

SumoSPATZ Capacitor Bank and DragSPATZ Inverter Power Sources

For this combination, the *DragSPATZ* high-current inverter and the *SumoSPATZ* capacitor bank are connected together. Both systems can demonstrate their strong points this way and the restrictions of the separate systems are eliminated.

The energy which is necessary for welding is provided by the *SumoSPATZ* storage capacitors. This allows the accordingly smaller design of the otherwise necessary, "bulky" power supply. Depending on the application, a 16 A or 32 A power supply for welding currents of up to 65 kA is quite enough.

An agreeable side effect here is the almost ideal smooth welding current, as the residual ripple which is otherwise existing in the intermediate circuit is smoothed almost completely.

The downstream *DragSPATZ* inverter allows, moreover, the realisation of any current profile with ramps, plateaus, off-times, etc. This would have been impossible if a "pure" capacitor discharge system had been applied.

The switch cabinet of *SumoSPATZ* houses the storage capacitors with the appropriate charging circuit. The following elements are installed in the door of *SumoSPATZ*: main switch, "Ready" display, key "Charge ON/OFF" and the display of the current state of charge of the capacitors.

The cabinet dimensions of *SumoSPATZ* are (W x H x D) 800 x 1,200 x 400 mm / 31.5 x 47.2 x 15.7 in (incl. a 200 mm / 7.9 in base). Cable entries are made via high-strength cable glands. The installation of the *DragSPATZ* inverter can be carried out on the capacitor bank, as shown in the picture.



Technical Data

Type	<i>SumoSPATZ KB1080</i>
Max. welding energy	40,000 Ws corresponds with approx. 65 kA at 50 ms
Mains Connection	3~400 V - 16 A at a 4 s welding cycle 3~400 V - 32 A at a 2 s welding cycle
Dimensions (W x H x D)	800 x 1,200 x 400 mm incl. 200 mm base 31.5 x 47.2 x 15.7 in incl. 7.9 in base
Weight	320 kg / 705.5 lb