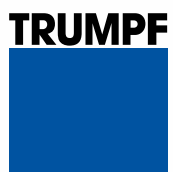




TruArc Weld 1000



TruArc Weld 1000

Get started
with automated
welding



Easy automation of manual welding

Do you manually weld standard sheet metal components using electric arc? Then you'll be familiar with the following scenario: It's hard to find welding experts and programming is not usually worthwhile for small quantities and short seams. The specialist knowledge required for setting up a welding robot is also often lacking. All this can be remedied by the TruArc Weld 1000. It is profitable even for small lot sizes, is easy to program, and can afterwards be operated by non-expert workers. Your welding experts then have time for more complex tasks.

Fully inclusive

The welding cell is a fully equipped machine tool, TÜV-approved and CE-compliant. It includes an exhaust system, housing with anti-glare protection and TRUMPF standard safety equipment.

Fully intuitive

No training is required to start, program or operate the welding cell – e-learnings are sufficient.

Fully flexible

Use as a one- or two-station operation according to requirements. You can then work on one larger component or smaller components in large series parallel to production.





- **Radically easy programming**
- **Automated welding – profitable from the first part**
- **No welding expertise necessary for operation**

The welding-cell practice test

Use easy automation instead of manual welding workstations – it pays off because the TruArc Weld 1000 is suitable for many components you currently weld manually, especially those that can be welded using simple fixtures. Programming is so quick that it is profitable even for small quantities.

TruArc Weld 1000's major advantage is that even without welding expertise you get:

- reproducible straight and uniform seams.
- seams with no weld spatter or beads.

"Finding welding experts is becoming increasingly difficult. The welding cell provides all the planning security we need. What's more, we can also produce small lot sizes with a wide variety of parts."

Pavel Hamberger, Project Manager for Steel Construction,
ENGEL STROJÍRENSKÁ SPOL. S.R.O., Czech Republic

"A huge advantage is its extreme ease of operation. Automating manual welding workstations would otherwise require very complex programming. But with the TruArc Weld, you can manage very well with little training. The switch to automated welding is therefore really quick."

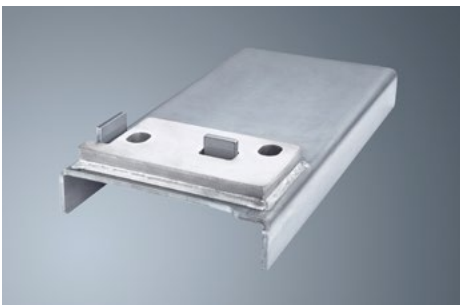
Josef Vacík, Project Manager for Steel Construction,
ENGEL STROJÍRENSKÁ SPOL. S.R.O., Czech Republic

"With TruArc Weld, TRUMPF has hit the nail on the head! Creating and running in of a program is extremely fast. This allows us to use the robot economically even for small batch sizes starting at 3 parts. Installation and commissioning were also very easy. The system was ready for operation 3 hours after delivery."

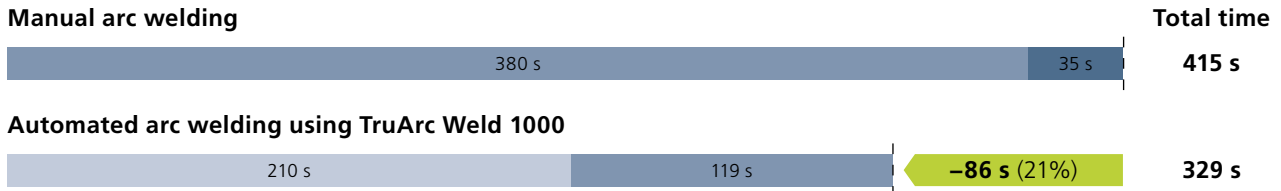
Marcel Wendt, Managing Director,
ABP – Innovative Blechbearbeitung GmbH, Germany

Profitable already from lot size 1

Time savings in welding and reworking can be achieved with the TruArc Weld 1000 for single parts as well as for small series. Simple weld seams can be programmed and welded in less than a minute.



Support bracket, single part with 5 weld seams.



Shipping brace, 8 items with 10 weld seams.



