volume. Ideally acting in combination with laser spots for positioning and movement information.



■ Integrated floor charging contacts at key positions for frequent refreshing of the on-board battery charge status.

Charging contacts in the plate and floor charging stations ensure that the on-board batteries are constantly refreshed during the positioning / parking phases. For useability without interruptions in performance and additional protection against a deep battery discharge.



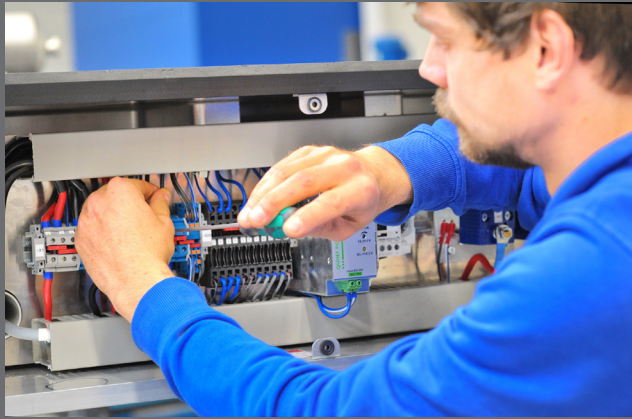
■ Performance and safety-oriented lead-gel batteries

Equipped with cost-effective, performance and safety-oriented lead-gel batteries:

- technically reliable and commonly available
- short charging times.
- good protection against deep discharge and overcharging.
- uncomplicated logistics (not classified as a "dangerous goods" shipment).

Apprenticeship at Witte: For the future

At Witte, this also counts as safeguarding the future: the number of young people who have taken the first practical steps of their professional career at Witte is already well into the three-digit range. For us, apprenticeships and training are, and remain, a matter of honor, dear and close to our hearts.



Additional requirements at the Chinese car manufacturer:

Witte favored once again

Automated structure plates from Witte - incidentally the first of their kind from a European manufacturer to be used in Asia - have proven themselves at the FAW Volkswagen plant in Tianjin in China since 2020.

Here, FAW-Volkswagen implemented its pilot project for full automation at the Tianjin production site with the mobile plates made in Germany

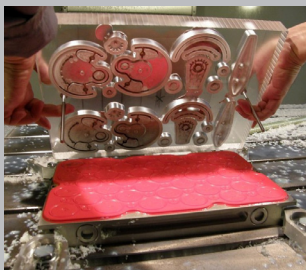
Convinced by the positive experience it has made, FAW-Volkswagen again favors Witte technology for a current tender for the Anhui plant.

Overall, FAW-Volkswagen Corporation Ltd. currently has five locations in China.



Mould clamping with Witte Weiguss Strong hold for delicate workpieces

When processing sensitive workpieces, delicate webs or extreme undercuts are a challenge for reliable workpiece clamping. The Weiguss mould clamping process from Witte enables even sensitive components to be securely clamped and mechanically processed. The component is held in place by a low-temperature melting bismuth alloy.



Especially with delicate, complicated components that have a tolerance value of less than a hundredth mm, dimensional accuracy is the top priority. When working with the Weiguss process from Witte, such tight milling tolerances can be achieved.

The semi-finished product to be processed is then clamped with a vacuum clamping plate and the upper half of the workpiece is conventionally finish-milled.

After the Weiguss bars have been turned into a castable compound by heating them to around 70 degrees Celsius, the workpiece that has just been machined is „filled up“. The Weiguss is poured into the component like water, whereby the liquid metal

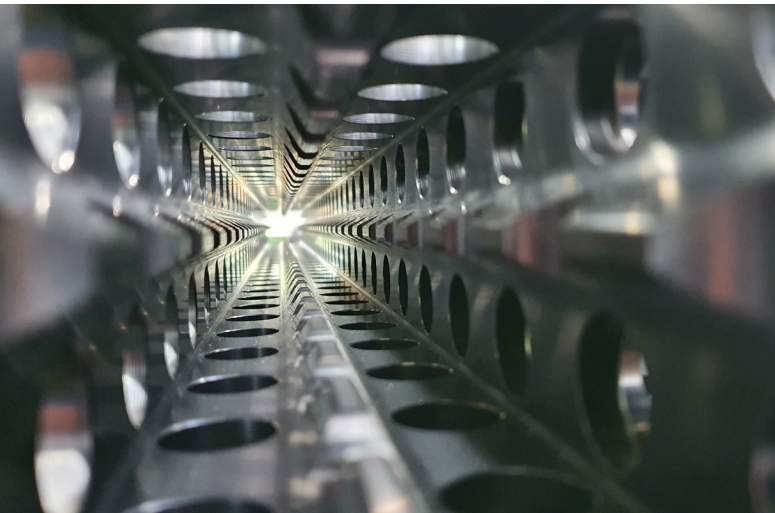
gets into all undercuts and cavities. During the solidification process, the casting compound expands by around 0.6 percent. This creates the wanted tension and clamping effect.

After the mass has solidified, there is again a plane-parallel plate. This is rotated 180 degrees and clamped again on the plate. Dowel pins can ensure the exact position of the workpiece, which can now be finish-milled on the back.

If reference points and reference surfaces have also been milled into the Weiguss, the workpiece, including the device, can also be held in a different set-up.

At the end of processing, the finished workpiece is melted out of the casting compound in hot water at more than 80 degrees Celsius. The casting compound neither mixes with water nor is its mass reduced. It solidifies into a lump so that the Weiguss can be melted down and reused as often as desired. Only the chips produced by milling and the slag produced during melting are lost.





The combination of all advantages New: ALUFIX ECO Plus

Witte has merged all the decisive advantages of the previous product variants Classic, Classic light and Eco light into the new ECO Plus version: convincing precision, trusted and known function and the best price-performance ratio.

ALUFIX ECO Plus bars meet the requirements of today's users and were especially designed to their demands and requests. The new high-quality ECO Plus replaces all previous bar design versions with immediate effect – for this, the favorable price of the previous Light Eco series remains.

Special edition ALUFIX basic set The most capturing startup of the year

This case is for everyone who is interested in „cost-benefit calculations“. We have something special for you: the ALUFIX start-up set, the brand new and limited-edition special offer of our popular ALUFIX basic set.

The ALUFIX Startup-Set provides entrance to the wide variety of the modular ALUFIX system. Included are the most important base components and accessories. These components can be combined in many ways and can be configured immediately to make well-functioning, complete fixtures.

All of this, for a limited time. Special startup price.

PLUS free trial period for a whole four months *.

* The startup set is invoiced four months after delivery so you have plenty of time and opportunity, to get to know ALUFIX in practical use and to discover all of its advantages. Should you, contrary to our expectations, not be convinced, we will take the set back within the test period of four months - uncomplicated and free of charge. This is customer-oriented service at Witte!



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