

Standard equipment

WELDING PACKAGE SELECTION GUIDE





AN EASY CHOICE

This selection guide will assist you in choosing the machine package that best suits your application requirements for welding.

Specific questions about your process and application help identify a Package Folder most appropriate for your needs. Features and benefits of each welding package are provided to help simplify your choice.

Package Folder

The Package Folder cover page provides an overview of the various package options offered. The centre spread explains the features and benefits of each welding package in detail from a welder's perspective. The back page presents optional accessories to enhance quality and increase productivity.

Introduction to Welding Packages

ESAB offers a wide range of solutions for MMA, TIG and MIG/MAG welding.

This selection guide presents packages designed to address basic welding functionality for service and maintenance applications up to the most advanced welding needs.

Selecting a welding package with greater functionality provides more flexibility in the materials you can weld and in the advanced settings offered.

Customized packages include a multitude of accessories and offer even greater process flexibility.

Please refer to the ESAB website or product catalogue for complete details for each package or product.

CONTENT

MMA – Introduction and Overview

Stick welding or MMA is more than 100 years old. The MMA welding method has the lowest investment cost, does not require shielding gas, and is highly portable, both indoor and outdoor, due to its relatively low weight and resistance to the elements.

4

MMA PACKAGES

TIG – Introduction and Overview

TIG welding offers an attractive bead appearance and the highest penetration, which results in strong weld joints. The TIG welding method has the highest investment cost and is a relatively slow welding process.

12

TIG PACKAGES

MIG/MAG – Introduction and Overview

MIG/MAG welding is the most common welding process in use today. The MIG/MAG welding method typically offers the highest productivity and lowest operating cost. Shielding gas is generally required to protect the weld pool, but specific self-shielding flux-cored wires are also available.

24

MIG/MAG PACKAGES



Introduction to MMA Welding Packages

To identify the most suitable welding package for your application consider the following:

- What electrode dimension will be used?
The thicker the electrode, the more welding current is required.
- Does the application require adjustment of the welding current during welding? If so, select a power source equipped with a remote control outlet to connect a separate remote control.
- Will the machine be used on a domestic grid? If yes, choose a machine that can be connected to a 10 A fuse.

For certain applications, more than one package may be suitable. In these cases please refer to the package information sheet in this binder.

Benefits

Electrodes with larger diameters are more productive due to a higher deposition rate but also require a higher welding current. A larger diameter electrode reduces the number of passes required when filling up the welding joint. When welding thinner materials, a smaller diameter electrode is preferable as it reduces the risk of burn through and is easier to strike.

Remote-controlled systems allow adjustment of the welding current during welding by using a separate remote control. Details are provided with each welding package.

The fuse size required on a domestic grid (1 ph, 230V, less than 16A fuse) is lower than on an industrial grid (1 ph, 230V, 16A fuse). Depending on local conditions, the industrial grid is also likely to offer 3 ph, 400V, which allows the use of welding equipment with higher welding output.

| Material | Electrode Diameter | Remote Control Outlet | Model | Mains Supply | Page |
|--------------------------------|--------------------|-----------------------|----------------------|--------------|------|
| Mild Steel/ Stainless Steel | Ø 1.6-2.5mm | No | Buddy™ Arc 145 | 1ph / 240V | 7 |
| | Ø 1.6-3.2mm | No | Caddy® Arc 151i A31, | 1ph / 240V | 7 |
| | | Buddy™ Arc 180 | 1ph / 240V | 7 | |
| | Ø 1.6-4.0mm | Yes | Caddy® Arc 151i A33, | 1ph / 240V | 7 |
| | | Caddy® Arc 201i A33, | 1ph / 240V | 7 | |
| | Ø 1.6-5.0mm | No | Caddy® Arc 251i A32, | 3ph / 400V | 7 |
| | | Yes | Caddy® Arc 251i A34, | 3ph / 400V | 7 |





MMA WELDING PACKAGES

ESAB's portable MMA packages provide the flexibility to weld most metals, including alloyed and non-alloyed steel, stainless steel and cast iron. A compact design and easy-to-use control panel make these machines handy to take along to any job.

Buddy™ Arc 145/180

- Buddy Arc 145 welds electrodes up to Ø2.5mm
- Buddy Arc 180 welds electrodes up to Ø3.2mm
- Competitively priced
- 230V 1ph, requires 16A fuse

Caddy® Arc 151i A31 & Caddy® Arc 151i/201i A33

- Caddy Arc 151i welds Ø3.2mm electrodes with a 10A fuse
- Caddy Arc 201i welds electrodes up to Ø4.0mm
- Allows for 100m mains cable
- For adjustable Arc Force, Hot Start, two memories and remote control facility, choose the A33 panel
- 230V 1ph, requires 10A fuse (Arc 151i), 16A fuse (Arc 201i)

Caddy® Arc 251i A32/A34

- Welds all types of electrodes up to Ø5.0mm
- For adjustable Arc Force and Hot Start, electrode type selector, two memories and remote control facility, choose the A34 panel
- 400V 3ph, requires 10A fuse



MMA WELDING PACKAGES

GENERAL FEATURES

All ESAB MMA machines offer a smooth direct weld current and excellent welding performance across the amperage range for welding most metals such as alloyed and non alloyed steel, stainless steel and cast iron using basic and rutile electrodes.

Portable design – A practical and compact design featuring a carry handle makes ESAB's portable MMA machines easy to transport to the work site. To further facilitate transportation, the Caddy offers an optional shoulder strap with an integrated cable holder solution. The Buddy machines come equipped with a basic shoulder strap.

Durability – The design in combination with a robust composite and metal housing offer IP23 classification making the machines suitable for outdoor use. Sturdy OKC 50 cable connectors ensure efficient current transfer with minimum power loss. Buddy Arc 145 features OKC 25 cable connectors.

TIG option – The Buddy Arc 180 and the Caddy Arc series offer basic TIG welding with the addition of a TIG torch including a gas valve, a gas regulator and a cylinder of gas. Mild steel or stainless steel can be welded with or without filler material.

Complete and Ready-to-use – All MMA machines come complete with a 3m mains cable with plug, 3m welding cable with electrode holder and a 3m return cable with clamp.

Buddy Arc 145/180

The Buddy Arc series are compact, competitively priced MMA machines. Buddy Arc features a simple, intuitive analogue panel and easy-to-use functions, making the machine ideally suited for both shop or offsite steel fabrication. Buddy Arc 145 welds electrodes up to Ø2.5mm. Buddy Arc 180 welds electrodes up to Ø3.2mm. A 16 amp slow fuse is required.



Caddy Arc 151i/201i/251i

Caddy Arc comes equipped with large OKC 50 welding current connections to withstand heavy loads. The efficient cooling of the machine and the carefully thought out design ensure a long working life and allow use under the toughest working conditions. Caddy Arc is equipped with automated power factor correction (PFC) allowing for welding of 3.2mm electrodes using only a 10A slow fuse. Mains cable up to 100m can be used for additional reach.

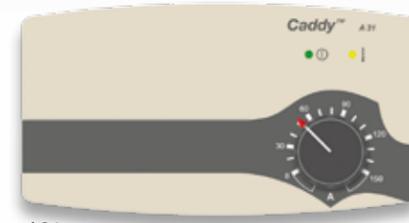
Caddy Arc 151i with A31 control panel is an extremely user-friendly machine featuring a one knob setting of the weld current. The machine also provides automatic Hot Start for easy striking and Arc Force for improved welding performance.

Caddy Arc 151i/201i with A33 control panel offers adjustable Hot Start and Arc Force. The two individual memory settings can be used to store the most frequently applied parameters, saving time when switching between jobs and ensuring high repeatability. The remote control mode enables the weld current to be set remotely from the power source. The current can be adjusted during welding for a more precise result.

Caddy Arc 251i with A32/A34 control panel is a 400A 3ph machine capable of welding with up to 5.0mm electrodes. The remote control mode enables the weld current to be set remotely from the power source.

The A32 digital panel is extremely user friendly with a one knob setting of the weld current.

The A34 digital panel features adjustable Hot Start and Arc Force. The two individual memory settings can be used to store the most frequently applied parameters, saving time when switching between jobs ensuring high repeatability. The electrode type selector optimises the machine characteristics according to the electrode to be welded.



A31



A33



A32



A34

| | Basic and Rutile Electrodes | High recovery and Cellulosic Electrodes | Max Length Mains Cable (2.5mm ²) 100m | Remote Control Connection | Memory | Panel | | Hot Start | | Arc Force | | Basic TIG | Fuse | | 230V 1ph | 400V 3ph | OKC 25 | OKC50 |
|---------------------|-----------------------------|---|---|---------------------------|--------|----------|---------|-----------|------------|-----------|------------|-----------|------|-----|----------|----------|--------|-------|
| | | | | | | Analogue | Digital | Auto | Adjustable | Auto | Adjustable | | 10A | 16A | | | | |
| Buddy™ Arc 145 | 0700 300 884 | • | | | | • | | • | | • | | | • | | | | • | |
| Buddy™ Arc 180 | 0700 300 680 | • | | | | • | | • | | • | | • | • | | | | | • |
| Caddy® Arc 151i A31 | 0460 445 881 | • | • | | | • | | • | | • | | • | • | | | | | • |
| Caddy® Arc 151i A33 | 0460 445 883 | • | • | | • | • | • | | • | | • | • | • | | | | | • |
| Caddy® Arc 201i A33 | 0460 445 884 | • | • | • | | • | • | | • | | • | • | • | | | | | • |
| Caddy® Arc 251i A32 | 0460 300 880 | • | • | • | • | • | | • | | • | | • | • | | | • | | • |
| Caddy® Arc 251i A34 | 0460 300 881 | • | • | • | • | • | | • | | • | | • | • | | | • | | • |

Accessories MMA



Remote Controls

| | |
|---------------------------------|--------------|
| MMA1 incl. 10m connection cable | 0349 501 024 |
| AT1 | 0459 491 896 |
| AT1 CoarseFine | 0459 491 897 |

Connection cables for remote controls

| | |
|------------|--------------|
| 5 m cable | 0459 552 880 |
| 10 m cable | 0459 552 881 |
| 15 m cable | 0459 552 882 |
| 25 m cable | 0459 552 883 |



Welding and return cable kit

| | |
|---|--------------|
| Welding cable kit | |
| Up to 150A Twist type 16 mm ² OKC50 3m | 0700 006 898 |
| Up to 200A Twist type 25 mm ² OKC50 3m | 0700 006 900 |
| Up to 300A Twist type 35 mm ² OKC50 3m | 0700 006 902 |
| Up to 300A Twist type 35 mm ² OKC50 5m | 0700 006 888 |

Return cable kit

| | |
|--|--------------|
| Up to 150A 16 mm ² OKC50 3m | 0700 006 899 |
| Up to 200A 25 mm ² OKC50 3m | 0700 006 901 |
| Up to 300A 35 mm ² OKC50 3m | 0700 006 903 |
| Up to 300A 35 mm ² OKC50 5m | 0700 006 889 |



Electrode holder

| | |
|----------------|--------------|
| Crocodile-type | |
| Confort 200 | 0700 006 004 |
| Confort 300 | 0700 006 005 |



| | |
|------------|--------------|
| Twist-type | |
| Handy 200 | 0700 006 003 |
| Handy 300 | 0700 006 016 |
| ESAB 200 | 0333 249 001 |
| ESAB 400 | 0369 849 880 |