TruArc Weld 1000

Fast programming, reliable welding: the complete package for getting started with automated arc welding.

01

Easy

operation and programming

02

Flexible

working and positioning

03

Fast

setup
and start

05

Safe

according to TRUMPF standards

04

Productive

welding



01

Easy

operation and programming

The welding cell's wild card is its extremely easy programming. The welding start and end points are input via buttons on the welding torch. The robotic arm is then manually moved from point to point. Pendulum movements can also be easily adjusted. Welding parameters and templates for welding programs are included.



03

Fast

setup and start

Plug in and start welding. Your machine comes with everything you need – from wire coils to welding parameters. You can set it up wherever it's needed and put it into operation by yourself within hours. No training is required – e-learnings are sufficient to program and operate the machine. If your hall plan changes, simply reposition the machine.

05

Safe

according to TRUMPF standards

Play it safe with the CE-compliant and TÜV-approved welding cell. The safety cabin comes with safety control, automatically opening anti-glare protection, a self-cleaning exhaust system and LED lighting. The collaborative robot has collision protection. The working area is easily accessible from all sides via doors.

02

Flexible

working and positioning

Depending on the component and lot size, the welding cell can be operated using one- or two-station operation. Thanks to the "loading by crane" option, even large and heavy components up to approx. 2000 × 600 × 600 mm can be processed. Components can be placed flexibly and precisely on the Demmeler table. Components can be precisely aligned with the optional rotary axis.



04

Productive

welding

In two-station operation, setup takes place parallel to production. Each component requires programming only once. The machine will automatically transmit the program to the second station. Speed is ensured by high-performance equipment from Fronius. For thin materials, the CMT welding technology package ensures higher process reliability, less weld spatter and distortion.



More information on the TruArc Weld 1000 is available here:
www.trumpf.com/s/truarc-weld-1000

Attention to every detail



01 Programming and operation

Programming times are minimized by an intuitive operating unit on the welding torch combined with simple programming directly in the robot control. The machine's main operating unit has a simple and clear layout.



02 Robot

UR10e collaborative robot with six axes and force torque sensor. The linear axis positions the robot to the left or right.



03 Fronius equipment

High-performance welding equipment from Fronius: TPS 320i C PULSE welding source including PMC welding package, water-cooled 350-A welding torch and external wire feed system.



04 Demmeler table

3D welding table from Demmeler with a D16 50 x 50 mm grid hole pattern and hardened surface. Dimensions: 2000 x 1000 x 100 mm.



05 Safety cabin

Housing with integrated exhaust system, automatically opening anti-glare protection and lighting. A telescopic center separation divides the working area when required for two-station operation.

Axis data		
Model	Collaborative industrial robotic arm	
Number of axes	6	
Range	mm	1300
Repeatability	mm	±0.05
Welding source		
Model	Fronius TPS 320i C PULSE	
MIG/MAG welding current range	A	3–320
Dimensions and weights		
Cabin dimensions	mm	3600 x 2200 x 2800
Weight	kg	2540
Work area		
Typical max. component size (with closed telescopic center separation)	mm	600 x 600 x 600
Typical max. component size (with open telescopic center separation)	mm	2000 x 600 x 600

The next step: Laser welding

Do you have many and long welding tasks? Do the parts need to look good, e.g. because they are visible? Or do you require especially precise welding seams? Then laser welding is for you. The rule of thumb is: The longer the welding time or reworking, the more worthwhile laser welding is. Laser welding enables you to achieve precise, high-quality and stable seams. You'll save yourself regrinding and other time-consuming corrections such as flattening. The ideal machine to achieve this is our TruLaser Weld 5000.



