



Welding processes

- MMA (Electrode)
- Air Carbon Arc gouging (TERRA 400/500 MSE)
- MIG/MAG short spray manual arc
- MIG/MAG short spray synergic arc (WF SMART/RAPID DEEP STEEL)
- MIG/MAG brazing

Materials

- Carbon steels
- Aluminized and galvanized steels
- Stainless steels
- Aluminum and aluminum alloys
- Copper and copper alloys

Applications

- Light job shop fabrication
- Medium-heavy job shop fabrication
- Heavy job shop fabrication
- Buildings sites
- Shipyards
- Plants machinery construction
- Oil refinery plants construction
- Machine and apparatus construction
- Automobile industry
- Railway industry
- Military industry
- Repair and overhaul
- Chassis
- Building
- Installers
- Stand construction workers
- Door and window fitters
- Blacksmiths
- Workshops
- Sheet metal working








Technical features








- Advanced inverter technology power source for superior arc performance
- High power at 100% of duty cycle
- Heavy duty and environmental conditions, high service life
- CAN field bus digital communication protocol system (very high speed and high reliability digital communication)
- Software based controls can be upgraded as new features become available (WF RAPID DEEP STEEL)
- High temperature, shock proof, abrasion resistant plastic case
- Air flow ducting and fully encapsulated PC board to avoid dust contamination
- Linear controlled fan on demand
- Wire feeder unit (2/4 roll drives)
- Wire drive unit fully designed by voestalpine Böhler Welding
- Full parameters control panel on wire feeder unit
- Ø 200/300 mm wire spool compatible
- Wheel skirt option compatible
- Full digital and user-friendly control panel
- Welding parameters digital display
- Last job settings auto-storage at switch-off
- User-defined welding program storage capability (64 free memory locations) (WF RAPID DEEP STEEL)
- Lock-unlock function key protected by password
- Ideal for stick welding with multiple types of popular electrodes
- Built-in adjustable arc control features (hot start, arc force, anti-sticking)
- Synergic setting for optimal stick welding with multiple types of electrodes (WF RAPID DEEP STEEL)
- 2/4 step operating mode
- Arc dynamic adjustment
- Perfect arc ignition (soft start - motor slope)
- Burn-back and droplet detachment correction
- Crater filler operating mode (WF RAPID DEEP STEEL)
- Synergic operations from databank (14 pre-set programs) (TERRA 320 MSE - WF SMART)
- Synergic operations from databank (18 pre-set programs) (TERRA 400/500 MSE - WF SMART)
- Synergic operations from databank (32 pre-set programs) (TERRA 320 MSE - WF RAPID DEEP STEEL)
- Synergic operations from databank (40 pre-set programs) (TERRA 400/500 MSE - WF RAPID DEEP STEEL)
- Wire speed (0,5-22,0 m/min) (WF CLASSIC)
- Wire speed (0,5-22,0 m/min), amperage and piece thickness adjustment (WF SMART - WF RAPID DEEP STEEL)
- Spot welding mode
- Intermittent welding mode
- Bilevel MIG/MAG (WF RAPID DEEP STEEL)
- Euro adaptor - U/D MIG/MAG torch compatible (WF RAPID DEEP STEEL)
- Push-pull torch device
- Remote control compatible
- WU cooling unit compatible
- Controlled cooling operations

TERRA 320/400/500 MSE

Power source

|  |  |  | P | X% | P.F. | I₂ | U_o | IP |  mm l x w x h |  Kg |
|---|---|---|-------------------|---|-------------|----------------------|----------------------|-----------|---|--|
| TERRA 320 MSE | 3x400V MIG/MAG | 25A | 16,2kVA 10,9kW | 40°C 50% 320A 40°C 60% 310A 40°C 100% 260A 25°C 90% 320A 25°C 100% 310A | 0,68 | 3-320A | 61V | 23S | 620x240x460mm | 20,2kg |
| | 3x400VMMA | 25A | 16,2kVA 10,9kW | 40°C 50% 300A 40°C 60% 290A 40°C 100% 250A 25°C 80% 300A 25°C 100% 290A | 0,68 | 3-320A | 61V | 23S | 620x240x460mm | 20,2kg |
| TERRA 400 MSE | 3x400V | 30A | 22,0kVA 16,2kW | 40°C 50% 400A 40°C 60% 360A 40°C 100% 340A 25°C 80% 400A 25°C 100% 360A | 0,74 | 3-400A | 61V | 23S | 620x240x460mm | 22,5kg |
| TERRA 500 MSE | 3x400V | 40A | 29,7kVA 22,2kW | 40°C 50% 500A 40°C 60% 470A 40°C 100% 420A 25°C 80% 500A 25°C 100% 470A | 0,74 | 3-500A | 61V | 23S | 620x240x460mm | 27,3kg |