Return clamps

| | |
|---------------|--------------|
| MP 200 | 0367 558 880 |
| Eco clamp 250 | 0700 006 001 |
| MP 300 | 0682 103 803 |



Consumables

| | |
|--|------------|
| Mild steel - Basic electrode | |
| OK48.00 Ø2.0mm x 300mm (carton of 10.2 kg) | 4800202010 |
| OK48.00 Ø2.5mm x 350mm (carton of 12.9 kg) | 4800253000 |
| OK48.00 Ø3.2mm x 450mm (carton of 18.0 kg) | 4800324000 |

Stainless steel

| | |
|--|------------|
| OK63.30 Ø2.0mm x 300mm (carton of 9.6 kg) | 6330202030 |
| OK63.30 Ø2.5mm x 300mm (carton of 10.2 kg) | 6330252030 |
| OK63.30 Ø3.2mm x 350mm (carton of 12.3 kg) | 6330323020 |



Dry-storage container

| | |
|-----------|--------------|
| PK 1 230V | 0000 515 064 |
|-----------|--------------|



Pneumatic shipping hammer

| | |
|-----|--------------|
| HCB | 0193 305 001 |
|-----|--------------|



Shoulder strap Caddy®

| | |
|-----------------------|--------------|
| Padded shoulder strap | 0460 265 003 |
|-----------------------|--------------|



TIG torches (OKC50)

| | | |
|-------------------------------------|--------------|--------------|
| | 4m | 8m |
| ET 17V (for Buddy™ Arc 180 only) | 0700 300 861 | 0700 300 865 |
| TXH™ 151V | 0700 300 539 | 0700 300 545 |
| TXH™ 201V | 0700 300 553 | 0700 300 556 |
| Wear part kit for TXH™ 151/201/ET17 | 0368 846 881 | |





Introduction to TIG Welding Packages

To identify the most suitable welding package for your application consider the following:

- What material will be welded? TIG welding aluminium requires a power source with AC functionality. If welding only mild and/or stainless steel, a DC power source is sufficient.
- What is the thickness of the material being welded? This determines the required output of the machine. Welding material less than 1.0mm thick will require pulse functionality (TA34 panel).
- Does the application require a water-cooled system? This determines the size of the welding torch required.
- Does the application require adjustment of the welding current during welding? If so, select a power source equipped with a remote control outlet to connect an adapter for a welding torch (this enables adjusting of the weld current) or add a separate remote control.

Benefits

Water-cooled systems allow use of a smaller size welding torch without the risk of overheating the torch (only available on >200A packages). The smaller sized torch provides better access to confined spaces and better ergonomics for the welder. In comparison, an air-cooled system has a lower investment cost and reduced maintenance cost.

Remote-controlled systems allow adjustment of the welding current during welding by using a welding torch with a remote control function, a foot pedal or a separate remote control. Details are provided with each welding package.

Pulse functionality is required when welding materials with a thickness less than 1.0mm. Thin materials are more likely to deform due to the heat input. By using pulsed TIG welding, the welding current is automatically adjusted during welding to reduce the heat input.

For certain applications, more than one package may be suitable. For additional details, please refer to the package information sheet in this binder.

| Material | Plate Thickness | Cooling | Model | Pulse / Remote Control Outlet | Page |
|--------------------------------------|--------------------------------------|-----------|------------------------------|-------------------------------|-------|
| DC TIG | | | | | |
| Mild Steel / Stainless Steel | <1.0mm | Air | Caddy® Tig 1500i TA34 | • / • | 15 |
| | | | Caddy® Tig 2200i TA34 | • / • | 15 |
| | <1.0mm | Water | Caddy® Tig 2200iw TA34 | • / • | 15 |
| | | 1.0-5.0mm | Air | Buddy™ Tig 160 | - / - |
| | Caddy® Tig 1500i TA33 | | | - / - | 15 |
| | Caddy® Tig 1500i TA34 | | | • / • | 15 |
| | 1.0-7.0mm | Air | Caddy® Tig 2200i TA33 | - / - | 15 |
| | | | Caddy® Tig 2200i TA34 | • / • | 15 |
| | | Water | Caddy® Tig 2200iw TA33 | - / - | 15 |
| | | | Caddy® Tig 2200iw TA34 | • / • | 15 |
| AC/DC TIG | | | | | |
| Aluminium (mild and stainless steel) | 0.5-5.5mm (Alu) 0.5-7.0mm (Fe/SS) | Air | Caddy® Tig 2200i AC/DC TA34 | • / • | 19 |
| | | Water | Caddy® Tig 2200iw AC/DC TA34 | • / • | 19 |
| | 1.0-5.5mm (Alu) 1.0-7.0mm (Fe/SS) | Air | Caddy® Tig 2200i AC/DC TA33 | - / • | 19 |
| | | Water | Caddy® Tig 2200iw AC/DC TA33 | - / • | 19 |



DC TIG WELDING PACKAGES

ESAB's DC TIG packages are ideal for welding mild and stainless steels. These complete welding packages consist of a compact and powerful power source with an easy-to-use control panel and ergonomic torch.

Buddy™ Tig 160

- Competitively priced
- Analogue panel
- Adjustable slope down
- Automatic post gas flow

Caddy® Tig 1500i/2200i with TA33 user interface

- Automatic settings - Simply set the plate thickness and the machine optimises the parameters
- Adjustable slope up/down and pre/post gas flow
- Option to use smaller sized TIG-torch
- Digital display

Caddy® Tig 1500i/2200i with TA34 user interface

- Pulsed functionality for controlled heat input
- Ideal for thin plate welding and special alloys
- Remote control ready
- Two individual memory settings
- Adjustable slope up/down and pre/post gas flow
- Option to use smaller sized TIG-torch
- Digital display

DC TIG WELDING PACKAGES

GENERAL FEATURES

Portable design – All ESAB DC TIG machines are portable and lightweight, making them easy to transport to indoor and outdoor work sites. The compact design makes them easy to store when not in use.

Durability – The design in combination with the robust, composite and metal housing offer IP23 classification making the machines suitable for outdoor use. Sturdy OKC 50 cable connectors ensure efficient current transfer with minimum power loss.

TIG welding – All ESAB TIG machines offer High Frequency (HF) and LiftArc™ starts. The arc is struck by pressing the trigger on the torch, so the electrode never touches the surface of the work piece. This eliminates the risk of contamination and improves the start properties making the machine user friendly. The 4-stroke mode (“push & release” to start – weld – “push & release” to stop) is commonly used on longer welds while the 2-stroke mode (“push” to start – weld – “release” to stop) is used on shorter welds such as tack welding. Both Caddy and Buddy offer this functionality and both weld most metals, including alloyed and non-alloyed steel, stainless steel and cast iron.

MMA option – Both Caddy Tig and Buddy Tig can be used for MMA (stick welding). A complete welding cable kit is included.

Complete and Ready-to-use – All portable TIG machines listed in this folder are delivered complete with a 3m mains cable with plug, 4.0m TIG Torch, MMA kit, return cable, 1.5m gas hose and carry handle.

Buddy Tig 160

ESAB's Buddy Tig 160 is a compact DC TIG machine that is competitively priced. Buddy Tig features a simple, intuitive analogue panel and easy-to-use functions making the machine ideally suited for both shop or offsite steel fabrication. The automatic slope down function (gradual decrease of the weld current) provides a smooth high-quality finish to the weld with reduced risk of craters. The post gas-flow is set automatically based on the selected weld current. A 16 amp slow fuse is required.

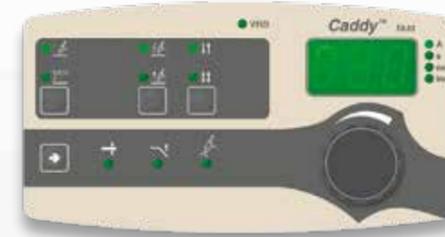


Caddy Tig 1500i & Caddy Tig 2200i

The Caddy Tig product is offered in multiple versions. The output power determines the maximum thickness that can be welded and the functionality is in the control panel (TA33 or TA34). On the more powerful Caddy Tig 2200i, an optional water cooling unit enables the use of a smaller sized water-cooled torch, suitable for those difficult to access welds.

The digital display allows the operator to set and view the welding parameters. It also provides the actual current (which might differ from the set current) for a more accurate reading. This is an important quality factor when welding according to a standard or a WPS.

The TA33 control panel offers intelligent and automatic settings to reduce set up time. Simply set the plate thickness and the machine adjusts the optimal welding parameters. The slope up and slope down time as well as the pre/post gas-flow time can be manually adjusted to suit the welder's preference.



TA33

The TA34 control panel provides pulse functionality which is recommended when welding thin material (<1.0mm). When the pulse functionality is activated, the weld current switches between the set peak and background current, thus minimising the heat input and reducing the risk of deformation of the work piece. The remote control mode on the TA34 enables the weld current to be set remotely from the power source. The current can be adjusted during welding for a more precise result.



TA34

The TA34 offers two individual memory settings. The most frequently used parameters may be stored to save time when switching between jobs and to ensure high repeatability.

| | | Plate Thickness | | | Pulse | Remote Control Connection | Water-cooled Torch | Memory | Panel | | Stick Electrode 3.2mm | | Max Length Mains Cable (2.5mm ²) 100m |
|------------------------|--------------|------------------------------|----------------------------------|---------------------------------------|-------|---------------------------|--------------------|--------|----------|---------|-----------------------|----------|---|
| | | Mild steel: Argon 100% < 1.0 | Mild steel: Argon 100% 1.0 - 5.5 | Stainless steel: Argon 100% 5.5 - 7.3 | | | | | Analogue | Digital | 10A fuse | 16A fuse | |
| Buddy™ Tig 160 | 0700 300 681 | | • | | | | | • | | | • | | |
| Caddy® Tig 1500i TA33 | 0460 450 880 | | • | | | | | | • | | • | • | |
| Caddy® Tig 2200i TA33 | 0460 450 881 | | • | • | | | | | • | | • | • | |
| Caddy® Tig 2200iw TA33 | 0460 450 884 | | • | • | | • | | | • | | • | • | |
| Caddy® Tig 1500i TA34 | 0460 450 882 | • | • | | • | • | • | • | • | • | • | • | |
| Caddy® Tig 2200i TA34 | 0460 450 883 | • | • | • | • | • | • | • | • | • | • | • | |
| Caddy® Tig 2200iw TA34 | 0460 450 885 | • | • | • | • | • | • | • | • | • | • | • | |

Self-cooled or water-cooled?
 You always have the option of upgrading your Caddy Tig 2200i machine with a water cooling unit. Please contact your local ESAB dealer for details. The following items are required.

CoolMini 0460 144 880
 Connection kit 0460 509 880
 TXH™ 251w / 251wF torch See next page.

