



**Pure power  
for unusual tasks**

**12 PULSE  
POWER CUBE**

*Up to 2000 Ampere!*

**The no-compromise power source  
for demanding multi-wire submerged arc welding**

Developed for  
**the toughest job**  
in the world



The **12Pulse PowerCube** is a no-compromise power source for demanding single- and multi-wire submerged arc welding. It has been developed especially for the extreme demands made on the construction of offshore wind power plants, where longitudinal pipe welds on monopiles 40 m long with diameters of up to 7 m and material thicknesses of 15 cm and more have to be achieved.

Sturdy components in tried-and-trusted configuration were used for the task, but these have been extremely generously dimensioned and designed for the previously utopian power volume of 2.000 Ampere (!).

The special highlight: the 12Pulse PowerCube has a double thyristor power bridge, thus halving the current ripple factor. The result is top weld seam quality coupled with excellent efficiency, saving electricity and making interruption-free work possible on a top performance level. Cooling-down phases are thus a thing of the past.

The 12Pulse PowerCube significantly increases welding speed and deposition efficiency - uninterrupted, reliably, untiringly.

#### **Areas of application:**

- pipe construction for wind power plants (onshore + offshore), drilling platforms, steelworks
- pipelines
- shipbuilding
- vehicle construction
- construction of storage tanks, hydraulic cylinders, pumps, fittings, steel girders, cranes, bridges, etc.

# 12 PULSE POWER CUBE

## Characteristics:

### The 12Pulse PowerCube

- power source for submerged arc welding
- for single, double, tandem and multi-wire welding
- **maximum power up to 2000 A DC:**
  - extremely high deposition efficiency
  - makes larger wire cross-sections possible
  - maximum welding speed
- **minimum current ripple factor thanks to 12-pulse technology** with double thyristor current bridge:
  - best weld seam quality
  - excellent efficiency
  - low temperature development, thus: 100% duty cycle
- stepless electronic welding current control
- outstanding ignition behavior and smooth, even arc
- suitable for universal adaption to higher-order controls such as industrial PC and SPS. Thus
  - program-controlled and reproducible ignition and welding workflows
  - avoidance of faulty settings thanks to manual preset feature
- compensation of voltage losses in the welding lines
- compensation of fluctuations in mains voltage
- characteristic curve can be switched (CV/CC) internally and externally



## Technical data:

	GT 1500/12P	GT 2000/12P
Welding current at 100% ED	1500 A	2000 A
Power supply voltage	3x 400 V, 50 Hz,	3x 400 V, 50 Hz,
	3 Ph, PE	3 Ph, PE
Rated current draw	173 A	230 A
Maximum rated input power	120 kVA	130 kVA
Power factor cos.phi	0,9	0,9
Provided by the customer	200 A	250A
Secondary voltage	80 V	65 V
Welding voltage range	28 V – 44 V	14 V – 44 V
Welding current range	150 – 1500 A	200 – 2000 A
Cooling type	F	F
Class of insulation	F	F
Degree of protection	IP 23	IP 23
Weight ca.	1000 kg	1850 kg
Dimensions LxWxH mm	800x1000x1600	800x2080x1640

**The no-compromise power source**  
for demanding multi-wire submerged arc welding

## 12 PULSE POWER CUBE

Do you have any questions about our 12Pulse PowerCube?

Just arrange for a consultation or demonstration.

We look forward to your call (or e-mail).



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Die perfekte Verbindung