AS 2210 series

efficent inverter technology ✓

ARC-procedure

AS 2210 series

Now available: product video on YouTube

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

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- Even more power reserves : Maximum welding current values of 1000A
- Re-activation lock on welded studs
- inverter constant current control for fast controling
- Individual storage of 16 welding-parameters
- Extrem short welding times in a range of 5-1000ms
- Day/ Job counter
- intuitiv parameterselection by integrated database
- robust case structure | dirt- proof control panels

Device protection

- reliable protection by automatic monitoringand fault diagnosis of phase failure, overtemperature, lifting magnet and control cable.
- testing of welding gun and magnetic lift settings without enabled welding current possible
- temperature-controlled double cooling of cooling type F with overload cut-out
- Automatic start test and digital monitoring of the workpiece contact

Additional options

- welding data monitoring
- interface for automatic gun AS 5100
- CNC Interface
- shielding gas controlling unit

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studwelder types of AS 2210 series

AS 2210 (Standard)

Art.-Nr. 19102210	technical data
welding application	ceramic ferrule: Ø 6-14 short cycle: Ø 2-10
welding range	- steel - stainless steel - suitable heat resistant materials
technology	inverter
welding time	5-1000ms
welding current	100-1000 A
dimensions	L W H 610 x 340 x 390mm
weight	37kg

AS 2210 (shielding gas)

Art.-Nr. 190 10 003	technical data
welding application	ceramic ferrule: Ø 6-14 short cycle: Ø 2-10 shielding gas : Ø2-12
advantages of shieling gas	- avoidance of pores - prevents absorption of nitrogen - pervents oxidation
interfaces	shielding gas function

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Versions of the AS 2210 series

AS 2210 (CNC)

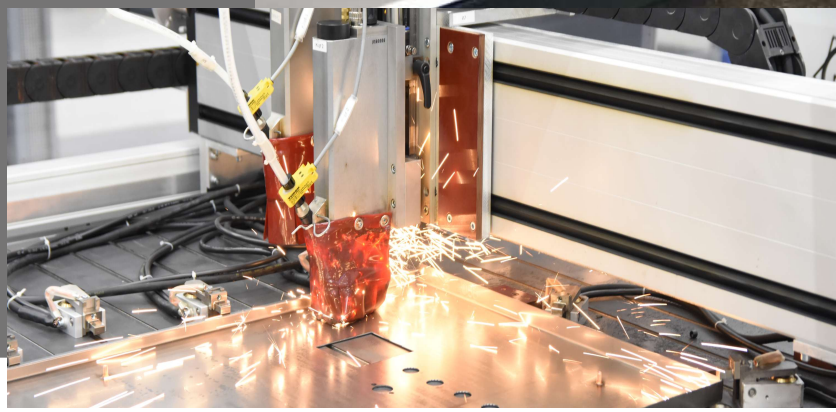
The As 2210 CNC is based on the AS 2210 standard and offers the option of a CNC interface.

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 foundi n the corresponding prospect or on our website

Art number: 191 21 282



AS 2210 (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 seperates 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

5200

VBZ 5100

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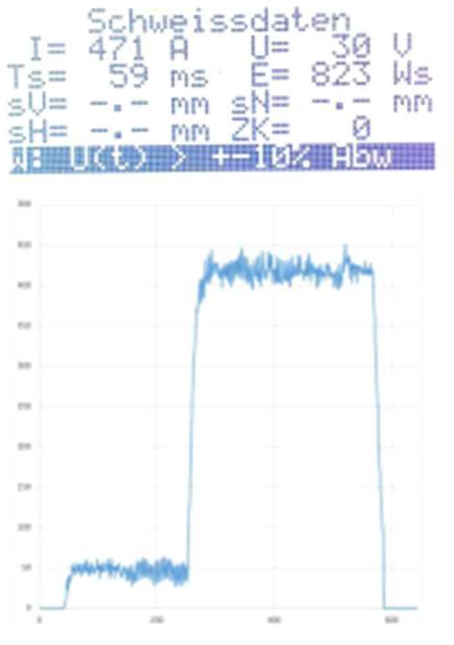
Options of AS 2210 series

welding data monitoring



You want to improve your Quality assurance?