Accessories TIG



Remote Controls TA34

| | |
|---------------------------------------|--------------|
| T1 Foot CAN incl. 5m connection cable | 0460 315 880 |
| AT1 CAN | 0459 491 863 |
| AT1 CoarseFine CAN | 0459 491 884 |
| MTA1 CAN | 0459 491 880 |

Connection cables for remote controls

| | |
|----------------|--------------|
| 5 m cable CAN | 0459 554 880 |
| 10 m cable CAN | 0459 554 881 |
| 15 m cable CAN | 0459 554 882 |
| 25 m cable CAN | 0459 554 883 |

TIG consumables

Mild steel

| | |
|---|--------------|
| OK Tigrod 12.64 Ø1.6mm x 1000mm (carton 5.0 kg) | 1264 16R 150 |
| OK Tigrod 12.64 Ø2.4mm x 1000mm (carton 5.0 kg) | 1264 24R 150 |
| OK Tigrod 12.64 Ø3.2mm x 1000mm (carton 5.0 kg) | 1264 32R 150 |

Stainless steel

| | |
|--|--------------|
| OK Tigrod 316LSi Ø1.6mm x 1000mm (carton 5.0 kg) | 1632 16R 150 |
| OK Tigrod 316LSi Ø2.4mm x 1000mm (carton 5.0 kg) | 1632 24R 150 |
| OK Tigrod 316LSi Ø3.2mm x 1000mm (carton 5.0 kg) | 1632 32R 150 |



Tungsten electrodes

Gold Plus, 1,5% Lanthan (AC/DC):

| | |
|---|--------------|
| WL15 1,0 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 050 |
| WL15 1,6 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 051 |
| WL15 2,4 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 052 |
| WL15 3,2 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 053 |
| WL15 4,0 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 054 |
| WL15 4,8 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 055 |

Tungsten grinders

| | |
|-----------------|--------------|
| G-Tech Handy II | 0700 009 886 |
| G-Tech | 0700 009 880 |



Shoulder strap Caddy®

| | |
|-----------------------|--------------|
| Padded shoulder strap | 0460 265 003 |
|-----------------------|--------------|



Trolleys Caddy®

| | |
|--|--------------|
| 2-wheel, large gas bottle 20-50 liters (forward facing panel) | 0460 330 880 |
| 2-wheel, large gas bottle 20-50 liters (sideways facing panel) | 0459 366 887 |
| 2-wheel, small gas bottle 5-10 liters | 0459 366 885 |



Torches (OKC50)

| | 4m | 8m |
|-----------------------------|--------------|--------------|
| ET 17 (for Buddy™ Tig only) | 0700 300 860 | 0700 300 864 |
| TXH™ 121 | 0700 300 524 | 0700 300 529 |
| TXH™ 121F Flexible head | 0700 300 526 | 0700 300 531 |
| TXH™ 151 | 0700 300 538 | 0700 300 544 |
| TXH™ 151F Flexible head | 0700 300 541 | 0700 300 547 |
| TXH™ 201 | 0700 300 552 | 0700 300 555 |
| TXH™ 201F Flexible head | 0700 300 554 | 0700 300 557 |
| TXH™ 251w Water-cooled | 0700 300 561 | 0700 300 563 |
| TXH™ 251wF Flexible head | 0700 300 562 | 0700 300 564 |

A TIG torch is included with all TIG welding packages listed.

| | 4m | 8m |
|--|--------------|--------------|
| Remote control torches | | |
| TXH™ 121r | 0700 300 620 | 0700 300 622 |
| TXH™ 121Fr Flexible head | 0700 300 621 | 0700 300 623 |
| TXH™ 151r | 0700 300 624 | 0700 300 626 |
| TXH™ 151Fr Flexible head | 0700 300 625 | 0700 300 627 |
| TXH™ 201r | 0700 300 628 | 0700 300 630 |
| TXH™ 201Fr Flexible head | 0700 300 629 | 0700 300 631 |
| TXH™ 251wr Water-cooled | 0700 300 632 | 0700 300 634 |
| TXH™ 251wFr Flexible head | 0700 300 633 | 0700 300 635 |
| Remote Adapter kit RAT1, 12-pole, incl 0,25m cable | 0459 491 812 | |

| | |
|-------------------------------------|--------------|
| Wear part kit for TXH™ 121/251w | 0368 846 880 |
| Wear part kit for TXH™ 151/201/ET17 | 0368 846 881 |



AC/DC TIG WELDING PACKAGES

ESAB's AC/DC TIG packages weld aluminium, mild steel, stainless steel and most other metals. These complete welding packages consist of a compact and powerful power source with an easy-to-use control panel and ergonomic torch.

Caddy® Tig 2200i AC/DC with TA33 user interface

- Automatic settings - Simply set the plate thickness and the machine optimises the parameters
- Pre-set AC frequency
- Pre-set AC balance
- Remote control ready

Caddy® Tig 2200i AC/DC with TA34 user interface

- Pulsed functionality for controlled heat input
- Ideal for thin plate welding and special alloys
- Adjustable AC Frequency optimises the arc width
- Adjustable AC Balance optimises the arc penetration
- Electrode preheating for improved starting properties and extended electrode life
- Two individual memory settings
- Remote control ready

AC/DC TIG WELDING PACKAGES

GENERAL FEATURES

Portable design – All ESAB Caddy AC/DC Tig machines are small and lightweight, making them easy to transport to indoor and outdoor work sites. The compact design makes them easy to store when not in use.

Durability – The design in combination with the robust composite and metal housing offer IP23 classification making the machines suitable for outdoor use. Sturdy OKC 50 cable connectors ensure efficient current transfer with minimum power loss.

TIG welding – All ESAB TIG machines offer High Frequency (HF) and LiftArc™ starts. The arc is struck pressing the trigger on the torch and the electrode will never touch the surface of the work piece. This eliminates the risk of contamination and improves the start properties, making the machine user friendly. For longer welds the 4-stroke mode (“push & release” to start – weld – “push & release” to stop) is commonly used while the 2-stroke mode (“push” to start – weld – “release” to stop) is used on shorter welds such as tack welding. Caddy Tig welds most metals, including alloyed and non alloyed steel, stainless steel and cast iron.

MMA option – Caddy Tig can be used for MMA (stick welding). A complete welding cable kit is included.

Complete and Ready-to-use – All portable TIG machines featured are delivered complete with a 3m mains cable with plug, 4m TIG Torch, MMA kit, return cable, 1.5m gas hose and carry handle.

Caddy Tig 2200i AC/DC

The Caddy Tig 2200i AC/DC is available with two panel options, TA33 and TA34. The 2200i model can weld aluminium up to 5.5mm and mild and stainless steels up to 7.3mm. The water-cooled 2200i allows the use of a smaller sized water-cooled torch, suitable for those difficult to access welds.

The digital display allows the operator to set and view the welding parameters. It also provides the actual current (which might differ from the set current) for a more accurate reading. This is an important quality factor when welding according to a standard or a WPS.



TA33 AC/DC



TA34 AC/DC

The TA33 control panel offers intelligent and automatic settings to reduce set up time. Simply set the plate thickness and the machine will adjust to the optimal welding parameters. The slope up and slope down time as well as the pre/post gas-flow time can be manually adjusted to suit the individual welder's preferred settings.

The TA34 control panel provides DC TIG pulse functionality which is recommended when welding thin material (<1.0mm). When pulse functionality is activated, the weld current switches between the set peak and background current, thus minimising the heat input and reducing the risk of deformation of the work piece. When welding aluminium, the adjustable AC Frequency optimises the arc width and the adjustable AC Balance optimises the penetration, providing full control of the weld pool. In addition, electrode preheating improves the start properties and extends the life of the electrode.

The TA34 offers two individual memory settings. The most frequently used parameters may be stored to save time when switching between jobs and to ensure high repeatability.

The remote control mode enables the weld current to be set remotely from the power source. This is often required when switching between different welding positions (ex. pipe welding).

| | Plate Thickness | | Plate Thickness | | Pulse | Remote Control Connection | Water-cooled Torch | Memory | Panel | Stick Electrode 3.2mm 10A fuse | Max Length Mains Cable (2.5mm ²) 100m |
|-------------------------------|--------------------------------|-----------|--|-----------|-------|---------------------------|--------------------|--------|-------|-----------------------------------|--|
| | Aluminium: Argon 100% < 1.0 | 1.0 - 5.5 | Mild steel: Argon 100% Stainless steel: Argon 100% < 1.0 | 1.0 - 7.3 | | | | | | | |
| Caddy® Tig 2200i AC/DC TA33 | | ● | | ● | | ● | | | ● | ● | ● |
| Caddy® Tig 2200iw AC/DC TA33 | | ● | | ● | | ● | ● | | ● | ● | ● |
| Caddy® Tig 2200i AC/DC TA34 | ● | ● | ● | ● | ● | ● | | ● | ● | ● | ● |
| Caddy® Tig 2200iw AC/DC TA34 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Caddy® Tig 2200iw AC/DC TA34* | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

* with trolley

Self-cooled or water-cooled?
You always have the option of upgrading your Caddy Tig 2200i AC/DC machine with a water cooling unit. Please contact your ESAB dealer for details. The following items are required.

CoolMini incl. connection kit 0460 144 880
TXH™ 251w / 251wF torch See next page.

Accessories TIG



Remote Controls TA34

| | |
|---------------------------------------|--------------|
| T1 Foot CAN incl. 5m connection cable | 0460 315 880 |
| AT1 CAN | 0459 491 863 |
| AT1 CoarseFine CAN | 0459 491 884 |
| MTA1 CAN | 0459 491 880 |

Connection cables for remote controls

| | |
|----------------|--------------|
| 5 m cable CAN | 0459 554 880 |
| 10 m cable CAN | 0459 554 881 |
| 15 m cable CAN | 0459 554 882 |
| 25 m cable CAN | 0459 554 883 |

TIG consumables

Mild steel

| | |
|---|------------|
| OK Tigrod 12.64 Ø1.6mm x 1000mm (carton 5.0 kg) | 126416R150 |
| OK Tigrod 12.64 Ø2.4mm x 1000mm (carton 5.0 kg) | 126424R150 |
| OK Tigrod 12.64 Ø3.2mm x 1000mm (carton 5.0 kg) | 126432R150 |

Stainless steel

| | |
|--|------------|
| OK Tigrod 316LSi Ø1.6mm x 1000mm (carton 5.0 kg) | 163216R150 |
| OK Tigrod 316LSi Ø2.4mm x 1000mm (carton 5.0 kg) | 163224R150 |
| OK Tigrod 316LSi Ø3.2mm x 1000mm (carton 5.0 kg) | 163232R150 |

Aluminium

| | |
|---|------------|
| OK Tigrod 53.56 Ø1.6mm x 1000mm (carton 2.5 kg) | 181516R120 |
| OK Tigrod 53.56 Ø2.4mm x 1000mm (carton 2.5 kg) | 181524R120 |
| OK Tigrod 53.56 Ø3.2mm x 1000mm (carton 2.5 kg) | 181532R120 |



Tungsten electrodes

Gold Plus, 1,5% Lanthan (AC/DC):

| | |
|---|--------------|
| WL15 1,0 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 050 |
| WL15 1,6 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 051 |
| WL15 2,4 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 052 |
| WL15 3,2 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 053 |
| WL15 4,0 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 054 |
| WL15 4,8 x 175mm Gold Plus (Lanthanated) Gold | 0151 574 055 |

Tungsten grinders

| | |
|-----------------|--------------|
| G-Tech Handy II | 0700 009 886 |
| G-Tech | 0700 009 880 |



Trolleys Caddy®

| | |
|--|--------------|
| 2-wheel, large gas bottle 20-50 liters (forward facing panel) | 0460 330 880 |
| 2-wheel, large gas bottle 20-50 liters (sideways facing panel) | 0459 366 887 |
| 2-wheel, small gas bottle 5-10 liters | 0459 366 885 |



