

# INTRODUCTION TO THE PRODUCT

## Contents



**HIGHLIGHTS**

**SYSTEM OVERVIEW**

**AREA OF APPLICATION**

**CONTROLS**

**TECHNICAL DATA**

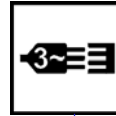
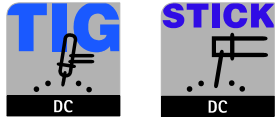
WELDON

## Power - for TIG use

- **Long useful life, even in heavy duty multi-shift mode**
  - High duty cycle
  - High reserve capacity inverter unit
  - Stable, robust machine construction of metal
- **Safe, reliable and low-maintenance machines**
  - Protected against overload
  - High mains voltage tolerance
  - Noise reduction and electronics protected from contamination by temperature-controlled fans
  - Quick replacement with few manual operations without tools or skilled personnel thanks to snap closures and plug connections
- **Innovative welding machines thanks to digital microprocessor technology**
  - Easiest operation
  - 100% reproducible welding results with maximum quality
  - Problem-free integration into mechanised systems
- **Power savings**
  - Innovative inverter technology

# SYSTEM OVERVIEW

WELDON



TRITON 400,500 A



TROLLY70-2



Cooling unit COOL70 U40 oc COOL70 U41 (reinforced)



TIG torch - Standard - Up / Down - Poti



Remote control - RT1



Remote control - RTP1 - RTP2



Remote control - RTF1



Wire feed for MIG/MAG welding WELDON DRIVE 4



TRITON 400,500 A



TROLLY70-2



Cooling unit COOL70 U40 or COOL70 U41 (reinforced)



