



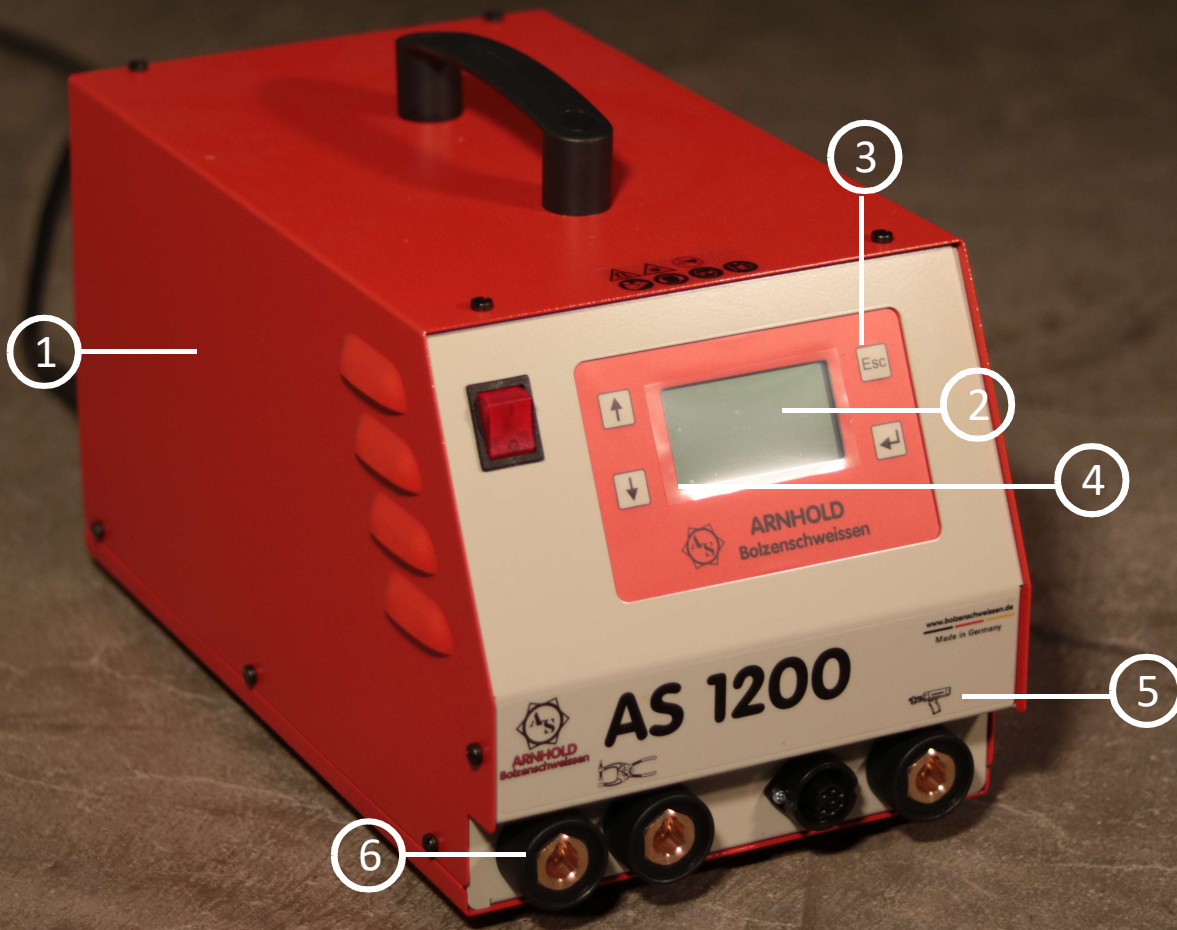
AS 1200 series

digitalized and high efficiency ✓

HMI + integrated parameter database ✓

CD-studwelding

The AS 1200 series



Now available: product video on



number	AS studwelder advantages
1	highest safety standards
2	digital operator interface
3	easy Touch buttons (useable with gloves)
4	infinitely variable welding voltages + Adjusting of capacity
5	labeled connections for flawless handling
6	robust welding and control cable connections



Now available: product video on



✓ Even more power reserves :
Maximum current of 15000A
charging voltage range 40-220V

✓ complet digitalized interface

✓ Switchable capacities between
33 und 99 mF (also possible: 66/99)

✓ Re-activation lock on welded studs

✓ Day / job counter

✓ intuitiv parameterselection by
integrated database

✓ Individual storage of 16 welding-
parameters

✓ robust case structure | dirt- proof
control panels | and low power-to-
weight ratio (14,8kg)

✓ 30% time savings due to high welding sequence
(1 second M3 / 4 second M8)

✓ Minimal back imprints due to extremely short welding
times in the gap process (0,5-4ms depending on gun)

✓ Contact- and gap procedure. Studwelder can
recognize automatically which gun is connected.