Torches (OKC50)

| | 4m | 8m |
|-----------------------------|--------------|--------------|
| ET 17 (for Buddy™ Tig only) | 0700 300 860 | 0700 300 864 |
| TXH™ 121 | 0700 300 524 | 0700 300 529 |
| TXH™ 121F Flexible head | 0700 300 526 | 0700 300 531 |
| TXH™ 151 | 0700 300 538 | 0700 300 544 |
| TXH™ 151F Flexible head | 0700 300 541 | 0700 300 547 |
| TXH™ 201 | 0700 300 552 | 0700 300 555 |
| TXH™ 201F Flexible head | 0700 300 554 | 0700 300 557 |
| TXH™ 251w Water-cooled | 0700 300 561 | 0700 300 563 |
| TXH™ 251wF Flexible head | 0700 300 562 | 0700 300 564 |

A TIG torch is included with all TIG welding packages listed.

| Remote control torches | 4m | 8m |
|--|--------------|--------------|
| TXH™ 121r | 0700 300 620 | 0700 300 622 |
| TXH™ 121Fr Flexible head | 0700 300 621 | 0700 300 623 |
| TXH™ 151r | 0700 300 624 | 0700 300 626 |
| TXH™ 151Fr Flexible head | 0700 300 625 | 0700 300 627 |
| TXH™ 201r | 0700 300 628 | 0700 300 630 |
| TXH™ 201Fr Flexible head | 0700 300 629 | 0700 300 631 |
| TXH™ 251wr Water-cooled | 0700 300 632 | 0700 300 634 |
| TXH™ 251wFr Flexible head | 0700 300 633 | 0700 300 635 |
| Remote Adapter kit RAT1, 12-pole, incl 0,25m cable | 0459 491 812 | |

| | |
|---------------------------------|--------------|
| Wear part kit for TXH™ 121/251w | 0368 846 880 |
| Wear part kit for TXH™ 151/201 | 0368 846 881 |





Introduction to MIG/MAG Welding Packages

To identify the most suitable welding package for your application consider the following:

- What material will be welded? This will determine the minimum functionality required.
- What consumable will be used? Flux-cored wire (FCW) or solid wire.
- Would a compact machine or a machine with a separate feeding unit be preferred? This is usually determined by the layout of the workplace.
- What is the thickness of the material being welded? This will determine the required output power of the machine.

On the following pages you'll find recommended packages for welding of mild steel, stainless steel and aluminium using either solid or flux-cored wire. For certain combinations, more than one package might be suitable. For further details, please refer to the package information sheet in this binder.

Benefits

Compact machines are smaller and therefore easier to transport. The investment cost is normally less than that of a power source with a separate feeder.

Machines with separate feeders feature interconnection cables between 1.7 and 35m for increased reach. Counterbalance arms improve ergonomics and minimise the weight of the torch package. The feeder can be suspended in cranes for improved reach. Wheels kits for the feeder are available for improved maneuverability on the floor.

Portable machines are lightweight and easy to carry to the work site. A smaller spool size reduces the size and weight of these machines (200mm, weight up to 5kg).

| Material | Type | Wire Ø / Plate thickness | Model | Page |
|---------------------------------|--------------------------------|--------------------------------------|--------------------------------|----------|
| Mild Steel Solid Wire | Portable | 0.8mm / <6mm | Caddy® Mig 160i | 27 |
| | | | Caddy® Mig 200i | 27 |
| | Compact | 0.8mm / <6mm | Origo™ Mig C151 | 31 |
| | | | Origo™ Mig C170 | 31 |
| | | | Origo™ Mig C250 | 31 |
| | | 1.0mm / <10mm | Origo™ Mig C250 | 35 |
| | | | Origo™ Mig C280 PRO | 35 |
| | | | Origo™ Mig C340 PRO | 35 |
| | 1.2mm / >10mm | Origo™ Mig C340 PRO | 35 | |
| | | Origo™ Mig C420 PRO | 35 | |
| Separate Feeder | 1.0mm / <10mm 1.2mm / >10mm | 400A Advanced | 39 | |
| | | 400A Synergic | 43 | |
| Mild Steel Flux-cored Wire | Compact | 1.0mm / <10mm 1.2 - 1.4mm / >10mm | Origo™ Mig C420 PRO | 35 |
| | Separate Feeder | 1.0mm / <10mm 1.2 - 1.4mm / >10mm | 400A Advanced 400A Synergic | 39 43 |
| Stainless Steel Solid Wire | Compact | 0.8mm / <6mm | Caddy® Mig C200i | 27 |
| | Separate Feeder | 1.0mm / <10mm 1.2mm / >10mm | 400A Pulse | 47 |
| Stainless Steel Flux-cored Wire | Compact | 1.0mm / <10mm 1.2 - 1.4mm / >10mm | Origo™ Mig C420 PRO | 35 |
| | Separate Feeder | 1.0mm / <10mm 1.2 - 1.4mm / >10mm | 400A Advanced 400A Synergic | 39 43 |
| Aluminium Solid Wire | Compact | 1.0mm / <6mm | Caddy® Mig C200i | 27 |
| | Separate | 1.0mm / <10mm | 400A Pulse | 47 |

Note: This selection guide should be viewed as a recommendation for the most common wire combinations. Smaller wire diameters can always be used and in most cases a larger diameter can be an option.



PORTABLE MIG/MAG WELDING PACKAGES

These portable MIG/MAG packages feature built-in wire feeders. An intuitive control panel reduces set up time. The machines are optimised for welding solid wire. Polarity can easily be reversed enabling the use of self-shielded wires. This eliminates the need for shielding gas, making the machine truly portable.

Caddy® Mig C160i

- Automatic settings - Simply set the plate thickness and the machine optimises the parameters
- Convenient single-knob heat adjustment
- Analogue panel
- Optimised for welding mild and stainless steel plates from 0.5 - 4.0mm

Caddy® Mig C200i

- QSet™ - Intelligent welding system
- Automatic settings - Simply set the plate thickness and the machine optimises the parameters
- Convenient single-knob heat adjustment
- MIG brazing capability
- Digital panel for exact settings of current and voltage
- Optimised for welding mild/stainless steel and aluminium plates from 0.5 - 6.0mm



PORTABLE MIG/MAG WELDING PACKAGES

GENERAL FEATURES

Portable design – ESAB Caddy Mig machines are lightweight and easy to carry to the work site. They use a smaller spool size of 200mm/max weight of 5 kg, which reduces the machine's size and weight. The machine's can operate with extra long mains cables of 50m. For additional freedom of movement, Caddy Mig machines can be used on generators with AVR with 5.5 kVA for full output or min 3.0 kVA for 100A output (required for OK 12.51 0.8mm).

Gasless MIG welding – The polarity of the Caddy Mig machines can easily be reversed, enabling the use of self-shielded wires such as Coreshield 15. This eliminates the need to transport a gas bottle to the work site making the machine truly portable. Optimised for plate thicknesses >1.5mm.

Durability – A durable design in combination with a corrosion-resistant flame-proof composite housing with IP23 classification makes the machines suitable for outdoor use. The recessed panel provides extra protection of the knobs.

Accessible and easy to service - The built-in wire feeder mechanism and Ø200 mm wire spool are easily accessed from the side panel. Feeder rolls can be changed without using any tools.

System management – The smart design of the housing offers a storage tray on the top surface. Integrated cables holders in the front and rear panels and a built-in shoulder strap make transport easy.

Delivered Ready-to-use, including wire - Caddy Mig machines come with 1kg OK Autrod 12.51 0.8mm solid wire included. The package contains a 3m MIG torch (MXL™ 180), a 3m return cable and clamp, 3m mains cable with plug, 4.5m gas hose with clamp and quick connector and a carrying strap.



Caddy Mig C160i

The Caddy Mig C160i is optimised for welding mild and stainless steels using up to 0.8mm solid wire.

An analogue panel allows the operator to easily set the thickness of the material to weld. The machine then automatically sets the optimum amperage and voltage. Heat input can be controlled by the turn of a knob. As a result, set up time is kept to a minimum and a quality weld is easy to achieve.



Caddy Mig C200i

The Caddy Mig C200i package is optimised for mild/stainless steel, aluminium and MIG brazing applications. Welding parameters can be set either manually or fully automatically using the QSet functionality. Either way, the intuitive control panel and large LCD display provide a clear overview of the settings even from a distance. This makes it easy to identify the optimal parameters and consequently reduces set up time.

Automatic mode / QSet is a built-in function which provides a unique way of setting welding parameters in short arc mode when welding mild steel. Simply set the material type to Fe/SS and plate thickness and QSet will sense the wire/gas combination and automatically select the correct welding parameters. QSet will also adjust for changes in wire stick out to maintain optimal arc characteristics. QSet give the following advantages:

- Consistent, high weld quality regardless of operator skill level
- Low spatter level, minimum after treatment
- Constant arc length – maintained weld quality also in hard to reach corners
- Quick set up – easy to get started
- Easy weld pool heat adjustment with a simple turn of the knob

In manual mode the wire feed speed and voltage may be adjusted manually with a simple turn of the knob. The corresponding amperage value is also displayed on the digital panel which enables exact readings.

To further **fine-tune arc characteristics** the C200i also offers a stepless inductance setting function. The inductance is pre-set to simplify for the welder. Typically, a higher inductance delivers a more crisp and focused arc suitable for position welding, while a lower inductance generates a smoother arc with less spatter.

Aluminium welding require adjustments of the machine and torch. The liner, feed rolls and contact tip should be replaced (see next page). The wire end has to be cut between welds for optimal start properties. For production welding in aluminium ESAB recommend the Aristo Mig 4004i Pulse package.

| | Plate Thickness | | Mild Steel Argon/Mix or CO ₂ | Stainless Argon 98% O ₂ 2% | Aluminium Argon 100% | MIG Brazing Argon 99% O ₂ 1% | Panel | | QSet™ |
|------------------|-----------------|-----------|---|---|-------------------------|---|----------|---------|-------|
| | 0.5-4.0 | 0.5 - 6.0 | | | | | Analogue | Digital | |
| Caddy® Mig C160i | 0349 310 850 | ● | ● | ● | | | ● | | |
| Caddy® Mig C200i | 0349 312 030 | | ● | ● | ● | ● | | ● | ● |

MIG/MAG PACKAGES

MIG/MAG PACKAGES

Accessories MIG/MAG



Consumables 200mm wire spools

| Mild steel solid wire | | |
|-----------------------|--------------|------------|
| OK Autrod 12.51 | Ø 0.6/5.0 kg | 1251064600 |
| OK Autrod 12.51 | Ø 0.8/5.0 kg | 1251084600 |
| OK Autrod 12.51 | Ø 1.0/5.0 kg | 1251004600 |

| Stainless solid wire | | |
|----------------------|--------------|------------|
| OK Autrod 308LSi | Ø 0.8/5.0 kg | 1612084600 |
| OK Autrod 316LSi | Ø 0.8/5.0 kg | 1632084600 |

| Aluminium solid wire | | |
|----------------------|--------------|------------|
| OK Autrod 5183 | Ø 1.0/2.0 kg | 181610462E |

| Self-shielded | | |
|---------------|--------------|------------|
| Coreshield 15 | Ø 0.8/4.5 kg | 35UE084630 |

| Brazing | | |
|-----------------|--------------|------------|
| OK Autrod 19.30 | Ø 1.0/5.0 kg | 1930104600 |



MIG/MAG Pliers

| | |
|-------------|--------------|
| Fix 1 Small | 0760 022 100 |
| Fix 2 Large | 0760 022 200 |

Wear parts wire feeder

| | |
|--|--------------|
| Feed roller Ø0,6-1,0 mm with V-groove (standard) | 0349 311 890 |
| Feed roller Ø1,0 mm with U-groove (aluminium) | 0349 312 836 |
| Pressure roller | 0349 312 062 |
| Inlet nozzle | 0455 049 002 |

For additional information and specifications, visit the ESAB website to download the latest product fact sheet.



