

iTECH MIG 280 4R

Full specifications



KEY FEATURES

The **iTECH MIG 280 4R** 3-in-1 welder is primarily for use in light industry. With the innovative **MIG/MAG AUTO system**, once the material, thickness and wire diameter are entered, the unit selects optimal settings and is ready to go. It also has a **MANUAL** settings mode for metalshop masters and pro welders. Semi-Pro and amateur welders will never regret the iTech, since they can focus on their technique instead of the settings. The machine is on a rugged cart with swivelling castors and enough room for 50L cylinders to be safely moved.

The **iTECH MIG 280 4R** has an innovative system of air flow through the cooling chamber **NorthernWind (NW)**, boosting the life, durability and duty cycle of the components.

Equipped with an enhanced **4R** four-roll feeder for a smoother and stable wire feed, as well as connectors for 5m MIG torches, and room to fit a **D300** wire spool. It has a **5" LCD** display, for intuitive and easy operation in 5 languages. It offers a **comfortable**, quiet operating mode (**FAN STOP**) that saves energy. Can weld any of **3 methods: (MIG/MAG-AUTO)**, electrode (**MMA**) and **LIFT-TIG**.

The **iTECH MIG 280 4R** is all about intuitive operation and advanced functionality, for individual adjustment of settings in **PULSE, DUAL PULSE** and **INDUCTANCE** technologies. The unit has a **3-metre all-copper 4x4 [mm²]** 450V/750V power cable and a **3-metre all-copper 25 [mm²]** ground cable. The kit includes a 3-metre electrode holder and a **4-metre KD24 torch**.

The **iTECH MIG 280 4R** is ideal for **welding materials with thicknesses from 0.5 [mm] to 23 [mm]:**

- light industry (aluminium structures, stainless steel tanks),
- in the metalshop (welding of half-shafts, welding of balustrades),
- at home (repair of backhoe blades, manufacture of gates and fences).

PRODUCT DETAILS

- **PULSE** and **DUAL PULSE** welding, for better transfer of the filler metal into the welding pool, boosting the quality and strength of the joint. The high welding current (280 A) and 400 V power supply is good for welding thicker structural elements.
- The welder comes with a **4 roller wire feeder**, so the wire is fed smoothly and steadily as required. The redesigned feeder can connect **long MIG torches**.
- **MIG/MAG AUTO system** - after selecting the material, thickness and wire diameter the machine can auto adjust the welding parameters.
- Welder with an easy-to-read **5" LCD display**, **five selectable languages** and **18** memory channels to save your settings.
- Welds in 4 methods: **MIG/MAG AUTO, MIG/MAG, LIFT-TIG** and **MMA**.
- The **FAN STOP** system switches off the fan at idle so even a powered up and fully functional welder is silent, saves energy and attracts no dust. The fan automatically switches on when welding starts.
- Can connect a **SPOOL GUN** holder (with integrated wire feeder) for better material transfer to the weld.
- **Lamp inside the welder** for easy wire change in the wire feeder.
- **Push** button for quick wire ejection (**inching**).
- Welder **on a sturdy cart** with space enough for cylinders up to **50L**. A **chain to secure the cylinder** and **hooks** for transporting the machine are included.
- The device adjusts the welding current in the **LIFT-TIG** method after setting the material thickness. In the **MMA** method, the device suggests the electrode diameter, together with the material thickness adjustment and intelligent parameter selection.
- **Convenient dials** and a **clear panel** make it easy to set the welder up quickly, even when wearing welding gloves.
- Features **2T** and **4T** options to make longer welds more comfortable.
- **SPOT functions** designed for spot welding. The machine has a preset heat-up time and the operator just sets the welding current. This function is most commonly used in auto repair shops.

- Functions **S_2T / S_4T** combines two welding techniques. Spot welding, for shielding gas before and after the welding process. In addition, a **2T** and a **4T** are combined to create the **S_2T/S_4** method, so welding starts and stops correctly.
- It is built with high performance **IGBT** components.
- Gas heater connector (**36 V**) - use the socket to connect the regulator with the heater or the heater itself and heat the gas to a positive temperature.

MIG/MAG AUTO welding

- The automatic setting of the welder: after specifying the material and thickness; and diameter of the wire, the machine adjusts to optimal welding parameters. Manual fine-tuning of the welding current lets you adjust the parameters individually.
- Choice of 4 welding methods, brazing option.
- **PULSE** welding, for better transfer of filler material into the weld pool, boosting the quality and strength of the joint.
- Choice of **2T/4T**, for making longer welds in better comfort.
- Choice of weld material (**Carbon steel, Stainless steel, Al-S** - soft aluminium, **Al-Mg** - hard aluminium, **Cu-Si** - brazing).