✓ reliable protection through temperature monitoring
of the inverter and thyristor

✓ Self-test at start and digital monitoring of the
contact to the workpiece

upgrading options for studwelder

- welding data monitoring
- automatic feeding control
- CNC interface and Ethercat, Profinet interface
- capacity extension to 132mF/156mF (reinforcement)

Versions of the AS 1200 series

AS 1200 (standard)

Art.-Nr. 19121200 technical data

Welding applications

- steel/ stainless steel Ø2-8
- aluminium Ø2-6 und 8*
- brass Ø2-8

*depending on the application, beyond the DIN range possible (no procedural review)

Welding performance

M3: 40 stud/min.
M8: 15 stud/min.
(Guideline values: Deviations depending on gun/ operating application)

technology capacitor (CD)

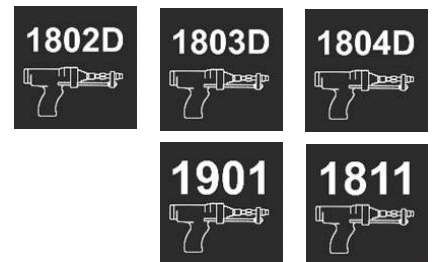
welding voltage 40-220V

capacity 99mF (switch between 33/99 or 66/99)

dimensions L W H 420 x 240 x 280mm

weight 14,8kg

electronic connections 230V 50Hz



AS 1200V

Art.-Nr. 191 21 281 technical data

Welding applications

steel/ stainless steel: Ø3-8 und 10/12 *
aluminium: Ø2-6 und 8*
brass: Ø2-8

*depending on the application, beyond the DIN range possible (no procedural review)

capacity 132mF (switch between 66/132mF)
Double reinforcement on 156mF possible



www.bolzenschweissen.de

Versions of the AS 1200 series

AS 1200 (CNC)

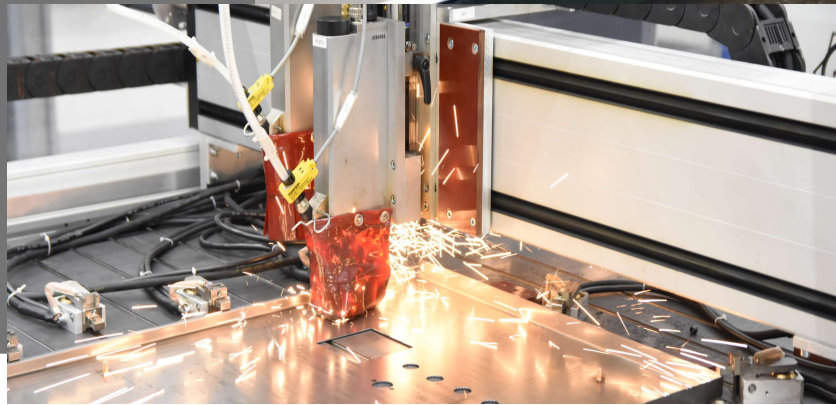
The AS 1200 CNC is based on the AS 1200 standard and offers the option of a CNC interface.

Through access to the welding parameter database, the welding parameters for the next weld can be selected individually by CNC. This feature enables to take impact on different workpiece conditions, without manual adjustment of welding parameters.

This universal-interface can be implemented on almost any PLC or CNC. Bus-connections such as Ethercat, Profinet, etc. are available on request. Outputs for contact signal, signal at process end or error message are already available.

More information about our expertise in CNC automation can be found in the corresponding prospect or on our website

Art number: 191 21 282



AS 1200 (AT)



Standard studwelder with the option of controlling the automatic studfeeding system AS 5100 and control of the automatic gun AS 5200.

The feeding system separates studs by vibration and studs are supplied by air pressure to the welding device. Parameters such as feed time for different stud sizes can be optimized and saved by the user. To control the feeder, the signals "Push" and 'Blow' are available on a 5-pin connector on the rear.

The automatic welding gun is usually suspended above the workstation by balancer. This enables the operator to work on maximum cycle times and with little fatigue. The positioning of automatic guns is usually done by using templates.