Wire feeder unit

|  | P | ϕ (m/min) |  mm |  | ϕ mm | ϕ |  |  | IP |  mm l x w x h |  Kg | |
|---|----------|----------------|--|---|--|--------|---|---|-----------|---|--|--------|
| WF 330 ARCDRIVE CLASSIC SL 4R-1T (v.2R) | 90W | 0,5-22,0m/min | 200/300mm | 2 ● 4 ○ | 1,0/1,2mm ● 0,6-1,6mm ○ A0,8-1,6mm ○ Z0,9-2,4mm ○ | ● | ● | ○ | ○ | 23S | 660x280x390mm | 13,0kg |
| WF 330 ARCDRIVE SMART SL 4R-1T (v.2R) | 90W | 0,5-22,0m/min | 200/300mm | 2 ● 4 ○ | 1,0/1,2mm ● 0,6-1,6mm ○ A0,8-1,6mm ○ Z0,9-2,4mm ○ | ● | ● | ○ | ○ | 23S | 660x280x390mm | 13,0kg |
| WF 330 RAPIDEEP STEEL SL 4R-2T (v.2R) | 120W | 0,5-25,0m/min | 200/300mm | 2 ● 4 ○ | 1,0/1,2mm ● 0,6-1,6mm ○ A0,8-1,6mm ○ Z0,9-2,4mm ○ | ● | ● | ○ | ○ | 23S | 660x280x390mm | 13,0kg |
| WF 430 ARCDRIVE CLASSIC SL 4R-1T (v.2R) | 90W | 0,5-22,0m/min | 200/300mm | 2 ● 4 ○ | 1,0/1,2mm ● 0,6-1,6mm ○ A0,8-1,6mm ○ Z0,9-2,4mm ○ | ● | ● | ○ | ○ | 23S | 640x250x460mm | 19,0kg |
| WF 430 ARCDRIVE SMART SL 4R-1T (v.2R) | 90W | 0,5-22,0m/min | 200/300mm | 2 ● 4 ○ | 1,0/1,2mm ● 0,6-1,6mm ○ A0,8-1,6mm ○ Z0,9-2,4mm ○ | ● | ● | ○ | ○ | 23S | 640x250x460mm | 19,0kg |
| WF 430 RAPIDEEP STEEL SL 4R-2T (v.2R) | 120W | 0,5-25,0m/min | 200/300mm | 2 ● 4 ○ | 1,0/1,2mm ● 0,6-1,6mm ○ A0,8-1,6mm ○ Z0,9-2,4mm ○ | ● | ● | ○ | ○ | 23S | 640x250x460mm | 19,0kg |






● = Included

○ = Optional

A = Aluminum

Z = Cored

Cooling unit

|  |  | P |  | IP |  mm l x w x h |  Kg |
|---|---|----------|---|-----------|---|--|
| WU 230 | 1x400 Vac | 1,0 kW | 3,0l | 23S | 660x240x220mm | 12,0 kg |

CONFIGURATIONS

| TERRA 320 MSE - MIG/MAG welding configuration - Gas - WF 330 ARCDRIVE CLASSIC | | AC |
|--|--|-----------|
| 55.13.005 | TERRA 320 MSE 3X400V | A |
| 71.01.068 | WIRE FEEDER WF330 ARCDRIVE CLASSIC | A |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
| 71.06.329 | AIR CABLE BUNDLE - 50mm ² - 4m | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72807 | MT 350 G MIG/MAG WELDING TORCH - 4m - AIR COOLED | B |
| 71.05.013 | WORK CABLE - 50mm ² - L.4m | A |
| TERRA 320 MSE - MIG/MAG welding configuration - Gas - WF 330 ARCDRIVE SMART | | |
| 55.13.005 | TERRA 320 MSE 3X400V | A |
| 71.01.067 | WIRE FEEDER WF330 ARCDRIVE SMART | B |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
| 71.06.329 | AIR CABLE BUNDLE - 50mm ² - 4m | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72807 | MT 350 G MIG/MAG WELDING TORCH - 4m - AIR COOLED | B |
| 71.05.013 | WORK CABLE - 50mm ² - L.4m | A |
| TERRA 30 MSE - MIG/MAG welding configuration - Gas - WF 330 RAPIDEEP STEEL | | |
| 55.13.005 | TERRA 320 MSE 3X400V | A |
| 71.01.061 | WIRE FEEDER WF330 RAPIDEEPSTEEL | A |
| 07.01.502 | UPGRADE KIT FROM 2 ROLLS DRIVETO 4 ROLLS DRIVE - 1.0/1.2 | A |
| 71.06.329 | AIR CABLE BUNDLE - 50mm ² - 4m | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72807 | MT 350 G MIG/MAG WELDING TORCH - 4m - AIR COOLED | B |
| 71.05.013 | WORK CABLE - 50mm ² - L.4m | A |
| TERRA 320 MSE - MIG/MAG welding configuration - Water - WF 330 ARCDRIVE CLASSIC | | |
| 55.13.005 | TERRA 320 MSE 3X400V | A |
| 71.01.068 | WIRE FEEDER WF330 ARCDRIVE CLASSIC | A |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
| 71.06.335 | WATER COOLED CABLE BUNDLE - 50mm ² - 4m | A |
| 71.03.071 | COOLING UNIT WU 230 - TERRA | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
| 71.05.013 | WORK CABLE - 50mm ² - L.4m | A |
| TERRA 320 MSE - MIG/MAG welding configuration - Water - WF 330 ARCDRIVE SMART | | |
| 55.13.005 | TERRA 320 MSE 3X400V | A |
| 71.01.067 | WIRE FEEDER WF330 ARCDRIVE SMART | B |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
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| 71.05.013 | WORK CABLE - 50mm ² - L.4m | A |