MIG torch - Standard - 10 Programs / Up-Down - Poti



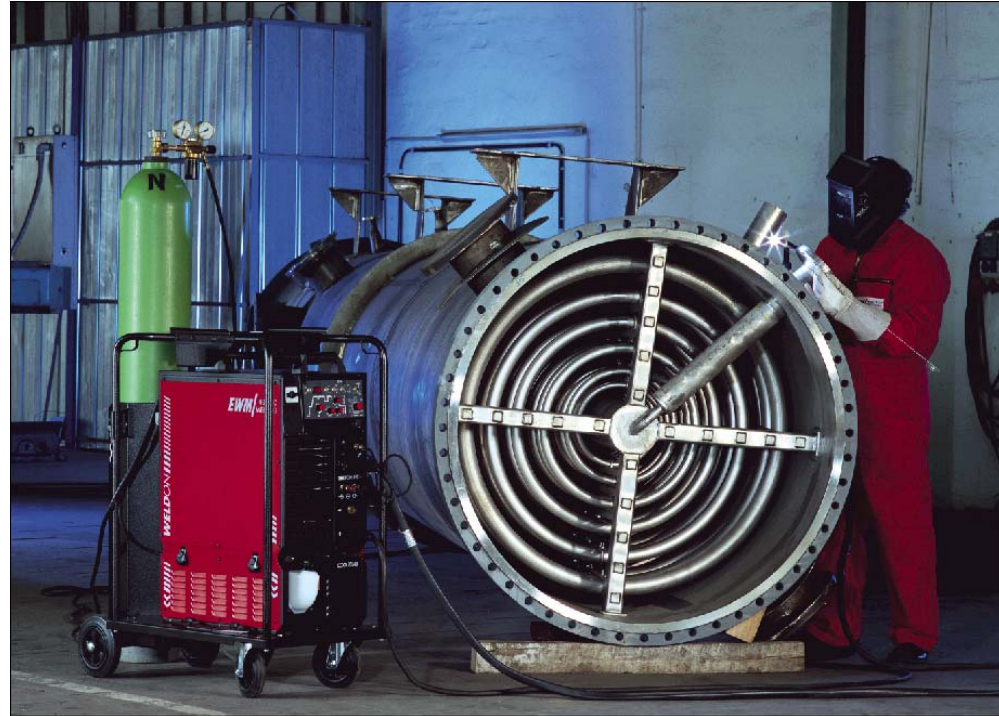
Remote control - Weldon R10



Remote control - Weldon R40

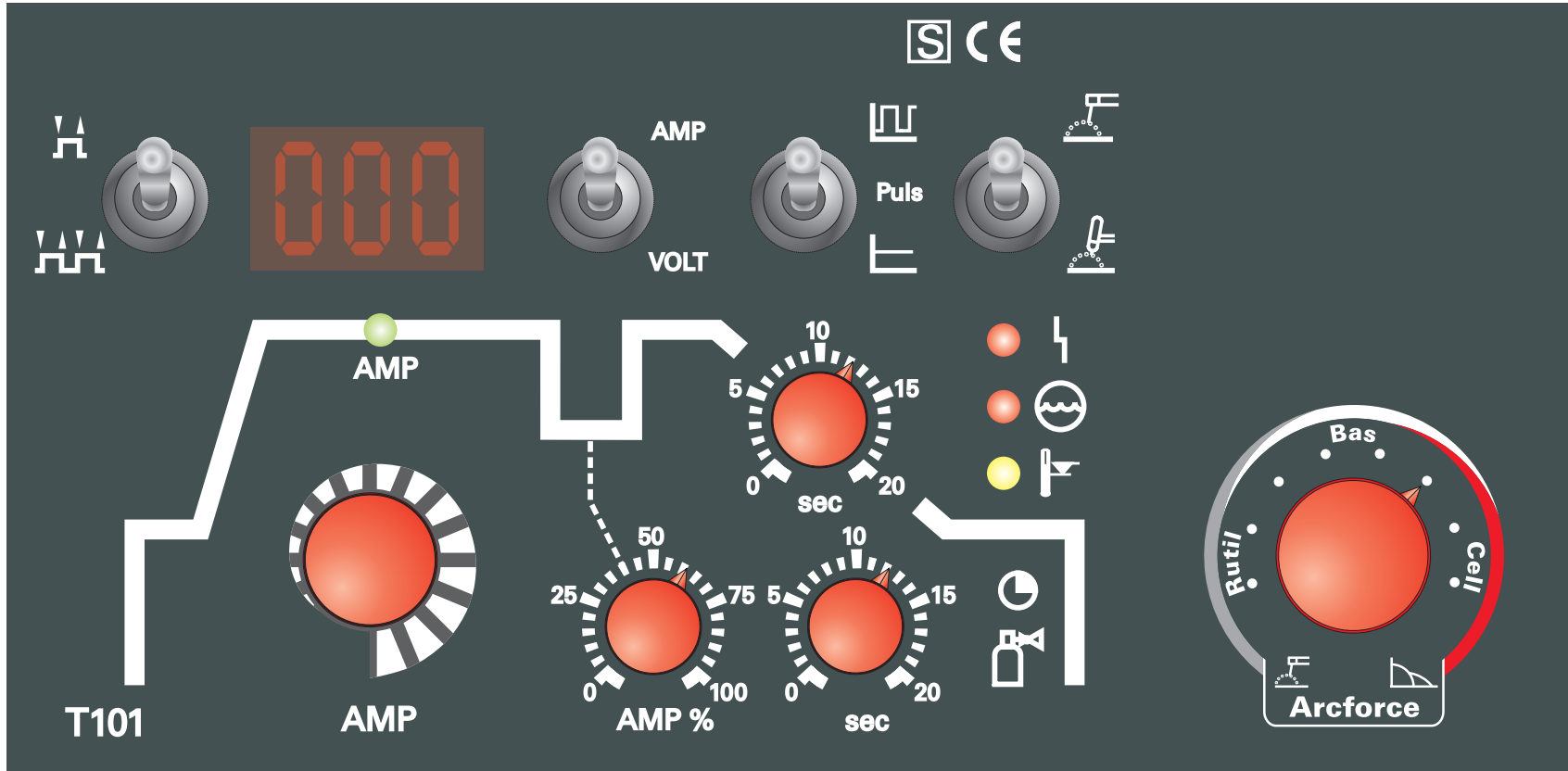
# AREA OF APPLICATION

- **Production and repair work**
  - Foodstuffs and chemicals industry
  - Machine and vehicle construction
  - Container, equipment and pipeline construction
  - Deposit welding in tool construction
  
- **Materials**
  - Unalloyed and low- and high-alloy steels
  - Copper
  - Special Metals