Trolley

| | |
|--|--------------|
| Trolley, 2-wheel for large gas bottles | 0459 366 887 |
|--|--------------|

Wear parts torch

| | |
|--|--------------|
| Gas nozzle (1) | 0700 200 054 |
| Contact tip (2) for 0.6mm wire | 0700 200 063 |
| Contact tip (2) for 0.8mm wire | 0700 200 064 |
| Contact tip (2) for 1.0mm wire | 0700 200 066 |
| Insulator for self-shielded wire 0.8mm (6) | 0700 200 105 |
| Nozzle spring (3) | 0700 200 078 |
| Tip adapter (5) | 0700 200 072 |

| Steel liners for mild steel, stainless steel, cored wire and MIG brazing | |
|--|--------------|
| Steel liner (4), 0.6-0.8mm | 0700 200 085 |
| Steel liner (4), 0.9-1.2mm | 0700 200 087 |

| PTFE liners for aluminium | |
|---------------------------|--------------|
| PTFE Liner(4), 0.9-1.2mm | 0700 200 091 |



COMPACT MIG/MAG WELDING PACKAGES

ESAB's compact MIG/MAG packages feature built-in wire feeders ideal for workshops and repair and maintenance applications. All machines are delivered ready for use and include a professional welding torch, shelf for gas cylinder and wheel kit for easy maneuverability.

Origo™ Mig C151

- 230V 1ph for welding up to 0.8mm solid wire
- Easy to change polarity enables welding with gasless cored wire
- Low investment cost
- Analogue display

Origo™ Mig C170

- 400V 3ph for welding up to 0.8mm solid wire
- Optional polarity change kit enables welding with gasless cored wire and optional digital V/A meter kit
- Adjustable burnback time and creep start functionality
- Tack welding functionality

Origo™ Mig C250

- 400V 3ph for welding up to 1.2mm solid wire
- Easy to change polarity enables welding with gasless cored wire
- Adjustable burnback time and creep start functionality
- Tack welding functionality
- Optional digital V/A meter

COMPACT MIG/MAG WELDING PACKAGES

GENERAL FEATURES

The compact and competitively priced Origo Mig machines with built-in wire feeder are designed for the workshop environment. A two-wheel drive wire feed mechanism also make these machines ideal for repair and maintenance applications.

Ready-to-use – Origo Mig machines are delivered ready for use, equipped with a professional welding torch, wheel kit and gas bottle shelf for easy maneuverability.

Robust – The machines have a strong galvanized casing and large wheels to withstand harsh environments. A compact design makes them easy to transport between work sites.

Serviceable – Proven technology ensures high reliability and low maintenance costs.

Origo Mig C151

Origo Mig C151 is a 1-phase machine ideal for welding up to 0.8mm solid wire using small spools (max. 200mm/5kg) which make the unit lightweight.

The polarity can easily be reversed enabling welding with gasless corded wire, no need to bring a gas bottle. The machine comes equipped with a 2.5m (MXL 150v) welding torch with fixed connection. The machine is easy to operate and comes at a low investment cost.



Origo Mig C170

Origo Mig C170 is a 3-phase machine ideal for welding up to 0.8mm solid wire. The use of large spools (max. 300mm/18kg) increases productivity with fewer workflow interruptions for spool changes. The 8-step voltage setting makes it easy for the welder to find the optimal welding parameters. The machine's creep start function provides a soft wire speed start which reduces spatter.

The optional digital V/A meter provides a clear, accurate reading of the weld parameters, even in poor light conditions. The adjustable burnback time maintains a consistent wire stick out which in turn ensure optimal starting properties. Tack welding time can be set between 0.2 seconds and 2.5 seconds.

Optional polarity change kit enables welding with gasless cored wire, no need to bring a gas bottle.

Origo Mig C250

Origo Mig C250 is a 3-phase machine ideal for welding up to 1.2mm solid wire. The use of large spools (max. 300mm/18kg) increases productivity with fewer workflow interruptions for spool changes. The 10-step voltage setting and two inductance outlets makes it easy for the welder to find the optimal welding parameters. The machine's creep start function provides a soft wire speed start which reduces spatter.

The optional digital V/A meter provides a clear, accurate reading of the weld parameters, even in poor light conditions. The adjustable burnback time gives a consistent wire stick out, which in turn ensure optimal starting properties. Tack welding time can be set between 0.2 seconds and 2.5 seconds.

The polarity can easily be reversed enabling welding with gasless corded wire, no need to bring a gas bottle.

Origo Mig machines are delivered with feed mechanism and torch components (drive rolls, liners, contact tips etc.) suitable for the following wire dimensions:

| | Wire dimension \varnothing (mm) |
|----------------|-----------------------------------|
| Origo Mig C151 | 0.8 |
| Origo Mig C170 | 0.8 |
| Origo Mig C250 | 1.0 |

For alternative wire dimensions, components in the feed mechanism and torch will have to be replaced. See separate fact sheets for machine and torch.

| | 230V 1ph | 400V 3ph | Maximum Solid Wire \varnothing (mm) | Gasless Cored Wire \varnothing (mm) | Polarity inversion kit Included | Spool Size | # of Voltage Steps | # of inductance Outlets | Optional Digital Display | Adjustable Burnback Time | Tack Welding | Torch | Torch Connection |
|----------------|--------------|--------------|---------------------------------------|---------------------------------------|---------------------------------|------------|--------------------|-------------------------|--------------------------|--------------------------|--------------|----------------|------------------|
| Origo Mig C151 | 0349 311 180 | - | 0.8 | 0.8 | ● | 200mm/5kg | 7 | 1 | | | | MXL 150v, 2.5m | Fixed |
| Origo Mig C170 | - | 0349 308 670 | 0.8 | 0.8 | optional | 300mm/18kg | 8 | 1 | ● | ● | ● | MXL 200, 3m | Euro |
| Origo Mig C250 | - | 0349 307 840 | 1.2 | 0.8 | ● | 300mm/18kg | 10 | 2 | ● | ● | ● | MXL 270, 3m | Euro |

Accessories MIG/MAG



Consumables 200mm wire spools

| Mild steel solid wire | | |
|-----------------------|--------------|------------|
| OK Autrod 12.51 | Ø 0.6/5.0 kg | 1251064600 |
| OK Autrod 12.51 | Ø 0.8/5.0 kg | 1251084600 |

| Stainless solid wire | | |
|----------------------|--------------|------------|
| OK Autrod 308LSi | Ø 0.8/5.0 kg | 1612084600 |
| OK Autrod 316LSi | Ø 0.8/5.0 kg | 1632084600 |

| Self-shielded | | |
|---------------|--------------|------------|
| Coreshield 15 | Ø 0.8/4.5 kg | 35UE084630 |

Consumables 300mm wire spools

| Mild steel solid wire | | |
|-----------------------|-------------|------------|
| OK Autrod 12.51 | Ø 0.8/15 kg | 1251086700 |
| OK Autrod 12.51 | Ø 1.0/18 kg | 1251106710 |
| OK Autrod 12.51 | Ø 1.2/18 kg | 1251126710 |

| Stainless solid wire | | |
|----------------------|-------------|------------|
| OK Autrod 308LSi | Ø 0.8/15 kg | 1612089820 |
| OK Autrod 308LSi | Ø 1.0/15 kg | 1612109820 |
| OK Autrod 308LSi | Ø 1.2/15 kg | 1612129820 |

| | | |
|------------------|-------------|------------|
| OK Autrod 316LSi | Ø 0.8/15 kg | 1632089820 |
| OK Autrod 316LSi | Ø 1.0/15 kg | 1632109820 |
| OK Autrod 316LSi | Ø 1.2/15 kg | 1632129820 |

Digital display

| | |
|-------------------------------|--------------|
| V/A meter kit for C170 / C250 | 0349 302 598 |
|-------------------------------|--------------|

Polarity inversion kit

| | |
|----------|--------------|
| For C170 | 0349 309 310 |
|----------|--------------|

For additional information and specifications, visit the ESAB website to download the latest product fact sheet.

Wear parts torch

Contact tips (Pos. 2) MXL 150v / 200

| Argon/Mix | M6 x 25 (Cu) | 10 pcs / pk |
|-----------|---------------------|-------------|
| 0.6 | 0700 200 063 | |
| 0.8 | 0700 200 064 | |
| 0.9 | 0700 200 065 | |
| 1.0 | 0700 200 066 | |

Contact tips (Pos. 2) MXL 270

| Argon/Mix | M6 x 28 (CuCrZr) | 10 pcs / pk | 100 pcs / pk |
|-----------|---------------------|--------------|--------------|
| 0.8 | 0700 200 068 | 0349 501 008 | |
| 0.9 | 0700 200 069 | - | |
| 1.0 | 0700 200 070 | 0349 501 009 | |
| 1.2 | 0700 200 071 | 0349 501 010 | |

Gas nozzle (Pos. 1) MXL 150v MXL 200 MXL 270

| | | | |
|-----------------|---------------------|---------------------|---------------------|
| Standard Ø12mm | 0700 200 054 | 0700 200 054 | - |
| Standard Ø15mm | - | - | 0700 200 055 |
| Straight Ø16mm | 0700 200 057 | 0700 200 057 | - |
| Straight Ø18mm | - | - | 0700 200 058 |
| Conical Ø9,5mm | 0700 200 060 | 0700 200 060 | - |
| Conical Ø11,5mm | - | - | 0700 200 061 |

Spring (Pos. 3) MXL 150v MXL 200 MXH 270

| | | | |
|--|---------------------|---------------------|---------------------|
| | 0700 200 078 | 0700 200 078 | 0700 200 079 |
|--|---------------------|---------------------|---------------------|

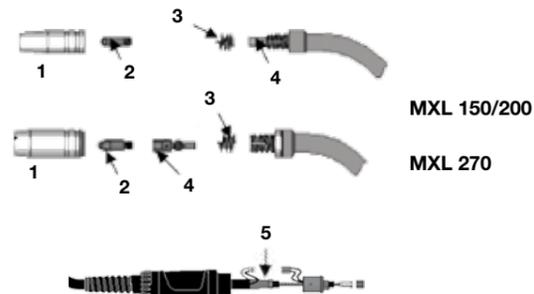
Tip adapter (Pos. 4) MXL 150v MXL 200 MXH 270

| | | | |
|----|---------------------|---------------------|---------------------|
| M6 | 0700 200 076 | 0700 200 072 | 0700 200 073 |
|----|---------------------|---------------------|---------------------|

Liners (Pos. 5) MXL 150v MXL 200 MXH 270

| Steel | Length | MXL 150v | MXL 200 | MXH 270 |
|------------|--------|---------------------|---------------------|----------------------|
| w0.6-0.8mm | 2.5m | 0700 200 099 | - | - |
| w0.6-0.8mm | 3.0m | - | 0700 200 085 | z0700 200 085 |
| w0.9-1.2mm | 3.0m | - | 0700 200 087 | 0700 200 087 |

Bold = included in standard delivery



COMPACT PRO MIG/MAG WELDING PACKAGES

ESAB's compact MIG/MAG packages feature built-in wire feeders and digital panel for exact reading of current and voltage. Designed for production welding in harsh environments. The wheel drive mechanism ensures consistent and trouble-free welding. All Origo Mig are delivered ready for use and include a professional and ergonomic 4.5m welding torch, shelf for gas cylinder and wheel kit for easy maneuverability.

