



# **Aristo Mig 5000i**

**Robust and Powerful Multi-process Inverter Power  
Source for Optimum Welding Solutions**

# Robust and Powerful



- Robust construction
  - Sturdy extruded Aluminium (Alutech®) body to withstand corrosion and harsh environments
  - Provision of trolley for ease of mobility
- Dust filter to prevent ingress of dust and metal particles and ensures enhanced protection to the power source
- High duty cycle
  - 500A at 60%
  - 400A at 100%
- Longer wire-feeder reach – up to 35m
- TrueArcVoltage System™
  - Measures arc voltage at the torch tip
  - Independent of length of interconnection cable, return cable or welding torch (39.5m working radius with 35m long interconnection and 4.5m Torch)



# Flexibility



- Multi-process capability – CC/CV
  - CV : MIG/MAG Synergic, Pulse and SuperPulse™
  - CC : MMA and AAG
- Optional in-built cooling unit for MIG torch (5000iw)
- Aristo Mig U5000iw is suitable for DC TIG (HF) and Pulse TIG with in-built cooling unit for TIG torch
- Outstanding performance on a wide range of metals including advanced Aluminium fabrication
- Choice of boom mounted wire feeder – greater access to a wide range of jobs and convenience
- Easy Data Transfer to Computers



# Advanced + User-friendly Controls



- Digital control pendant on feeder / with extension cable for remote operation
  - Menu driven selection of the parameters
  - Option of using USB for data transfer
  - Finer adjustments for Pulse MIG/MAG
- User defined (create / edit) Synergic Lines
  - Super Pulse for controlled heat input with combination of heterogeneous pulses for ease of welding on variety of materials
  - Job Memory – 255 numbers



# Safety and Reliability



- Enclosure class IP23 – suitability for indoor and outdoor use
- Application class 'S' for operation in areas with increased electrical hazard
- OKC type quick connectors – no live parts for greater welder safety
- Voltage Reduction Device (VRD): OCV to  $< 35V$
- Conformity to EN 974 -1, -2, -5 and -10





# Technical Specifications

## Aristo Mig 5000i



Parameter	Aristo Mig 5000i
Mains supply, V/Ph, Hz	400 ± 10% / 3, 50~60
Input power, KVA (max)	25.6
No load power, W	50
Welding process suitability	MIG/MAG, MMA, AAG
Open circuit voltage, V	72 - 88 (MIG/MAG), 68 - 80 (MMA) , < 35 (VRD ON)
Output range, A	16 – 500
Permitted load at 60% duty cycle, A / V (MIG/MAG)	500 / 39
Permitted load at 100% duty cycle, A / V (MIG/MAG)	400 / 34
Power factor (max)	0.91
Efficiency at maximum current, %	87
Dimensions, l x w x h, mm	625 x 394 x 776
Weight, kg	68 (88 Kg with Cooling Unit)
Operating temperature, Deg C	-10 to +40
Enclosure class	IP23
Insulation class	H
Application class	S
Standards of conformity	EN 60974 -1, -2 & -10