# CONTROLS

## T101 (TRITON 400/500 without MIG/MAG)

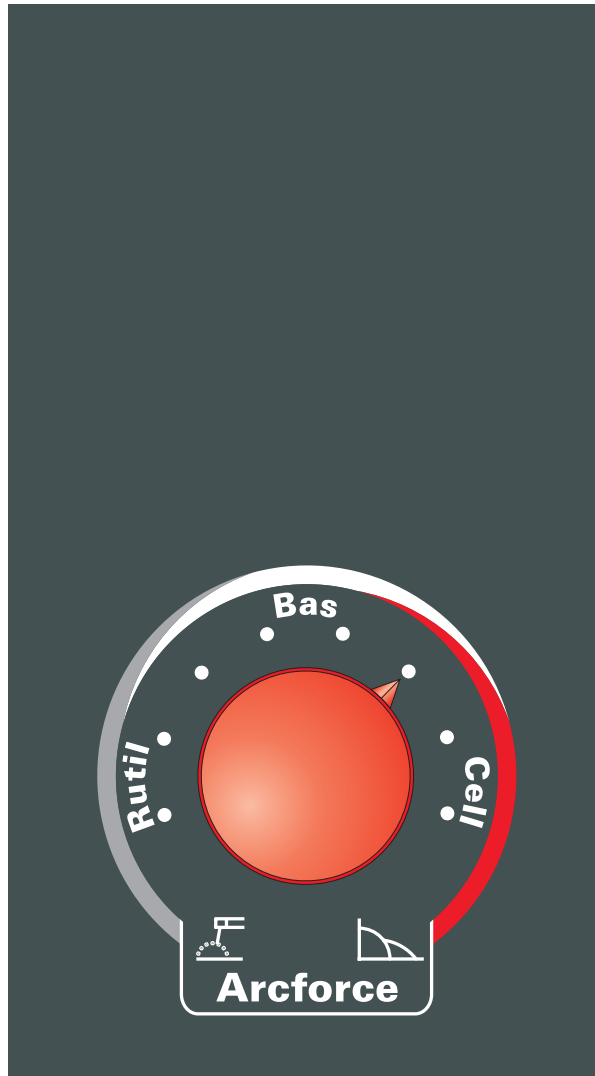


WELDON

## Selection Welding Task

- **MMA**

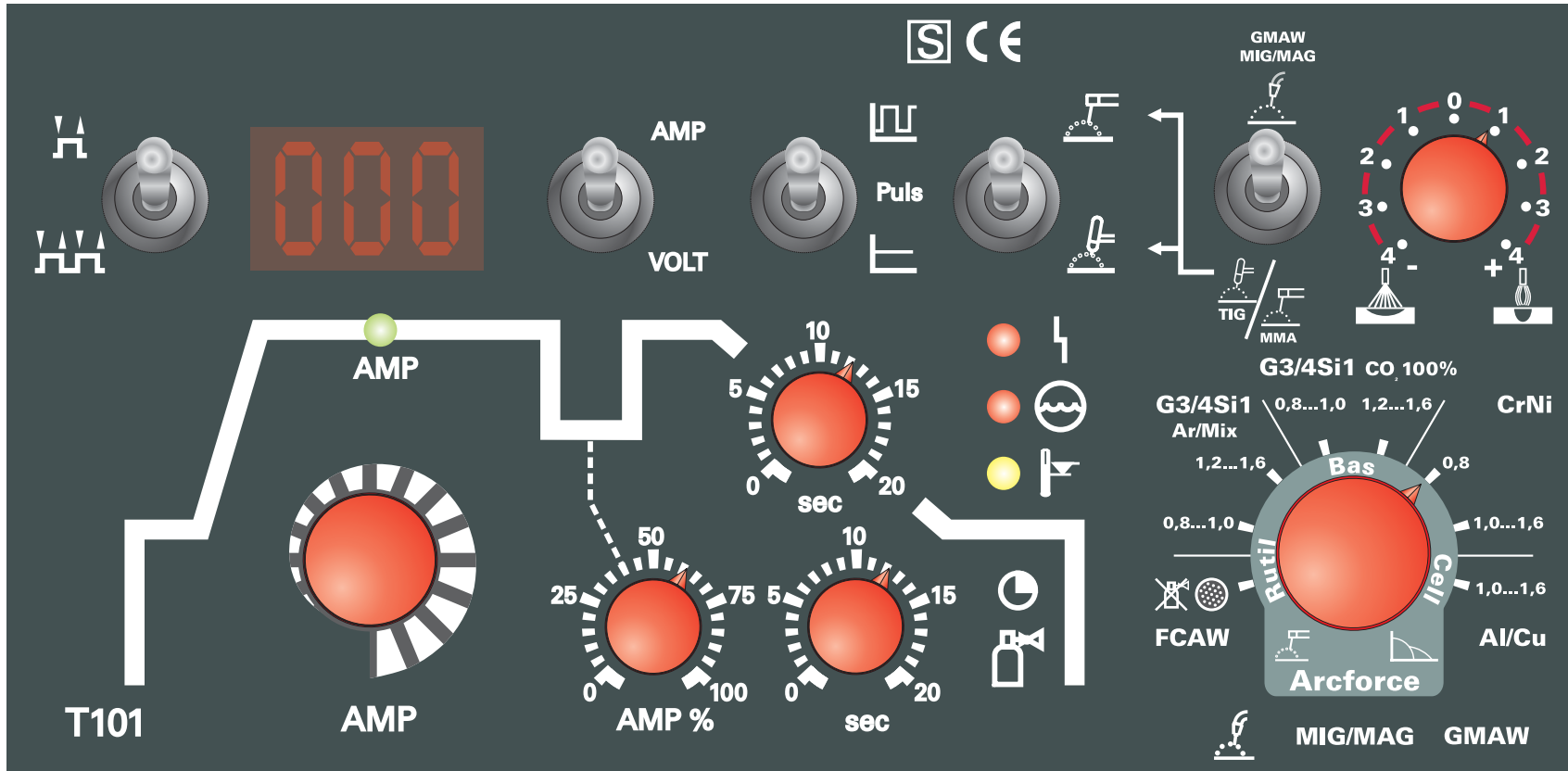
- ⇒ Arcforcing adjustable in 8 steps from hard (cellulose) over medium (basic) up to soft arc (rutile), antistick function