Origo™ Mig C280 PRO

- Production welding up to 1.0mm solid wire
- High weld current output 280 A
- 10 step voltage setting
- Tack welding functionality

Origo™ Mig C340 PRO

- Production welding up to 1.2mm solid wire
- High weld current output 340 A
- 40 step voltage setting and creep start functionality
- 2/4 stroke trigger mode

Origo™ Mig C420 PRO

- Production welding up to 1.6mm solid wire and 1.4mm cored wire
- High weld current output 420 A
- 35 step voltage setting and creep start functionality
- 2/4 stroke trigger mode
- Water-cooled option

COMPACT PRO MIG/MAG WELDING PACKAGES

GENERAL FEATURES

The compact Origo Mig PRO machines are designed for medium to heavy-duty welding in a workshop environment. The built-in wire feed mechanism with a 4-wheel drive ensure consistent and trouble free welding. The machines are capable of carrying up to 18 kg wire spool.

Built-in digital V/A meter provides a clear, accurate reading of the exact weld parameter settings, even in poor lighting conditions.

Step-regulated inductance setting – In addition to setting the wire feed speed and voltage, the arc characteristics of these machines can be fine-tuned using the inductance setting. Typically a higher inductance provides a crisp and focused arc suitable for position welding while a lower inductance provides a smooth arc with less spatter.

Adjustable burnback time – Consistent wire stick out after weld ensures optimal starting properties.

Robust – The machines have a strong galvanized casing and large wheels to withstand harsh environments. The compact design makes it easy to transport between work sites.



Origo Mig C280 PRO

Designed for production welding with up to 1.0 mm solid wire at the lowest investment cost. The machine features a tack welding setting between 0.2-2.5 seconds and is ideal for car repair applications.

Origo Mig C340 PRO

For production welding with up to 1.2mm solid wire, a 40-step voltage setting and two inductance outlets makes it easy to achieve the optimal welding parameters. The machine features creep start functionality where the wire speed starts slowly, creating a soft start which reduces spatter.

The machine features a 2-stroke/4-stroke trigger mode. For longer welds the 4-stroke mode (“push & release” to start – weld – “push & release” to stop) is commonly used. The 2-stroke mode (“push” to start – weld – “release” to stop) is applied to shorter welds such as tack welding.

Origo Mig C420 PRO

The Origo Mig C420 PRO is designed for production welding with up to 1.6 solid and 1.4mm cored wire. The 35-step voltage setting and three inductance outlets make it easy for the welder to achieve optimal welding parameters.

Choose between a self-cooled or water-cooled system. The water-cooled system allows the use of a smaller sized water-cooled torch, improving the ergonomic for the welder.

The machine features a 2-stroke/4-stroke trigger mode. For longer welds the 4-stroke mode (“push & release” to start – weld – “push & release” to stop) is commonly used. The 2-stroke mode (“push” to start – weld – “release” to stop) is applied to shorter welds such as tack welding.

| | 400V 3ph | Multi voltage* | Maximum Wire Ø (mm) | Solid Wire Welding | Cored Wire Welding | # of Voltage Steps | # of Inductance Outlets | 2/4 Stroke | Digital Display | Adjustable Burnback Time | Tack Welding | Creep Start | Water-cooled | Torch 4.5m |
|---------------------|--------------|----------------|---------------------|--------------------|--------------------|--------------------|-------------------------|------------|-----------------|--------------------------|--------------|-------------|--------------|------------|
| Origo Mig C280 PRO | 0349 312 520 | 0349 312 530 | 1.0 | ● | | 10 | 2 | | ● | ● | ● | | | PSF 250 |
| Origo Mig C340 PRO | 0349 310 830 | 0349 312 570 | 1.2 | ● | | 40 | 2 | ● | ● | ● | | ● | | PSF 305 |
| Origo Mig C420 PRO | 0349 312 590 | - | 1.6 | ● | ● | 35 | 3 | ● | ● | ● | | ● | | PSF 405 |
| Origo Mig C420w PRO | 0349 312 580 | - | 1.6 | ● | ● | 35 | 3 | ● | ● | ● | | ● | ● | PSF 410w |

* 230 / 400-415 / 500 V, 50 HZ; 230 / 440 - 460 V, 60HZ

These machines are delivered with feed mechanism and torch components (drive rolls, liners, contact tips etc.) suitable for the following wire dimensions:

| | Wire dimension Ø (mm) |
|--------------------|-----------------------|
| Origo Mig C280 PRO | 1.0 |
| Origo Mig C340 PRO | 1.2 |
| Origo Mig C420 PRO | 1.2 |

For alternative wire dimensions, components in the feed mechanism and torch will have to be replaced.

Accessories MIG/MAG



Consumables 300mm wire spools

| Mild steel solid wire | | |
|-----------------------|-------------|------------|
| OK Autrod 12.51 | Ø 0.8/15 kg | 1251086700 |
| OK Autrod 12.51 | Ø 1.0/18 kg | 1251106710 |
| OK Autrod 12.51 | Ø 1.2/18 kg | 1251126710 |

| Stainless solid wire | | |
|----------------------|-------------|------------|
| OK Autrod 308LSi | Ø 0.8/15 kg | 1612089820 |
| OK Autrod 308LSi | Ø 1.0/15 kg | 1612109820 |
| OK Autrod 308LSi | Ø 1.2/15 kg | 1612129820 |

| | | |
|------------------|-------------|------------|
| OK Autrod 316LSi | Ø 0.8/15 kg | 1632089820 |
| OK Autrod 316LSi | Ø 1.0/15 kg | 1632109820 |
| OK Autrod 316LSi | Ø 1.2/15 kg | 1632129820 |

| Mild steel rutile cored wire | | |
|------------------------------|-------------|------------|
| OK Tubrod 15.14 | Ø 1.2/16 kg | 1514127730 |
| OK Tubrod 15.14 | Ø 1.4/16 kg | 1514147730 |

| Mild steel metal cored wire | | |
|-----------------------------|-------------|------------|
| OK Tubrod 14.11 | Ø 1.2/16 kg | 1411127730 |
| OK Tubrod 14.11 | Ø 1.4/16 kg | 1411147730 |

| Stainless rutile cored wire | | |
|-----------------------------|-------------|------------|
| SHIELD-BRIGHT 308L | Ø 1.2/16 kg | 35BA129840 |
| SHIELD-BRIGHT 316L | Ø 1.2/16 kg | 35FA129840 |

Torch and return cable holder

| | |
|------------------------|--------------|
| For C280 / C340 / C420 | 0349 303 362 |
|------------------------|--------------|

Water flow guard

| | |
|-----------|--------------|
| For C420w | 0349 302 251 |
|-----------|--------------|

Wear parts wire feeder mechanism

| Feed roller | C280 | C340 | C420w |
|------------------------|---------------------|---------------------|---------------------|
| 0.6/0.8mm V-groove | 0459 052 001 | 0459 052 001 | 0459 052 001 |
| 0.8/0.9-1.0mm V-groove | 0459 052 002 | 0459 052 002 | 0459 052 002 |
| 0.9-1.0/1.2mm V-groove | 0459 052 003 | 0459 052 003 | 0459 052 003 |
| 1.4/1.6mm V-groove | - | - | 0459 052 013 |

For additional information and specifications, visit the ESAB website to download the latest product fact sheet.



Wear parts torch

Contact tips PSF 250 / 305

| Argon/Mix | CO ² | M6 x 27 (CuCrZr) | 100 pcs / pk |
|-----------|-----------------|------------------|--------------|
| - | 0.6 | 0468 500 001 | - |
| 0.6 | - | 0468 500 002 | - |
| - | 0.8 | 0468 500 003 | 0468 500 303 |
| 0.8 | 0.9 | 0468 500 004 | 0468 500 304 |
| 0.9 | 1.0 | 0468 500 005 | 0468 500 305 |
| 1.0 | 1.2 | 0468 500 007 | 0468 500 307 |

Contact tips PSF 405/410w

| Argon/Mix | CO ² | M8 x 37 (CuCrZr) | 100 pcs / pk |
|-----------|-----------------|------------------|--------------|
| - | 0.8 | 0468 502 003 | 0468 502 303 |
| 0.8 | 0.9 | 0468 502 004 | 0468 502 304 |
| 0.9 | 1.0 | 0468 502 005 | 0468 502 305 |
| 1.0 | 1.2 | 0468 502 007 | 0468 502 307 |
| 1.2 | 1.4 | 0468 502 008 | 0468 502 308 |
| - | 1.6 | 0468 502 009 | - |
| 1.6 | - | 0468 502 010 | - |

| Swan neck | PSF 250 | PSF 305 | PSF 405 | PSF 410w |
|--------------|---------------------|---------------------|---------------------|---------------------|
| Standard 45° | 0366 315 880 | 0366 388 880 | 0366 389 880 | 0458 403 881 |
| 0° | 0469 329 880 | 0469 333 880 | 0469 334 880 | 0458 403 886 |
| 60° | 0467 985 880 | 0467 988 881 | 0467 988 880 | 0458 403 884 |

| Gas nozzle | PSF 250 | PSF 305 | PSF 405 | PSF 410w |
|------------|---------------------|---------------------|---------------------|---------------------|
| Standard | 0458 464 881 | 0458 464 882 | 0458 464 883 | 0458 464 882 |
| Straight | 0458 470 881 | 0458 470 882 | 0458 470 883 | 0458 470 882 |
| Conical | 0458 465 881 | 0458 465 882 | 0458 465 883 | 0458 465 882 |

| | PSF 250 | PSF 305 | PSF 405 | PSF 410w |
|----------------------|--------------|--------------|--------------|--------------|
| Spatter protection | 0458 471 002 | 0458 471 003 | 0458 471 004 | 0458 471 003 |
| Tack welding adapter | 0366 314 001 | - | - | - |

| Tip adapter | PSF 250 | PSF 305 | PSF 405 | PSF 410w |
|-------------|---------------------|---------------------|---------------------|---------------------|
| M6 | 0700 200 076 | 0366 394 001 | - | - |
| M8 | - | - | 0460 819 001 | 0460 819 001 |

| Steel liners | PSF 250 | PSF 305 | PSF 405 | PSF 410w |
|-----------------|---------------------|---------------------|---------------------|---------------------|
| w0.6-0.8mm 3.0m | 0366 549 882 | 0366 549 882 | 0366 549 882 | 0366 549 882 |
| w0.6-0.8mm 4.5m | 0366 549 883 | 0366 549 883 | 0366 549 883 | 0366 549 883 |
| w0.9-1.0mm 3.0m | 0366 549 884 | 0366 549 884 | 0366 549 884 | 0366 549 884 |
| w0.9-1.0mm 4.5m | 0366 549 885 | 0366 549 885 | 0366 549 885 | 0366 549 885 |
| w1.2mm 3.0m | 0366 549 886 | 0366 549 886 | 0366 549 886 | 0366 549 886 |
| w1.2mm 4.5m | 0366 549 887 | 0366 549 887 | 0366 549 887 | 0366 549 887 |
| w1.4mm 3.0m | - | 0366 549 888 | 0366 549 888 | 0366 549 888 |
| w1.4mm 4.5m | - | 0366 549 889 | 0366 549 889 | 0366 549 889 |
| w1.6mm 3.0m | - | 0366 549 890 | 0366 549 890 | 0366 549 890 |
| w1.6mm 4.5m | - | 0366 549 891 | 0366 549 891 | 0366 549 891 |

Bold = included in standard delivery.



