

BOSSARD

Proven Productivity



TUCKER®

TH 51X Stud Welding Head

One weld head for (nearly) all applications

TUCKER®

TH 51X Stud Welding Head

One weld head for (nearly) all applications

Tucker's TH 51X series is the World's best-selling automatic stud welding tool in the modern automotive industry. The robust and versatile weld head meets a wide range of customer requirements due to the wide variety of weld studs and metal sheets in use today.

The modular design of the TH 51X allows production engineers to process all different stud geometries by exchanging only a few components of the front end. This simplified design of weld head enables a common tool type for all applications. For challenging materials such as aluminum or high-strength steel, the TH 519 can be used with protective gas. Beyond that the TH 511 includes Magnetic Arc Control (MAC) that provides the opportunity for further process optimization. An integrated quick-change system and easily accessible consumables allow for a smooth production process with minimal downtime.

Available Variants

- **TH 510** – Weld head for standard steel applications
- **TH 511** – MAC weld head for highest requirements
- **TH 519** – Protective gas weld head for aluminum and high-strength steel applications

Investing in the Future

- Future-proof interfaces to the customer network
- Modern sensor technology for analysis and optimization

High Technical Availability and Precision

- Repeatable welding results through linear motor technology in combination with a probe to assure stabilization of the sheet metal surface during welding
- Parameter monitoring for quality assurance and optimization of the manufacturing process
- Reduced downtime due to rapid replacement of a weld head with integrated multi-coupling



TUCKER®

TH 51X Stud Welding Head

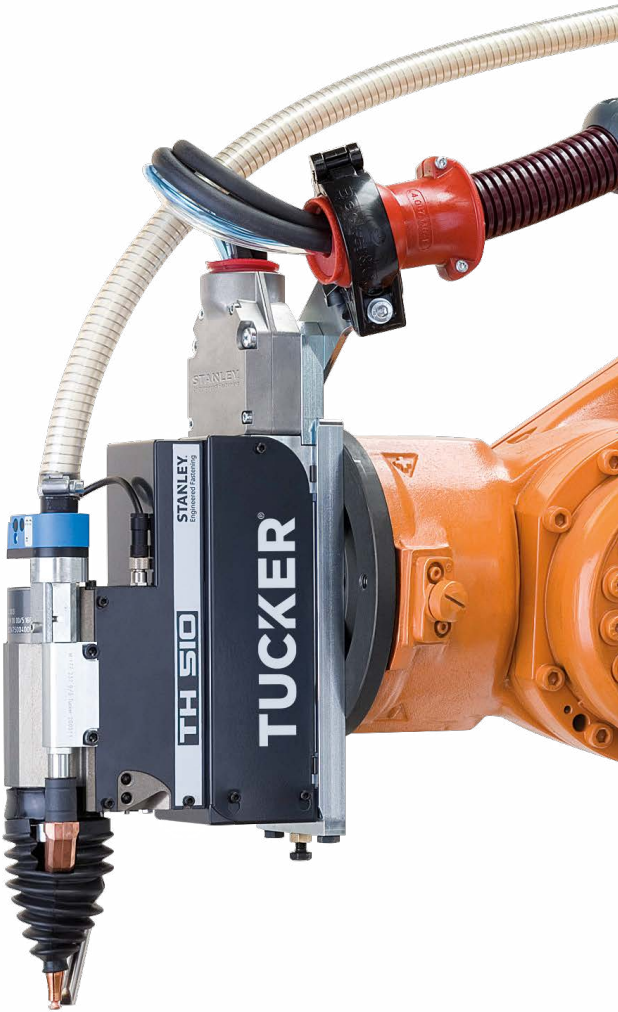
Optimized variants for every application -
Facts & Features

Applications

	Standard TH 510	MAC TH 511	Gas TH 519
Steel	■	■	■
High-strength, thin steel	■	■	■
Aluminium		■	■

Specifications (deviations possible depending on variant)

Weight	7 to 7.5 kg
Dimension L x W x H	414 x 120 x 187 mm
Max. welding stroke	12 mm
Max. slide stroke	50 mm
Optimal slide stroke	40-45 mm
Max. power consumption	2.5 A
Protective gas pressure	4 bar
Max. protective gas flow	20 l/min
Noise emissions, assessed as 'A'	< 75 dB (A)



www.bossard.com