CONFIGURATIONS

| TERRA 320 MSE - MIG/MAG welding configuration - Water - WF 330 RAPIDEEPSTEEL | | AC |
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| 55.13.005 | TERRA 320 MSE 3X400V | A |
| 71.01.061 | WIRE FEEDER WF330 RAPIDEEPSTEEL | A |
| 07.01.502 | UPGRADE KIT FROM 2 ROLLS DRIVE TO 4 ROLLS DRIVE - 1.0/1.2 | A |
| 71.06.335 | WATER COOLED CABLE BUNDLE - 50mm ² - 4m | A |
| 71.03.071 | COOLING UNIT WU 230 - TERRA | A |
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| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
| 71.05.013 | WORK CABLE - 50mm ² - L.4m | A |
| TERRA 400 MSE - MIG/MAG welding configuration - Water - WF 330 ARCDRIVE CLASSIC | | |
| 55.13.006 | TERRA 400 MSE 3X400V | A |
| 71.01.068 | WIRE FEEDER WF330 ARCDRIVE CLASSIC | A |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
| 71.06.327 | WATER COOLED CABLE BUNDLE - 70mm ² - 4m | A |
| 71.03.071 | COOLING UNIT WU 230 - TERRA | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
| 71.05.014 | WORK CABLE - 70mm ² - L.4m | A |
| TERRA 400 MSE - MIG/MAG welding configuration - Water - WF 330 ARCDRIVE SMART | | |
| 55.13.006 | TERRA 400 MSE 3X400V | A |
| 71.01.067 | WIRE FEEDER WF330 ARCDRIVE SMART | B |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
| 71.06.327 | WATER COOLED CABLE BUNDLE - 70mm ² - 4m | A |
| 71.03.071 | COOLING UNIT WU 230 - TERRA | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
| 71.05.014 | WORK CABLE - 70mm ² - L.4m | A |
| TERRA 400 MSE - MIG/MAG welding configuration - Water - WF 330 RAPIDEEPSTEEL | | |
| 55.13.006 | TERRA 400 MSE 3X400V | A |
| 71.01.061 | WIRE FEEDER WF330 RAPIDEEPSTEEL | A |
| 07.01.502 | UPGRADE KIT FROM 2 ROLLS DRIVETO 4 ROLLS DRIVE - 1.0/1.2 | A |
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| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
| 71.05.014 | WORK CABLE - 70mm ² - L.4m | A |
| TERRA 500 MSE - MIG/MAG welding configuration - Water - WF 330 ARCDRIVE CLASSIC | | |
| 55.13.007 | TERRA 500 MSE 3X400V | A |
| 71.01.068 | WIRE FEEDER WF330 ARCDRIVE CLASSIC | A |
| 07.01.507 | UPGRADE KIT FROM 2 ROLLS (1 ROLL DRIVE) TO 4 ROLLS (2 ROLLS DRIVE) - 1.0/1.2 | A |
| 71.06.327 | WATER COOLED CABLE BUNDLE - 70mm ² - 4m | A |
| 71.03.071 | COOLING UNIT WU 230 - TERRA | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
| 71.05.014 | WORK CABLE - 70mm ² - L.4m | A |

CONFIGURATIONS

TERRA 500 MSE - MIG/MAG welding configuration - Water - WF 330 ARCDRIVE SMART

AC

| | | |
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| 71.05.014 | WORK CABLE - 70mm ² - L.4m | A |

TERRA 500 MSE - MIG/MAG welding configuration - Water - WF 330 RAPIDEEP STEEL

AC

| | | |
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| 71.01.061 | WIRE FEEDER WF330 RAPIDEEPSTEEL | A |
| 07.01.502 | UPGRADE KIT FROM 2 ROLLS DRIVE TO 4 ROLLS DRIVE - 1.0/1.2 | A |
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| 71.03.071 | COOLING UNIT WU 230 - TERRA | A |
| 71.03.078 | POWER SOURCE TROLLEY GT 400 WF | A |
| 81.05.72826 | MT 440 W MIG/MAG WELDING TORCH - 4m - LIQUID COOLED | B |
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