Art Nummer: 191 21 283



VBZ 5100



Options of AS 1200 series

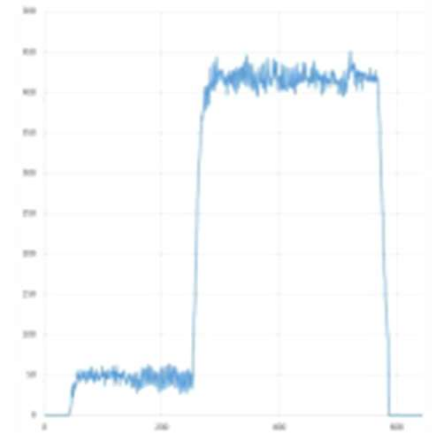
welding data monitoring

You want to improve your Quality assurance?

Then the AS welding data monitoring is the solution for your manufacturing process. Available for CD and ARC studwelding

AS Welding Technology

Schweisssdaten
I= 471 A U= 30 V
Ts= 59 ms E= 823 Ws
sU= -.- mm sN= -.- mm
sH= -.- mm ZK= 0
AF UK(t) > +10% Hbw



artical number: 191 21 293

	discription	your benifit
100% Monitoring	Real-time monitoring of all welds monitoring of: - welding current - welding voltage - stud movement distance compared to reference data	Error control - possibility to react to errors in production Comparison with reference values for "good welding"
error Confirmation by operator	Optional error confirmation by the operator Display of current measured values and indications of deviations from reference data	Flexibility for every production application auality assurance
100% data recording	monitoring of all welding data storaging on SD card	quality assessment for customers data for process optimation



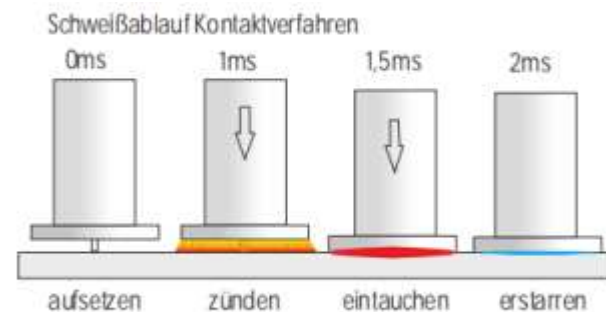
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procedure of tip ignition

contact procedure

In the process of "contact welding", the stud is welded by pressing the welding gun onto the workpiece against a spring force. As a result, there is electrical contact between the stud ignition tip and the workpiece. When the welding process is triggered by the operator or the automation controlling unit the ignition tip melts and there is a small arc between the stud flange and the workpiece. This produces a weld pool. The stud now moves due to the spring force by the distance of the ignition tip length towards the workpiece. After the final penetration of the stud, the pool solidifies.

Due to the stronger joining force and the longer welding time the contact process is suitable for steel, stainless steel, aluminium sheets and galvanized sheet metal.



gap procedure

When stud welding by the "gap procedure", the stud is pretensioned against a spring by a magnetic force. This creates a gap between the stud and the workpiece. This gap can be continuously adjusted on the welding gun.

After the welding height has been reached, the magnetic coil is released and the stud is accelerated by the spring towards the workpiece. As soon as the electrical contact is achieved, an arc is created during the forward movement of the stud.

The arc creates the welding pool where the stud is joined under the spring force. When the stud arrives at the surface of the workpiece the arc is blown off and the stud is finally connected to the workpiece.

Due to the shorter welding time, the gap process is suitable for steel and stainless steel, as well as for aluminum sheets. Due to the lower joining force, the gap process is usually used in automated systems and where you want to create less imprint at the back side.



More information about the CD procedures at www.bolzenschweissen.de

welding guns for AS 1200 series



1802D



Art Nr: 197 10 012

1803D



Art Nr: 197 10 009



The AS 1802D is a welding gun for contact procedure. It is suitable for welding steel or stainless steel also on difficult workpiece surfaces.

The AS 1803D is a high quality welding gun for the gap procedure. It is suitable for welding steel and stainless steel and due to an improved mechanic also for aluminium. Due to the backlash free ball guidance system there is the highest level of precision and reproducibility.

1804D



Art Nr: 197 10 007

The AS 1804D is a mini welding gun for gap procedure. It has a length of 120mm and is suitable for welding steel and stainless steel in narrow areas.



1811



Art Nr: 197 10 008

The AS 1811 is a contact procedure welding gun for applications in the isolation sector. Based on the 1803D this welding gun is specially used for welding disc pins or isolation nails. A welding cable of 10m enables the highest welding radiation.

1901



Art Nr: 197 10 003



The AS 1901 is the gap procedure welding gun. It is suitable for welding steel, stainless steel and aluminium at thin work sheets. Due to the short welding time there is a reduction of the reflective imprints on the back side of thin workpieces.

5200



Art Nr: 199 10 600

The AS 5200 is an automatic welding gun for the gap procedure. The automatic feeding system enables a fast and precise workflow.