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

AS Welding Technology

articel number: 191 21 293

	discribtion	your benifit
100% Monitoring	Real-time monitoringof 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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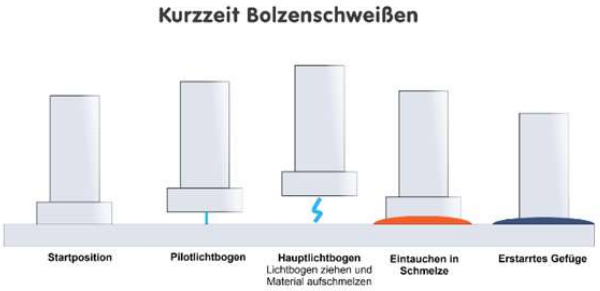
procedures of ARC-studwelding

drawn arc procedure

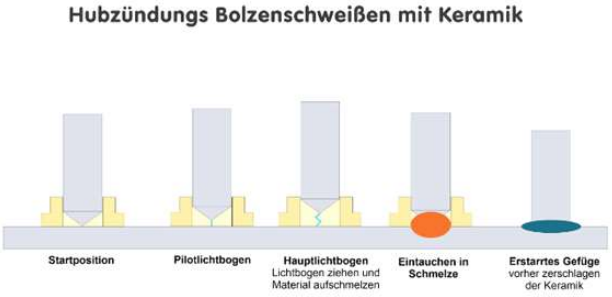
In the drawn arc process, the stud is lifted by the magnetic coil and drawing an arc between the stud and the workpiece. The subsequent immersion into the welding pool ensures an extremely stable joint if the lift and welding current are set correctly. Depending on the device, extreme welding currents of up to 1900 A can be generated. The advantage of drawn arc welding is that extreme stud sizes from Ø 2mm to 25mm can be welded.

short cycle procedure

The short-time process is characterized by its very short weldingtimes. This process is used for stud diameters from 3-10 mm. Due to the flat welding penetration it is also ideal for thinner sheets (min. 1/8 D). The welding time here is 5-100ms with a current of up to 1900 A.



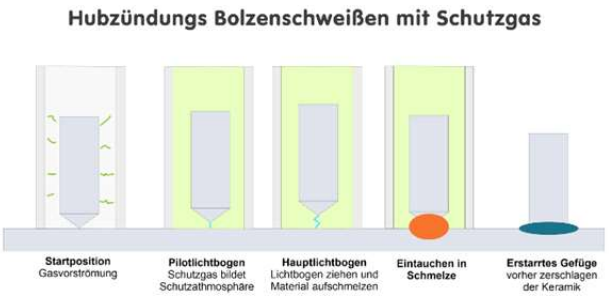
ceramic ferrule



In the drawn arc ignition process, from a stud diameter of 5mm a ceramic ring is used to stabilize the arc and the welding pool. Here the ceramic ring procedureis highly suitable for construction sites, as it restricts the arc blowing effect better than the shielding gas procedure

shielding gas

Gas-shielded welding is mostly used for stainless steel up to stud diameters of 12 mm. Here theshielding gas shields the welding pool from the atmosphere and prevents the absorption of nitrogen/oxygen, reduces oxidation and prevents the formation of pores. Furthermore, the the melting behavior, so that a lower welding penetration is achievedcompared to welds with the ceramic ring procedure.



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

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AS welding guns for AS 2210

Small drawn arc gun with stepless lift adjustment and stand mount. The infinitely variable stroke enables optimum adjustment, even for special tasksand improves the welding quality

2901

Art Nr: 192 20 025

chuck mounting: M10
pillar spacing: 45mm
welding range: Ø2-12mm
slides for:

welding with caramic ferrule:	180 40 170
welding with shielding gas:	180 40 174
Isolation applications:	180 40 173

2902

Art Nr: 198 20 025

chuck mounting: Ø10
welding range: Ø2-8mm (M10)
mounting for:

threepod attachment:	180 40 373
positional tube:	082 40 513
shielding gas tube:	182 40 532

Short-cycle gun with infinitely variable lift adjustment and attachment for diffrent equipment. The infinitely variable stroke enables optimum adjustment, even for special tasks and improves the welding quality.

2903

Art Nr: 192 20 030

chuck mounting: M10
welding range Ø2-8mm (M10)
slides for:

welding with caramic ferrule	180 40 373
welding with shielding gas	082 40 513
Isolation applications	182 40 532

Small drawn arc pistol with automatic length compensation, fixed stroke 2mm and tripod mount. Even with heavily fluctuating stud lengths and surfaces, you always achieve the same arc length and the best welding quality.

2702

Art Nr: 196 30 020

The largest drawn arc pistol with automatic length compensation, can be used with all stud welding devices that enables drawn arc welding. With the variant with shielding gas, an additional shielding gas version of the equipment is also required. The gun has an integrated mechanism, for automatic lift compensation between stud length differences of 1-4 mm. Furthermore, the lift is adjustable in stud sizesbetween Ø3-20 mm are possible.

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