

AutoSPATZCX2i switch cabinet for two welding guns

The *AutoSPATZCX2i* switch cabinet with two connections for medium-frequency transformer guns - or kick less cable guns connected to a medium-frequency transformer - represent, in conjunction with an *AutoSPATZM600L* inverter, a high-performance, flexible and cost-optimized tool which is especially suitable for manual applications. The primary areas of application are prototyping, pilot and niche production as well as repair stations in production lines.

Two welding guns can be connected at the same time to an *AutoSPATZCX2i* control cabinet sharing only one *AutoSPATZM600L* unit. A distance of about 15 - 20 meters (590.6 - 787.4 in) is permissible between the control cabinet and each welding gun. Each of the connected welding guns can be operated independently of the other gun. Despite parallel operation, no noticeable delay occurs in the operational process at the individual workplaces. The weld gun valves are operated in parallel mode, and all squeeze and hold times run independently of one another. Only the individual current times are executed in succession by the welding timer. Depending on the used transformer a maximum welding current of up to 30 kA is, in conjunction with the *AutoSPATZM600L* inverter, attained. This covers a very broad range of welding tasks at a sufficient duty factor.

Programming and analysis of the welding process can be carried out via a **SPATZBG-02** operating device, via RS232 and *AutoSPATZAS-01* software on a laptop or via Ethernet and *AutoSPATZAS-32* software on a line PC. When welding programs are to be altered or new reference welds carried out for **MASTER** control, one of this units has to be connected to the control cabinet. The appropriate weld gun is selected and the desired changes are carried out. In conjunction with the **MASDAT** weld gun identification system and quick-changing devices, guns can be exchanged as often as necessary between the most diverse welding operations in



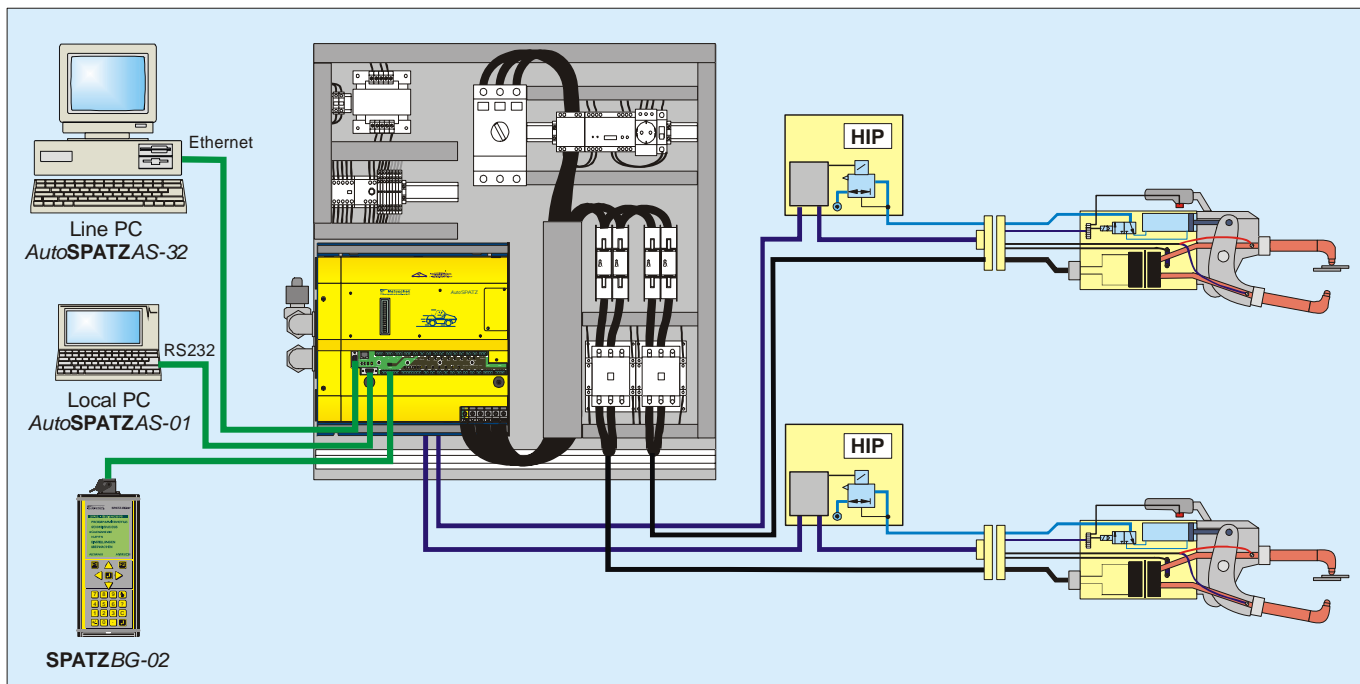
the production process, without any need to network the welding controllers. This outstanding flexibility enables weld guns to be exchanged between different locations or factories without requiring any programming work on the respective welding timers.

For each gun separate I/O signals are available. In addition each gun has its own **MASDAT** weld gun identification interface and proportional valve output. Four different weld programs can be used with each gun.

The enclosure is equipped to house one *AutoSPATZM600L* mid-frequency power unit with integrated weld timer, two isolation contactors for the two guns and a residual current monitor with 30 mA trip current and a circuit breaker with shunt trip for the mains.

The cabinet door is equipped with the handle for the circuit breaker, the **SPATZBG-02** and RS232 connectors, a push button for Weld Stop and Error Reset, two buttons for Counter Reset of gun 1 and 2, an indicator light for Power On and Error and two lights for Electrode Life of gun 1 and 2.





The cable with the electrical mains into the cabinet will be direct connected to the mains circuit breaker and the cable to the transformers direct to the isolation contactors. Each cable to the transformer is separate fused with a 63 A switch disconnecter. The control cables to guns are connected to terminals. All cables go via cable glands in mounting plates into the cabinet. One mounting plate for cable glands is at the top, 5 mounting plates are at the bottom of the cabinet. The connectors for cooling water are on the left side wall of the cabinet.

The dimensions of the enclosure are (W x H x D) 800 x 800 x 400 mm (31.5 x 31.5 x 15.7 in). The additional enclosure socket is 200 mm (7.9 in) high. The enclosures are prepared to built one on top of another to save space on the floor. The result is a double cabinet with a total height of 2 m (78.7 in) with a socket in the middle and on the bottom for the cabling to the individual cabinet.

Technical Data in conjunction with the AutoSPATZM600L

Dimensions cabinet (W x H x D)	800 x 800 x 400 mm 31.5 x 31.5 x 15.7 in
Dimensions socket (W x H x D)	800 x 200 x 370 mm 31.5 x 7.9 x 14.6 in
Circuit breaker	80 A
Isolation contactor	for each gun 75 A type
Switch disconnecter	for each gun 63 A type
Residual-current monitor	30 mA
Water connectors	½ " x 15 BSPT
Water consumption	2 l/min, temp. 20 °C - 25 °C 0.5 gal(US)/min, temp. 68 °F - 77 °F
Pressure drop	< 0,10 bar at 10 l/min < 1.45 PSI at 2.6 gal(US)/min
Mains voltage U ₁	3-400 V - 500 V, 50/60 Hz
Weld programs for each gun	4
Control modes	MASTER , CCC, CPC, CVC
Weld parameter monitoring	yes
Sensor supervision	yes
Force schedules	yes
Interfaces	SPATZBG-02 , MASDAT , RS232, Ethernet
Signal inputs	voltage, current
Output for proportional valve	2 pcs, 0 - 10 V DC