400A ADVANCED MIG/MAG PACKAGE

ESAB's industrial 400A CC/CV MIG/MAG package features the latest inverter technology and handles both mild steel and stainless steel using solid wire or flux-cored wire.

- Multi-process package - MIG/MAG, MMA, Carbon Arc Gouging and LiveTIG
- Digital display (V/A) in the feeder provides accurate readings close to the weld
- Digital display (V/A) in the power source for MMA and Gouging and LiveTig welding
- TrueArcVoltage™ system - Measures the correct arc voltage at the contact tip

400A ADVANCED MIG/MAG PACKAGE

MULTI-PROCESS CC/CV

- A SINGLE, VERSATILE SYSTEM

The power source and wire feeder in this 400A package combine to form a multi-process system. This system handles the MIG/MAG, MMA, Live TIG and Carbon Arc Gauging processes, providing versatility and performance in a single, highly efficient package that helps future-proof production requirements.

The 400A CC/CV package incorporates the latest inverter technology, providing increased energy efficiency and energy savings.

A wide range of auxiliary products offers the flexibility to customize the package to suit specific application requirements.

- Counterbalance arm provides improved ergonomics for the welder
- Wheel kits are offered for both the feeder and power source
- Remote control kit available for high requirement MMA applications

Durable and reliable

A high duty cycle of 400A at 60% provides the power and capability to handle heavy-duty welding.

The dust filter handles tough/dirty working environments and prevents grinding dust and metal particles from entering the chassis.

The power source is designed for nominal input voltage from 380 to 415V AC for a **wide mains input tolerance**.



400A CC/CV MIG/MAG Package 0479 000 104

The package includes:

| | |
|--------------------------------|--------------|
| Warrior® 400 CC/CV | 0465 350 884 |
| Cool 2 | 0465 427 880 |
| Warrior® Feed 304w | 0465 250 881 |
| Interconnection cable set 2.0m | 0459 836 890 |
| Torch PSF™ 410w 4.5m | 0458 400 883 |
| Trolley | 0465 510 880 |

Improving the weld quality

TrueArcVoltage system – Weld parameters are measured and adjusted automatically at the contact tip. The power source automatically compensates for power loss due to the length of the interconnection cables, length and wear of the welding torch. System requires an ESAB PSF torch.

Continuous inductance setting – In addition to setting the wire feed speed and voltage, the arc characteristics of the 400A CC/CV can be fine-tuned using the inductance setting. Typically a higher inductance provides a crisp and focused arc suitable for position welding while a lower inductance provides a smooth arc with less spatter.

Creep start – The wire speed starts slowly and the shielding gas starts to flow, creating a soft start which reduces any spatter. The set wire speed is achieved when the wire comes in contact with the work piece.

User friendly

Short Circuit Termination (SCT) eliminates the need to manually set the burn back time when welding solid wire. SCT produces a minimised ball at the wire end which ensures excellent start properties for the next weld.

Built-in digital V/A meter provides a clear, accurate reading of the exact weld parameter settings, even in poor lighting conditions.

Wire inching & gas purge controls are conveniently located on the wire feeder, making wire set up and change quick and easy.

2-stroke/4-stroke – For longer welds the 4-stroke mode (“push & release” to start – weld – “push & release” to stop) is commonly used. The 2-stroke mode (“push” to start – weld – “release” to stop) is applied to shorter welds such as tack welding.

Flexibility

MMA option – Switch between MIG/MAG and MMA (stick) welding as required, eliminating the need for two separate power sources.

Accessories MIG/MAG



Remote Controls

| | |
|-------------------------------------|--------------|
| Power source Warrior 400i/500i | |
| Adapter kit | 0465 424 880 |
| Remote control MMA1 incl. 10m cable | 0349 501 024 |
| Remote control AT1 | 0459 491 896 |
| Remote control AT1 CoarseFine | 0459 491 897 |
| Connection cables 5.0m | 0459 552 880 |
| Connection cables 10m | 0459 552 881 |
| Connection cables 15m | 0459 552 882 |
| Connection cables 25m | 0459 552 883 |

| | |
|------------------------|--------------|
| Warrior Feed | |
| Adapter kit | 0465 451 880 |
| Remote control M1 | 0459 491 895 |
| Connection cables 5.0m | 0459 553 880 |
| Connection cables 10m | 0459 553 881 |

Counterbalance arm



The spring supporter counterbalance arm for the wire feed unit can rotate 360 degrees. The use of a counterbalance will reduce welder fatigue, reduce machine wear and tear and make the torch easily accessible.

| | |
|--------------------------|--------------|
| Counterbalance arm | 0458 705 880 |
| Stabilizer kit Warrior * | 0465 509 880 |

*required to fit to the trolley

Connection cables

| 70mm ² | Air-cooled | Water-cooled |
|-----------------------|--------------|--------------|
| Connection cable 2.0m | 0459 836 880 | 0459 528 890 |
| Connection cable 5.0m | 0459 836 881 | 0459 528 891 |
| Connection cable 10m | 0459 836 882 | 0459 528 892 |
| Connection cable 15m | 0459 836 883 | 0459 528 893 |
| Connection cable 25m | 0459 836 884 | 0459 528 894 |
| Connection cable 35m | 0459 836 884 | 0459 528 895 |

For additional information and specifications, visit the ESAB website to download the latest product fact sheet.



Trolleys

| | |
|---|--------------|
| Trolley 4-wheel large gas bottle | 0465 510 880 |
| Wheel kit power source | 0465 416 880 |
| Wheel kit Warrior Feed * | 0458 707 880 |
| Guide pin extension kit for Wheel kit * | 0465 508 880 |

* Guide pin extension kit is required to fit Warrior Feed with wheel kit on the 4-wheel trolley

Torches

| Self-cooled | | |
|----------------|--|--------------|
| PSF™ 405, 3.0m | | 0458 401 882 |
| PSF™ 405, 4.5m | | 0458 401 883 |
| PSF™ 505, 3.0m | | 0458 401 884 |
| PSF™ 505, 4.5m | | 0458 401 885 |

| Water-cooled | | |
|-----------------|--|--------------|
| PSF™ 410w, 3.0m | | 0458 400 882 |
| PSF™ 410w, 4.5m | | 0458 400 883 |
| PSF™ 510w, 3.0m | | 0458 400 884 |
| PSF™ 510w, 4.5m | | 0458 400 885 |

A MIG/MAG torch is included with all MIG/MAG welding packages listed.



400A SYNERGIC MIG/MAG PACKAGE

ESAB's 400A industrial Synergic MIG/MAG welding package features the latest inverter technology to efficiently weld both mild steel and stainless steel using solid wire or cored wire.

- MIG/MAG and MMA process package.
- 35 pre-programmed synergic lines
- QSet™ Intelligent welding system
- 3 individual memory settings
- Crater filling, adjustable burn back time
- Pre/post gas flow
- ESAB LogicPump prevents overheating of the torch
- Digital display (V/A) in the feeder provides accurate readings close to the weld
- Digital display (V/A) in the power source for MMA and Gouging and LiveTig welding (Mig 4004i A44 panel only)
- TrueArcVoltage™ system measures the correct arc voltage at the contact tip

400A SYNERGIC MIG/MAG PACKAGE

POWERFUL AND ENERGY EFFICIENT

The 400A Synergic package features 35 sets of pre-programmed synergic lines which reduce set up time and improve weld quality. Inverter technology makes the system energy efficient, reducing operating cost.

A wide range of auxiliary products offers the flexibility to customize the package to suit specific application requirements.

Durable and reliable

A high duty cycle of 400A at 80% makes the machine powerful and able to handle heavy-duty welding.

The dust filter handles tough/dirty working environments and prevents grinding dust and metal particles from entering the chassis.

ESAB LogicPump ELP water pump starts automatically when the arc is struck. If the connections for the cooling hoses are not properly fitted, the machine will not start. The pump stops automatically 6.5 minutes after the weld, reducing wear, and minimising energy consumption and noise level.

Improving the weld quality

TrueArcVoltage system – Weld parameters are measured and adjusted automatically at the contact tip. The power source automatically compensates for any power loss due to the length of the interconnection cables, length and wear of the welding torch. An ESAB PSF torch is required.



400A Synergic MIG/MAG Package 0479 000 007

The package includes:

| | |
|--------------------------------|--------------|
| Mig 4004i | 0465 154 880 |
| Cool 1 | 0462 300 880 |
| Interconnection cable set 1.7m | 0459 528 790 |
| Origo® Feed 3004w, MA24 | 0460 526 999 |
| Torch PSF™ 410w 4.5m | 0458 400 883 |
| Trolley | 0462 151 880 |

QSet – a built-in function, provides a unique method for setting welding parameters in short arc mode. Simply set the material type and thickness and QSet identifies the proper wire/gas combination and automatically selects the correct welding parameters. QSet also adjusts for changes in wire stick out to maintain optimal arc characteristics.

- Easy weld pool heat adjustment with a simple turn of the knob
- Consistent weld quality regardless of operator skill level
- Low spatter post processing
- Constant arc length ensures high weld quality in hard-to-reach corners
- Quick set up makes it easy to get started

Start properties

- » **Creep start** – The wire speed starts slowly and the shielding gas starts to flow creating a soft start which reduces any spatter. The set wire speed is achieved when the wire comes in contact with the workpiece.
- » **Gas pre-flow** – The gas starts to flow before the arc is struck, keeping the weld pool well protected thus reducing the risk of weld defects.
- » **Hot start** – A short boost of power heats the wire, ensuring a perfect result from the first drop transfer.

Weld termination properties

- » **Gas post flow** – Ensures cooling of the wire tip, longer nozzle life and avoids oxidization of the weld (important for titanium and stainless).
- » **Crater filling** – Creates a smooth termination of the weld by gradually and automatically reducing the weld current according to your parameter settings. This reduces the risk of cracks at the end of the weld.

User friendly

35 sets of pre-programmed synergic lines reduce set up time and improve weld quality. A wide choice of materials, wire dimensions and gas combinations provide optimal settings for a broad range of applications. Parameters can be fine-tuned manually by the welder and stored for easy access (See Memory settings).

Memory settings – Store up to 3 different individual settings to handle three different jobs without the need to reset all parameters. Memory settings save time when switching between jobs such as horizontal and vertical welding. The set programs can also be activated from the torch by simply pressing/releasing the trigger quickly to advance to the next program.

Built-in digital V/A meter provides a clear, accurate reading of the exact weld parameter settings, even in poor lighting conditions.

2-stroke/4-stroke – For longer welds, the 4-stroke mode (“push & release” to start – weld – “push & release” to stop) is commonly used. The 2-stroke mode (“push” to start – weld – “release” to stop) is applied to shorter welds such as tack welding.

For complete details about synergic lines, please refer to the 4004i demo handbook XA00159020.