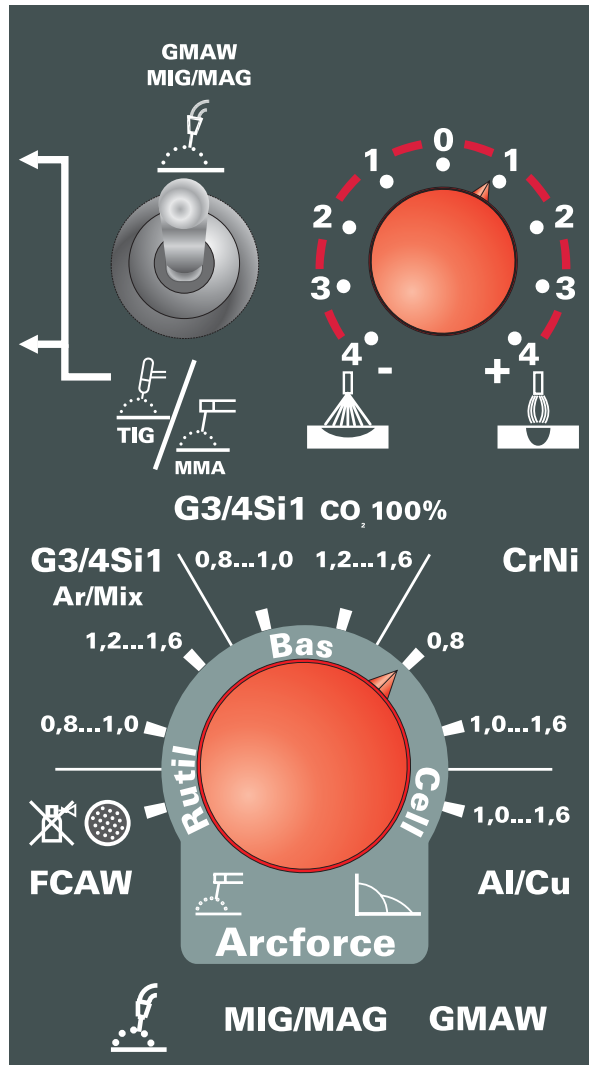
# CONTROLS

## T101 (TRITON 400/500 with MIG/MAG)



WELDON

## Selection Welding Task



- **TIG**

- ⇒ concentrated - stable arc, good dynamics

- **MMA**

- ⇒ Arcforcing adjustable in 8 steps from hard (cellulose) over medium (basic) up to soft arc (rutile), antistick function

