

# Aristo® 1000 AC/DC SAW

## AC/DC inverter power source for efficient submerged arc welding

The Aristo® 1000 AC/DC power source is based on unique and patent pending technologies to deliver the best welding performance with the lowest power consumption. The result is a power source that will deliver more welding per kilowatt hour.

The Aristo® 1000 AC/DC is designed to be used with the digital PEK controller and the robust A2/A6 feeder units.

- **A global inverter** - Connect to a three phase mains supply from 380 to 575 V, 50 or 60 Hz.
- **AC settings – Bead Profile Modelling™**  
Aristo 1000 AC/DC offers full control of the settings for AC welding. By controlling the AC frequency, balance and offset you can optimise the penetration profile, heat input, deposition rate, arc stability and stirring effect to suit your individual needs.
- **Change between DC and AC “on the fly”** – Minimise downtime and weld defects by the push of a button with the patent pending “on the fly” function.
- **More output** – Two Aristo 1000 AC/DC can easily be connected in synchronised parallel mode to deliver more welding current if required.
- **Designed for heavy duty industrial environments**  
- IP 23 rated.
- **Long welding cables** – The patent pending **Cable Boost™** technology stores energy and instantly delivers up to 450% additional energy when required. Cable Boost extends the maximum usable weld cable length with more than a factor two, without compromising the weld result.

### Designed for automation

A DC arc is normally used for the root pass to achieve full penetration. The “on the fly” function allows you to switch over to an AC arc without stopping the process when welding on round objects. This will minimise both downtime and the risk of weld defects as the stop and re-start sequence is completely eliminated.

Aristo 1000 AC/DC is designed to be used in installations where long welding cables are necessary, as AC welding is more demanding and sensitive to voltage drops. Special care has been taken to avoid situations where the machine is the limitation. There are no compromises when it comes to the welding process.



### Eco design

- **Cable Boost™** is also an energy saver. The inductive energy generated in the welding cables is re-used in the welding process instead of being wasted as heat and power losses.
- **Remote controlled on/off function** - Another feature to save energy. Multiple power sources in a remote location can be controlled by a remote function and can easily be switched off to save energy.
- **Power efficiency and less current consumption** - The latest technology and patent pending inventions in the Aristo 1000 AC/DC reduce the losses to a minimum. Only the most power efficient components have been selected in the design. This will reduce your installation- and running costs and help to reduce your carbon footprint.

### Applications

- **Wind tower structures, nuclear components**
- **Beams, bridge components**
- **Trailer beams, excavator components**
- **Panel lines, sub components**
- **General fabrication**
- **Single or multi wire applications**

## Technical data **Aristo® 1000 AC/DC SAW**

Mains voltage, 3 ph V, Hz	380-575, 50/60
Mains current (DC load), A / V	86 / 380 82 / 400 79 / 415 74 / 440 71 / 460 66 / 500 59 / 550 57 / 575
Mains fuse (slow), A / V	100 / 380 100 / 400 80 / 415 80 / 440 80 / 460 80 / 500 63 / 550 63 / 575
Maximum load at: 100% duty cycle A/V	1000 / 44
Open circuit voltage, V	130
Open circuit power, W	240
Efficiency at max rating	0.88
Power factor	0.93
Enclosure class	IP23
Dimensions LxWxH mm	865x610x1320
Weight, kg	330
Certification	CE certified
3rd party approvals	ETL, CCC and Ghost R

This welding power source comply with the requirements of IEC-/EN 60974-1 and IEC-/EN 60974-10

### The digital PEK controller

ESABs standard digital process controller PEK is used for all types of mechanisation, from tractors to Column and Booms, and provides user recognition and ease of use.

The PEK controllers flexibility means less user training and reduces the number of spare parts.

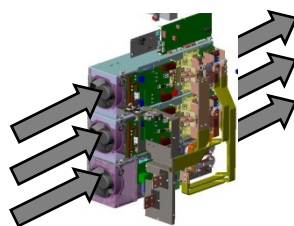
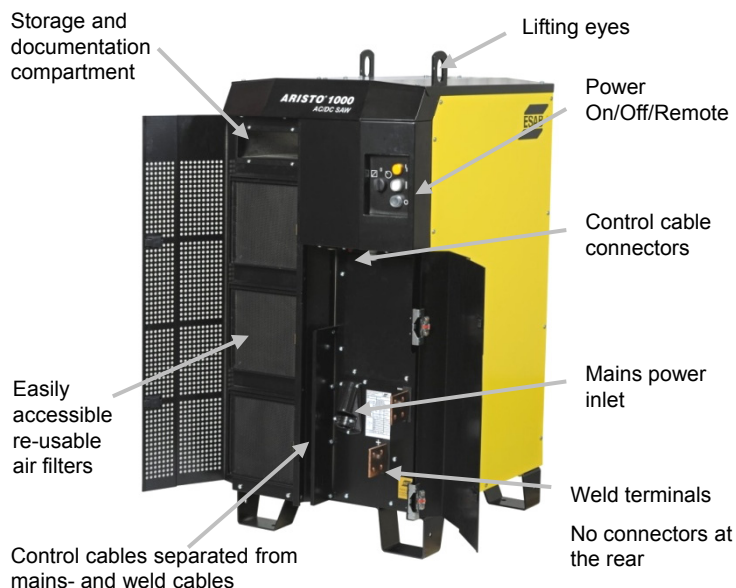
Featuring 255 programmable parameter memories, clear text menus in 17 languages, USB connector for the use of a USB memory for data back-up, parameter transfer, production monitoring, software upgrades etc. Actual heat input shown in real time on the display. Encoder controlled motors for accurate speed control. Different user levels can be set to limit access for different users. See separate PEK fact sheet for more information.



A2-A6 Process controller PEK

## Designed for uninterrupted welding production

One of the most common reasons for a production stop in a welding installation is damaged cables or broken connectors. The Aristo 1000 AC/DC is designed to eliminate this risk. There are no connectors or cables at any exposed positions. All cables are connected behind a door in the front of the machine. Easily accessible for service and well protected from damage.



### Efficient cooling

Cooling channel design provides optimal cooling of the machine while all sensitive components are protected from dust and particles. The cooling channel is easy to clean with compressed air.

Re-usable air filters minimise the amount of particles in the cooling channel.

**Cooling on demand.** The cooling fan only runs during welding.

Advantages:

- Less energy required
- Less noise level in the workshop
- Less dust inside the cooling channel

## Ordering information

Aristo® 1000 AC/DC SAW	0462 100 880
Control cable 15 m	0460 910 881
Control cable 25 m	0460 910 882
Control cable 35 m	0460 910 883
Control cable 50 m	0460 910 884
A2-A6 Process controller PEK	0460 504 880



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