Accessories MIG/MAG

Remote Controls

| | |
|--------------------|--------------|
| AT1 CAN | 0459 491 863 |
| AT1 CoarseFine CAN | 0459 491 884 |
| MTA1 CAN | 0459 491 880 |
| M1 10Prog CAN | 0459 491 882 |

Connection cables for remote controls

| | |
|----------------|--------------|
| 5.0m cable CAN | 0459 554 880 |
| 10m cable CAN | 0459 554 881 |
| 25m cable CAN | 0459 554 882 |

Counterbalance arm



The spring supporter counterbalance arm for the wire feed unit can rotate 360 degrees. The use of a counterbalance will reduce welder fatigue, reduce machine wear and tear and make the torch easily accessible.

| | |
|--------------------|--------------|
| Counterbalance arm | 0458 705 880 |
| Stabilizer kit* | 0460 946 880 |

*required to fit to the trolley

Connection cables

| 70mm ² | Air-cooled | Water-cooled |
|-----------------------|--------------|--------------|
| Connection cable 2.0m | 0459 528 780 | 0459 528 790 |
| Connection cable 5.0m | 0459 528 781 | 0459 528 791 |
| Connection cable 10m | 0459 528 782 | 0459 528 792 |
| Connection cable 15m | 0459 528 783 | 0459 528 793 |
| Connection cable 25m | 0459 528 784 | 0459 528 794 |
| Connection cable 35m | 0459 528 785 | 0459 528 795 |

Flow guard for Cool 1

| | |
|------------|--------------|
| Flow guard | 0456 855 881 |
|------------|--------------|

For additional information and specifications, visit the ESAB website to download the latest product fact sheet.



Trolleys

| | |
|-----------------------------------|--------------|
| Standard | |
| Trolley 4-wheel large gas bottles | 0462 151 880 |

For counterbalance arm

| | |
|-----------------------------------|--------------|
| Trolley 4-wheel large gas bottles | 0465 565 880 |
| Mounting kit | 0461 310 880 |

Torches

| Self-cooled | | |
|----------------|--|--------------|
| PSF™ 405, 3.0m | | 0458 401 882 |
| PSF™ 405, 4.5m | | 0458 401 883 |
| PSF™ 505, 3.0m | | 0458 401 884 |
| PSF™ 505, 4.5m | | 0458 401 885 |

| Water-cooled | | |
|-----------------|--|--------------|
| PSF™ 410w, 3m | | 0458 400 882 |
| PSF™ 410w, 4.5m | | 0458 400 883 |
| PSF™ 510w, 3m | | 0458 400 884 |
| PSF™ 510w, 4.5m | | 0458 400 885 |

| Push-pull | | |
|---|--|--------------|
| MXH™ 300 PP, 6m Straight swan neck | | 0700 200 017 |
| MXH™ 300 PP, 10m Straight swan neck | | 0700 200 018 |
| MXH™ 300 PP, 10m Swan neck 45° | | 0700 200 020 |
| MXH™ 400w PP, 6m Straight swan neck | | 0700 200 015 |
| MXH™ 400w PP, 10m Straight swan neck | | 0700 200 016 |
| MXH™ 400w PP, 10m Swan neck 45° | | 0700 200 019 |
| MXH™ PP connection kit | | 0459 020 883 |
| Remote adapter kit MXH™ PP and PSF™ RS3 | | 0459 681 881 |

A MIG/MAG torch is included with all MIG/MAG welding packages listed.



400A PULSE MIG/MAG PACKAGE

ESAB's 400A industrial Pulsed MIG/MAG welding package features the latest inverter technology to efficiently weld mild steel and stainless steel using solid or flux-cored wire and aluminium using solid wire.

- MIG/MAG and MMA process package.
- Pulse functionality for reduced heat input and minimised spatter
- 79 pre-programmed synergic lines
- QSet™ intelligent welding system
- 10 individual memory settings
- Crater filling, adjustable burn back time
- Pre/post gas flow
- ESAB LogicPump prevents overheating of the torch
- Digital display (V/A) in the feeder provides accurate readings close to the weld
- TrueArcVoltage™ system measures the correct arc voltage at the contact tip

400A PULSE MIG/MAG PACKAGE

ADVANCED WELDING IN STAINLESS AND ALUMINIUM

The 400A Pulse package is suitable for the most advanced welding applications, including welding of stainless steel and aluminium. Pulse functionality ensures good control of the heat input, which is essential for advanced welding when weld quality is critical.

A wide range of auxiliary products offers the flexibility to customize the package to suit specific application requirements.

Durable and reliable

A high duty cycle of 400A at 60% with a wide mains input tolerance from 380 to 440 V makes the machine powerful and able to handle heavy-duty welding.

The dust filter handles tough/dirty working environments and prevents grinding dust and metal particles from entering the chassis.

ESAB LogicPump ELP water pump starts automatically when the arc is struck. If the connections for the cooling hoses are not properly fitted, the machine will not start. The pump stops automatically 6.5 minutes after the weld, reducing wear, and minimising energy consumption and noise level.

Improving the weld quality

TrueArcVoltage system – Weld parameters are measured and adjusted automatically at the contact tip. The power source automatically compensates for any power loss due to the length of the interconnection cables, length and wear of the welding torch. An ESAB PSF torch is required.

Pulse functionality reduces the heat input and minimises spatter. It also improves the esthetics of the joint giving it a "TIG look".

400A Pulse MIG/MAG Package 0479 000 002

The package includes:

| | |
|--------------------------------|--------------|
| Aristo® Mig 4004i Pulse | 0465 152 881 |
| Aristo® Feed 3004w, U6 | 0460 526 896 |
| Cool 1 | 0462 300 880 |
| Interconnection cable set 2.0m | 0459 528 790 |
| Torch PSF™ 410w 4.5m | 0458 400 883 |
| Trolley | 0462 151 880 |



QSet – a built-in function, provides a unique method for setting welding parameters in short arc mode. Simply set the material type and thickness and QSet identifies the proper wire/gas combination and automatically selects the correct welding parameters. QSet also adjusts for changes in wire stick out to maintain optimal arc characteristics.

- Easy weld pool heat adjustment with a simple turn of the knob
- Consistent weld quality regardless of operator skill level
- Low spatter post processing
- Constant arc length ensures high weld quality in hard-to-reach corners
- Quick set up makes it easy to get started

Start properties

- » **Creep start** – The wire speed starts slowly and the shielding gas starts to flow creating a soft start which reduces any spatter. The set wire speed is achieved when the wire comes in contact with the workpiece.
- » **Gas pre-flow** – The gas starts to flow before the arc is struck, keeping the weld pool well protected thus reducing the risk of weld defects.
- » **Hot start** – A short boost of power heats the wire, ensuring a perfect result from the first drop transfer.

Weld termination properties

- » **Gas post flow** – Ensures cooling of the wire tip, longer nozzle life and avoids oxidization of the weld (important for titanium and stainless).
- » **Crater filling** – Creates a smooth termination of the weld by gradually and automatically reducing the weld current according to your parameter settings. This reduces the risk of cracks at the end of the weld.

User friendly

79 sets of pre-programmed synergic lines reduce set up time and improve weld quality. A wide choice of materials, wire dimensions and gas combinations addresses a broad range of market requirements. 45 of the synergic lines are customised for pulsed welding. Parameters can be fine-tuned manually by the welder and stored for easy access (See memory settings).

Memory settings – Store up to 10 different individual settings to handle ten different jobs without the need to reset all parameters. Memory settings save time when switching between jobs such as horizontal and vertical welding. The first three sets of programs can also be activated from the torch by simply pressing/releasing the trigger quickly to advance to the next program.

Built-in digital V/A meter provides a clear, accurate reading of the exact weld parameter settings, even in poor lighting conditions.

2-stroke/4-stroke – For longer welds the 4-stroke mode ("push & release" to start – weld – "push & release" to stop) is commonly used. The 2-stroke mode ("push" to start – weld – "release" to stop) is applied to shorter welds such as tack welding.

For complete details about synergic lines, please refer to the 4004i demo handbook XA00159020.

Accessories MIG/MAG

Remote Controls

| | |
|--------------------|--------------|
| AT1 CAN | 0459 491 863 |
| AT1 CoarseFine CAN | 0459 491 884 |
| MTA1 CAN | 0459 491 880 |
| M1 10Prog CAN | 0459 491 882 |

Connection cables for remote controls

| | |
|----------------|--------------|
| 5.0m cable CAN | 0459 554 880 |
| 10m cable CAN | 0459 554 881 |
| 25m cable CAN | 0459 554 882 |

Counterbalance arm



The spring supporter counterbalance arm for the wire feed unit can rotate 360 degrees. The use of a counterbalance will reduce welder fatigue, reduce machine wear and tear and make the torch easily accessible.

| | |
|--------------------|--------------|
| Counterbalance arm | 0458 705 880 |
| Stabilizer kit* | 0460 946 880 |

*required to fit to the trolley

Connection cables

| 70mm ² | Air-cooled | Water-cooled |
|-----------------------|--------------|--------------|
| Connection cable 2.0m | 0459 528 780 | 0459 528 790 |
| Connection cable 5.0m | 0459 528 781 | 0459 528 791 |
| Connection cable 10m | 0459 528 782 | 0459 528 792 |
| Connection cable 15m | 0459 528 783 | 0459 528 793 |
| Connection cable 25m | 0459 528 784 | 0459 528 794 |
| Connection cable 35m | 0459 528 785 | 0459 528 795 |

Flow guard for Cool 1

| | |
|------------|--------------|
| Flow guard | 0456 855 881 |
|------------|--------------|

For additional information and specifications, visit the ESAB website to download the latest product fact sheet.



Trolleys

| | |
|-----------------------------------|--------------|
| Standard | |
| Trolley 4-wheel large gas bottles | 0462 151 880 |

For counterbalance arm

| | |
|-----------------------------------|--------------|
| Trolley 4-wheel large gas bottles | 0465 565 880 |
| Mounting kit | 0461 310 880 |

Torches

| Self-cooled | | |
|----------------|--|--------------|
| PSF™ 405, 3.0m | | 0458 401 882 |
| PSF™ 405, 4.5m | | 0458 401 883 |
| PSF™ 505, 3.0m | | 0458 401 884 |
| PSF™ 505, 4.5m | | 0458 401 885 |

Water-cooled

| | |
|-----------------|--------------|
| PSF™ 410w, 3.0m | 0458 400 882 |
| PSF™ 410w, 4.5m | 0458 400 883 |
| PSF™ 510w, 3.0m | 0458 400 884 |
| PSF™ 510w, 4.5m | 0458 400 885 |

Push-pull

| | |
|---|--------------|
| MXH™ 300 PP, 6m Straight swan neck | 0700 200 017 |
| MXH™ 300 PP, 10m Straight swan neck | 0700 200 018 |
| MXH™ 300 PP, 10m Swan neck 45° | 0700 200 020 |
| MXH™ 400w PP, 6m Straight swan neck | 0700 200 015 |
| MXH™ 400w PP, 10m Straight swan neck | 0700 200 016 |
| MXH™ 400w PP, 10m Swan neck 45° | 0700 200 019 |
| MXH™ PP connection kit | 0459 020 883 |
| Remote adapter kit MXH™ PP and PSF™ RS3 | 0459 681 881 |

A MIG/MAG torch is included with all MIG/MAG welding packages listed.



World leader in welding and cutting technology and systems



ESAB operates at the forefront of welding and cutting technology. More than one hundred years of continuous improvement in products and processes enables us to meet the challenges of technological advance in every sector in which ESAB operates.

Quality and environment standards

Quality, the environment and safety are three key areas of focus. ESAB is one of few international companies to have obtained the ISO 14001, ISO 9001 and OHSAS 18001 standards in Environmental, Health & Safety Management Systems across all our global manufacturing facilities. At ESAB, quality is an ongoing process that is at the heart of all our production processes and facilities worldwide. Multinational manufacturing, local representation and an international network of independent distributors brings the benefits of ESAB quality and unrivalled expertise in materials and processes within reach of all our customers, wherever they are located.

ESAB Sales and Support offices worldwide



* Includes manufacturing facilities of ESAB North America.



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COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV
= ISO 9001 =
= ISO 14001 =
= OHSAS 18001 =