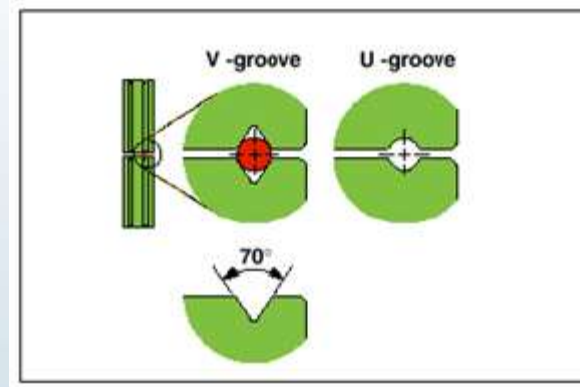
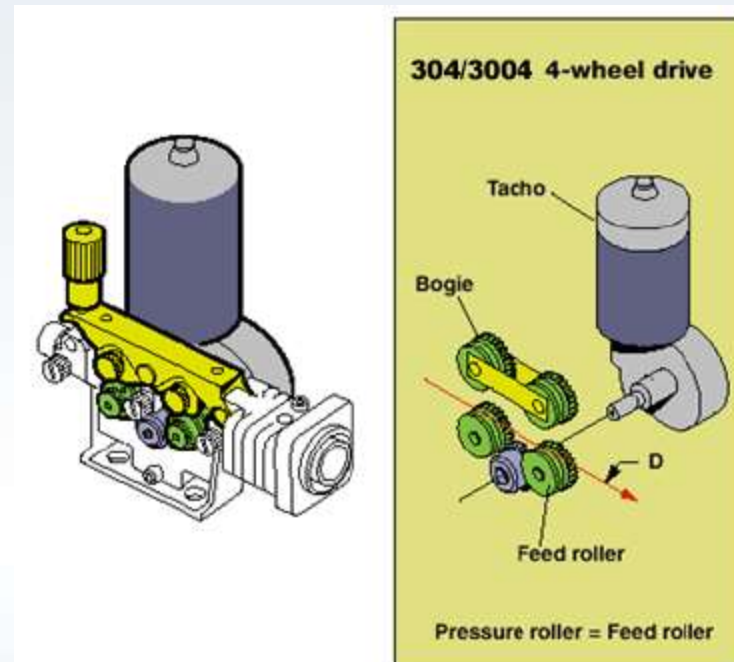


# Technical Specifications

## Aristo Feed 3004w



Parameter	Aristo Feed 3004w
Power supply voltage, VAC / Hz	42 / 50 ~ 60
Wire feed mechanism	4-roll (all geared and grooved)
Drive	DC motor
Wire type	MS / SS / Al / FC
Wire diameter, mm	
MS	0.6 – 1.6
SS	0.6 – 1.6
Al	1.0 – 1.6
FC	0.8 – 1.6
Wire feed speed, m/min	0.8 – 25
Spool diameter, mm (standard / option)	300 / 440
Choice of connection set, m	5 / 10 / 15 / 25 / 35
Dimensions, l x w x h, mm	690 x 275 x 420
Weight, Kg (w/o wire spool)	15
Standards of conformity	EN 60974-5



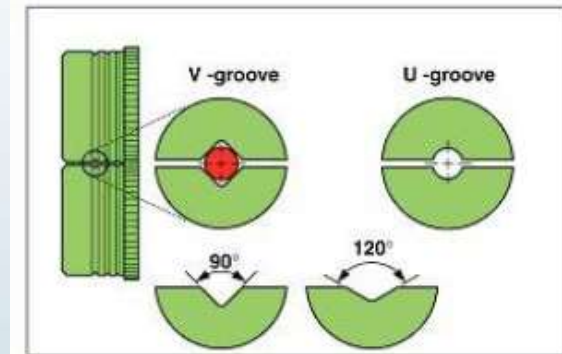
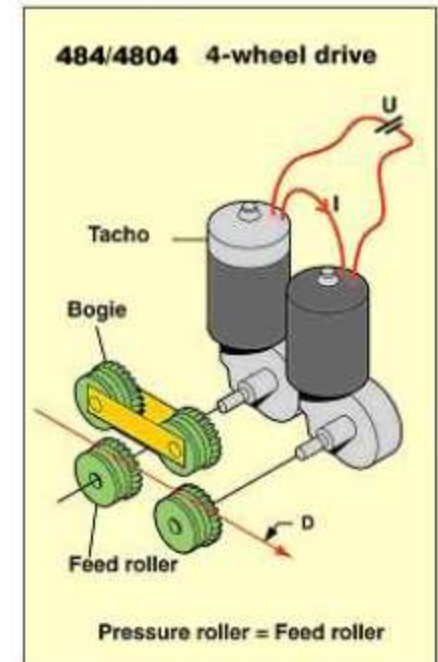
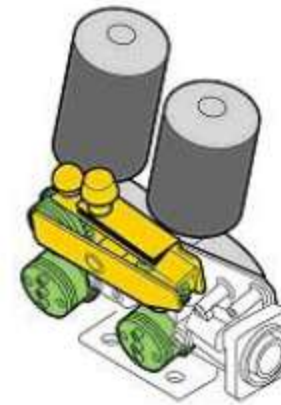