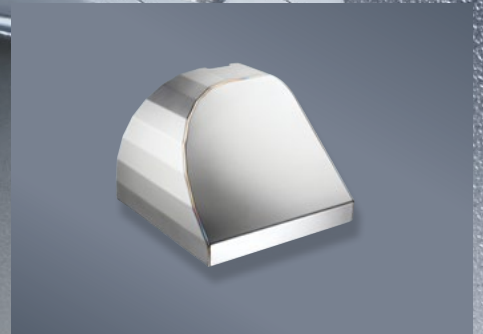
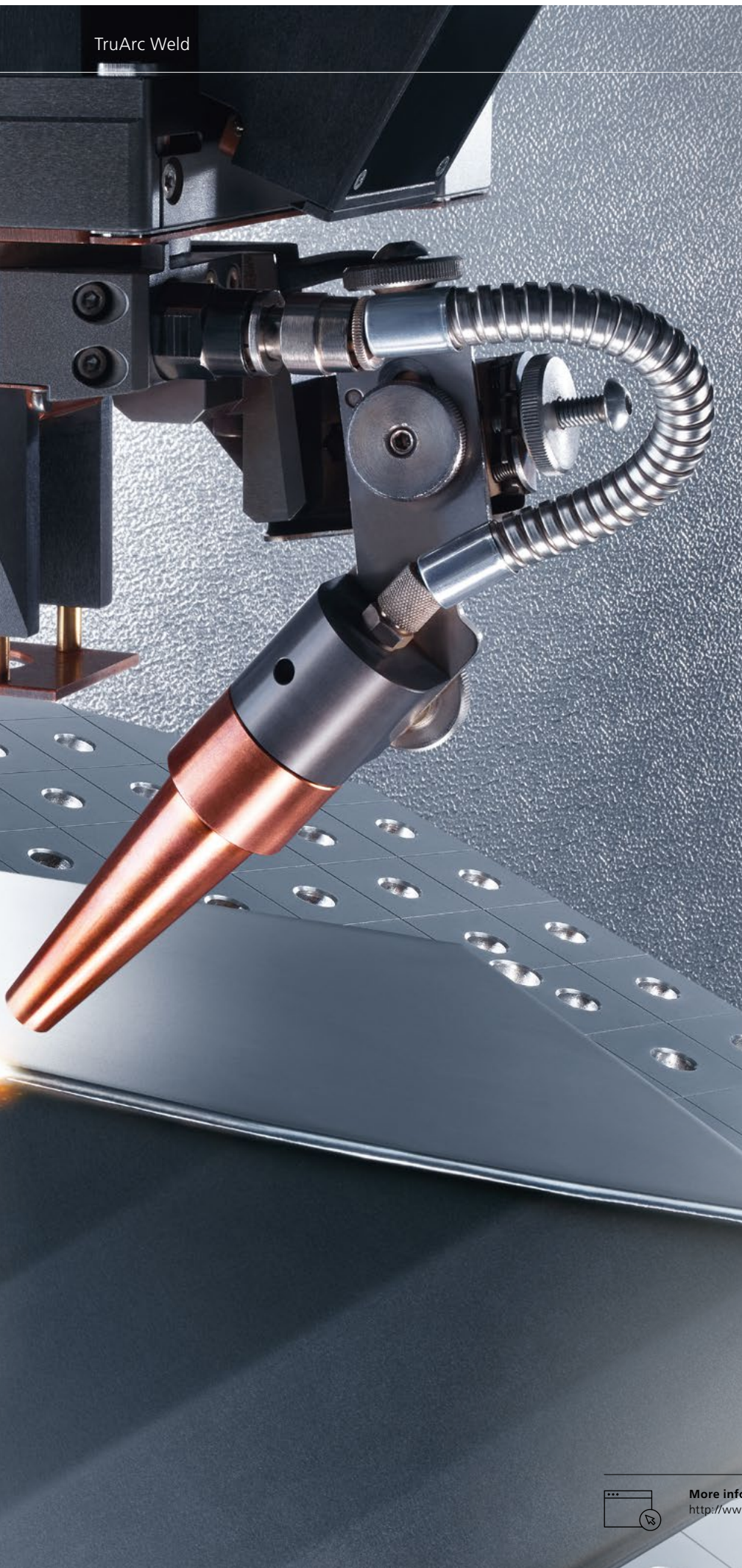
Deliver top quality

- High-quality appearance and extremely stable seams
- Minimal distortion
- Reproducible results

Save on time and costs

- Minimal reworking
- Reduced consumables
- Huge time benefits

A system that does everything: the TruLaser Weld 5000 is a turnkey system for automated laser welding in sheet metal processing.



More information on laser welding is available here:
<http://www.trumpf.com/s/m4l5sk>

TRUMPF is certified to ISO 9001
(Find out more: www.trumpf.com/s/quality)



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