



# TECMEN



MMA



MIG/MAG



TIG



FLUX-CORED



PLASMA



GRIND



## FreFlow™ V3

Respiratory Welding Helmet

Filter efficiency  
≥ 99.97%



Easy  
Operation



Hard Hat  
Adapter



Curved 3D  
Feature



High-impact  
Resistance



Wide  
Application



Patented  
Headgear



Applicable  
with PAPR



Side  
Lens



## Product Features

### Flip-up design

Easy lift up for grinding function, suiting welding / cutting / grinding mode.

### Large view for grinding

20 x 12 cm area, large and curved transparent grinding anti-fog lens.

### Rechargeable Li-ion battery

Rechargeable battery for longer lifetime.  
Fast-charging option makes charging only 1 hour.



### Respiratory protection

Filter efficiency  $\geq 99.97\%$ , preventing inhalation of dust, pollutants, fine particles as well as other contaminants.

### Intelligent air supply

Respirator will self-adjust the flow rate according to the blockage of the filter automatically.

### Real-time display indicator

Filter status / airflow rate / battery capacity indicator, real-time monitoring and displaying.

### Auto-alarm system

Flashing indicator, beeping sound, together with vibrating blower to ensure safety.

## Respirator Specifications

Airflow Rate	Low speed: 170+lpm (6+cfm) High speed: 210+lpm (7.4+cfm)
Battery Type	Rechargeable Li-ion Battery
Battery Duration	9 hours (Standard battery, 170+lpm) 5 - 6 hours (Standard battery, 210+lpm) 15 hours (Extended battery, 170+lpm) 9 hours (Extended battery, 210+lpm)
Battery Charge Time	1 hours (Standard battery) 2 hours (Extended battery)
Battery Life	$\geq 500$ charges
Filter Efficiency	$\geq 99.97\%$
Alarms	Visible, Audible and Vibrate
Operating Temp.	$-5^{\circ}\text{C} \sim +55^{\circ}\text{C}$ ( $23^{\circ}\text{F} \sim 131^{\circ}\text{F}$ )
Storing Temp.	$-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$ ( $14^{\circ}\text{F} \sim 131^{\circ}\text{F}$ )
Operating Relative Humidity	$< 90\%$
Storage Relative Humidity	$< 85\%$
Weight (Blower Unit+Battery)	1020 g
Respirator Approval	EN 12941 TH3 P R SL NIOSH 42 CFR Part 84 AS/NZS 1716 

## ADF Specifications

Optical Class	1 / 1 / 1 / 1
Viewing Area	107 x 75 mm (4.21" x 2.95")
Cartridge Size	156 x 123 x 33 mm (6.14" x 4.84" x 1.30")
Arc Sensor	4
Light State	DIN 4
Grind State	DIN 4
Cutting Shade	Shade No. from 5 to 8
Welding Shade	Shade No. from 9 to 13
Shade Control	Internal, Digital Display Control
Power On / Off	Automatic On / Off
Sensitivity Control	Low ~ High, Digital Display Control
UV / IR Protection	Up to Shade DIN16 at all times
Power Supply	Solar cell. Battery replaceable, 2 x CR2450 lithium battery
Switching Time	1/25,000 s. from Light to Dark
Grinding	Yes
Delay (Dark to Light)	0.1 ~ 1.0 s, Digital Display Control
Low Amperage TIG Rated	$\geq 2$ amps (DC); $\geq 2$ amps (AC)
Operating Temp.	$-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$ ( $14^{\circ}\text{F} \sim 131^{\circ}\text{F}$ )
Storing Temp.	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$ ( $-4^{\circ}\text{F} \sim 158^{\circ}\text{F}$ )
Helmet Material	High Impact Resistance Nylon
Approved	



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