- **MIG/MAG**

- ⇒ stable arc
  - ⇒ adjustable arc characteristics in 8 steps for different applications: massive / solid wires, non-alloyed and alloyed steels as well as aluminium and its alloys
  - ⇒ potentiometer for correction of dynamics and choke effect






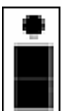



**HIGHLIGHTS**

- **Effective working and even better results faster thanks to the few control elements and their clear arrangement:**
  - Welding current
  - Secondary current
  - Down-slope time
  - Gas post-flow timeother welding parameters preset to the optimum, but can be changed in-house
- **Intelligent digital microprocessor control for**
  - Reproducible welding results of high quality
  - Precise setting and reading of welding parameters
  - Ideal ignition properties for all welding procedures

## Function specification

- **Rotary dials for**
  - Main current [AMP]
  - Secondary welding current [AMP%]
  - Down-slope time
  - Gas post-flow time
  - Selection of welding task (8 levels)
    - MMA: Arcforcing  
(rutile / basic / cellulose)
    - MIG/MAG: Material/ gas type
- **Toggle switch for**
  - Non-latched / latched operating mode
  - MMA or TIG
  - MMA/TIG or MIG/MAG
  - TIG standard / TIG pulsed
  - Display of switching of welding current or voltage
  - Liftarc or HF ignition  
(rear of machine)
- **Signal lights for**
  - Excess temperature
  - Collective interference,
  - Open-circuit or welding voltage on,
  - Coolant level low
- **"Internal" settings**
  - Ignition current,
  - Gas pre-flows,
  - Up-slope time,
  - Pulse and break times of TIG pulses
- **Digital display for welding voltage or current**
  - Before and during welding.

## TIG welding torch designs, operating variants

Operating elements	plug	functions
<b>Retrieval of secondary current (AMP%) with TIG standard torches</b>		
	5-pole	Welding On/Off Secondary Current On/Off
	5-pole	Welding On/Off Secondary Current
	5-pole	Welding On/Off Secondary Current, via tipping operating mode
<b>Infinitely adjustable welding current (Up/Down function) with TIG standard torch or special TIG Up/Down torch</b>		
	8-pole	Welding On/Off Up-/Down function
	5-pole	Welding On/Off Up-/Down function (without opening of unit programmable via torch trigger)
	5-pole	Welding On/Off Up-/Down function (without opening of unit programmable via torch trigger)
<b>Infinitely adjustable welding current (Potentiometer function) with special TIG rotating wheel torch</b>		
	8-pole	Welding On/Off Potentiometer function (activate internally)

	TRITON 400	TRITON 500
<b>Setting range:</b>		
<b>Welding current / voltage</b>		
<b>MMA</b>	5A/ 10,2V - 400A/ 26,0V	5A/ 10,1V – 500 A/ 30,0V
<b>MIG/MAG</b>	5A/ 20,2V - 400A/ 36,0V 5A/ 14,3V - 400A/ 34,0V	5A/ 20,1V – 500A/ 40,0V 5A/ 14,2V – 500A/ 39,0V
<b>Max. welding current at 40°C</b>		
<b>ambient temperature:</b>		
<b>40%ED</b>	400A	500A
<b>60%ED</b>	360A	450A
<b>100%ED</b>	300A	340A
<b>Max. welding current at 20°C</b>		
<b>ambient temperature:</b>		
<b>40%ED</b>	-	500A
<b>45%ED</b>	400A	-
<b>60%ED</b>	-	475A
<b>65%ED</b>	360A	-
<b>100%ED</b>	300A	390A
<b>Open circuit voltage</b>	92V	79V at 400V 91V at 460V
<b>Mains voltage (tolerances)</b>	3 x 400V (-25% - +20%) 3 x 415V (-25% - +15%)	3 x 400V (-25% - +20%) 3 x 415V (-25% - +15%) 3 x 460V (-25% - +10%)
<b>Mains fuse (safety fuse – slow blow)</b>	3 x 35A	
<b>cosφ / Efficiency</b>	0,99 / 89%	
<b>Dimensions L/W/H [mm]</b>	625 x 335 x 560	
<b>Weight</b>	55 kg	58 kg