MIG/MAG welding

- **PULSE** welding, for better transfer of filler material into the weld pool to boost the quality and strength of the joint.
- **2T/4T** selection, so longer welds are made in better comfort.
- **SPOT** welding functions and **S_2T** and **S_4T** welding support, i.e. gas shielding before the welding process from a lower current to base current and finally lowering the current to the crater quench setting and using gas shielding until the process is completed.
- Welding material selection (**Carbon steel, Stainless steel, Al-Si** - soft aluminium, **Al-Mg** - hard aluminium, **Cu-Si** - brazing).
- Selection of weld material thickness.
- **Determination of wire diameter.** In Al-Si and Al-Mg (**range 1.0-1.2 [mm]**), other materials from (**0.8-1.2 [mm]**).
- **Setting of wire feed** speed [m/min].
- **Welding current voltage** setting [V].

- **Adjustment of inductance** \pm [%].
- **Pulse frequency setting** in pulse mode [Hz].
- **Pulse cycle adjustment** [%].

MIG/MAG DUAL PULSE welding

- **Peak feed** speed [m/min].
- **Base wire feed** speed [m/min].
- **Adjustable** double pulse **frequency** [Hz].
- **Adjustable** double pulse **duty** [%].

MMA welding

- **Hot Start** - temporary boost in the welding current for better performance.
- **Arc Force** - adjusts the welding arc length, to reduce or increase the depth of fusion and reduce spatter.
- **VRD** - turns off the arc when the electrode detaches from the material for a safer welding environment.
- **Anti Stick** - easier electrode detachment in the event of sticking.

LIFT-TIG welding

- **Adjustable welding current** [A], once set the welder prompts the thickness of the sheet metal.
- The **LIFT-TIG** function is equipped with a **SOFT START** module, for no risk of damaging the electrode when starting the welding process.

Can return to factory settings by holding the "Return" button.

TECH SPECS

POWER SUPPLY PARAMETERS

Power supply: 400 V

Frequency: 50/60 Hz

Idling voltage: 74 V

TECHNICAL PARAMETERS

• MIG welding current: 40-280 A

• MIG welding voltage: 16-28 V

• MIG efficiency (at 40°C):

30%/280 A/28 V

60%/198 A/23.9 V

100%/153 A/21.7 V

• TIG welding current: 10-280 A

• TIG welding voltage: 10.4-21.2 V

• TIG efficiency (at 40°C):

30%/280 A /21.2 V

60%/198 A/17.9 V

100%/153 A/16.1 V

• MMA welding current: 30-280 A

• MMA welding voltage: 21.2-32 V

• MMA efficiency (at 40°C):

30%/280 A/31.2 V

60%/198 A/27.9 V

100%/153 A/26.1 V

• Feeder: 4 R

• Wire spool diameters: D200, D300

• Maximum spool size: 5[kg], 16[kg]

• Wire diameter for use in the welding machine: 0.8/1.0/1.2 [mm].

PHYSICAL SPECS

• Length x width x height of the welder with cart when the unit is folded:

89 × 51 × 81 [cm].

• Length x width x height of packaging, inside set with cart:

74 × 43 × 90 [cm].

• Weight of unit: welder [net] 49 [kg], in box [gross] 62 [kg]

• Degree of housing protection: IP21S

• Cooling: fan

ADDITIONAL FUNCTIONS

• 4-roll wire feeder for smooth filler material transfer: yes

• PULSE and DUAL PULSE for better quality welding: yes

• FAN STOP - switching off the fan when not in use: yes

• Connection for quick-connect gas hose (TYPE 21): yes

• Gas heater connection: yes

• SPOOL GUN external wire feeder connection: yes

• VRD voltage reduction and safety improvement: yes

• Arc Force welding arc length control: yes

• Hot Start rapid arc ignition: yes

• Anti sticking electrode: yes

• Cart: yes

• Memory channels: 18

WHATS IN THE BOX?

- **SKANDI KRAFT iTech MIG 280 4R** welder with integrated 3-metre 4x4 [mm²] power cable
- MIG welding holder MB 24 4-metre with Teflon-graphite insert
- Additional blue steel insert 4 m for MB 24 holder for welding with 0.8 -1.0 [mm] wire diameter
- All-copper electrode holder 3 metres, cross section 25 [mm²]
- Wire rollers: for aluminium 2x 1.0-1.2U, for carbon steel 2x 0.8-1.0V
- Wire feeder rollers size 22/10/30 [mm]
- Gas cylinder mounting components: 2 x gas regulator mounting clamps, 2-metre gas hose, spanner, Allen key
- Current pins for handle KD24, MB24 (1x 0.8; 1x1.0; 1x1.0 ALU; 1x1.2 ALU)
- Bushing with spring for guiding the welding wire to the feeder.
- Instructions.

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