# Technical Specifications

## Aristo Feed 4804w



Parameter	Aristo Feed 4804w
Power supply voltage, VAC / Hz	42 / 50 ~ 60
Wire feed mechanism	4-roll (all geared and grooved)
Drive	DC motor
Wire type	MS / SS / Al / FC
Wire diameter, mm	
MS	0.6 – 2.4
SS	0.6 – 2.4
Al	1.0 – 1.6
FC	0.8 – 2.4
Wire feed speed, m/min	0.8 – 25
Spool diameter, mm (standard / option)	300 / 440
Choice of connection set, m	5 / 10 / 15 / 25 / 35
Dimensions, l x w x h, mm	690 x 275 x 420
Weight, Kg (w/o wire spool)	19
Standards of conformity	EN 60974-5



# Technical Specifications

## Aristo U8\_2 Plus



### Panel (MMC) functions

### U8<sub>2</sub> Plus

QSet™	X
2/4 stroke	X
Crater filling	X
Creep start, hot start and adjustable burn-back time	X
Gas pre/post flow	X
Digital V/A meters	X
Pre-programmed synergic lines	X (>230)
Gas purge/wire inching	X
Memory 10 set	
Memory 255 set	X
Pulse/synergic pulse	X
Limit editor, set and measured values	X
Create synergic lines	X
SuperPulse™	X
Production statistics	X
Auto save mode	X

# Best Suited Application Areas



## Aristo Mig 5000i(w) / U5000iw

- Railways – wagons, coaches and locomotives
- Process Plant Equipment
- Heavy fabrication
- Nuclear
- Shipbuilding
- Aerospace



# Feature / Benefit

## Aristo Mig 4004i Pulse

Features	Benefits
Multi-process – CC/CV	Gives flexibility to operate MMA and MIG/MAG with one power source, also saving cost of 2 power sources
Synergy (MIG/MAG)	Selection of wire and gas from the library for optimum parameters, saves time improves productivity
Pulse (MIG/MAG)	Excellent performance on thin sheets, improved quality
TrueArcVoltage™ (TIG)	Automatic voltage compensation in MIG/MAG independent of interconnection and torch length, improved quality and reliability
Data transfer to PC / Laptop with U8_2 Plus	Improved productivity and quality
Job memories (255 nos.)	Easy to recall set parameters, saves time, improved productivity
Aristo U8_2 Plus Pendant on Power Source / Feeder	Flexibility to operate as standalone power source for MMA/TIG or with feeder (MIG/MAG)



# Case Study

## Segment: Railcar

### Customer Need

#### Manufacture of SS coaches

- MIG/MAG welding application using 0.8 – 1.2mm wire on thin sheets (different SS grades and MS)
- Sheet thickness 2 – 6mm, operating current < 300A
- There is a wide range of jobs interchangeable between different welding stations and hence portability of welding parameter is required
- Arcing time over 5 hours / shift, each shift of 8 hours duration, 2 shifts / day
- Storage of welding parameters for different types of jobs (>50)

### ESAB Solution

#### Aristo Mig 5000i with the following features

- 500A Inverter Multi-process power source
- Aristo U8\_2 Plus – Synergic / Pulse MIG/MAG
- High duty cycle – 500A / 60% and 400A / 100%
- Aristo U8\_2 Plus – 255 job memories
- User defined synergic lines

# Case Study

## Segment: Railcar

### Customer Benefits

Aristo Mig 5000i Pulse delivers the following benefits

- High duty cycle – 400A / 60% and 300A / 100%, suitable for continuous usage
- Aristo U8\_2 Plus
  - Pulse MIG/MAG for improved performance on thin sheets
  - Large no. of pre-defined synergic lines & user defined synergic lines gives optimum welding parameters, saves time and improves productivity
  - 255 job memories for storage and recall of parameters, saves time, higher productivity







**esab.com**

