

TECMEN TM820

The Slimline Welding Helmet for Confined Spaces

Crystal-clear vision in a compact, low-profile design – ideal for welding in tight or hard-to-reach areas. This helmet is built for daily tasks, providing protection without added weight, and integrates seamlessly with the FreFlow blower unit to keep welders breathing safely and easily.

Why Choose the TM820?

Designed for welders who need a no-fuss, reliable helmet, the TM820 offers crystal-clear vision in a compact, slimline design. Its lightweight build makes it ideal for confined spaces, overhead work, and all-day use, reducing neck strain without compromising protection. A cost-effective choice for welders who need trusted performance and durability, the TM820 delivers clarity, comfort, and ease of use—making it the go-to helmet for everyday welding tasks.



Options:



TM820 with FreFlow
Code: WSHWR82002



TM820 for FreFlow
Code: WSHWR82001



TM820 Helmet Only
Code: WSHWR82000

TM820

Lightweight, Best optical class
1/1/1/1 with true colour



Intelligent arc sensor technology

Not affected by natural/surrounding light,
stable outdoor performance.

Large 95x85mm viewing area

Aluminium heat shield

Reflects heat away from the welder and
lens, for continuous high amp welding.

Superior lens technology

Best optical class 1/1/1/1 to bring true
colour and clear vision to the welder.
1 Optical class: No distortion.
1 Light diff vision: No double vision.
1 Homogeneity: No shade variation.
1 Angle dependence: Shade remains
consistent when looking at any angle.



External grinding control

Allows quick switching from welding
to grinding and back without lifting the
welding hood or removing gloves.

Multi point adjustable headgear

Well balanced design,
maximum comfort level.

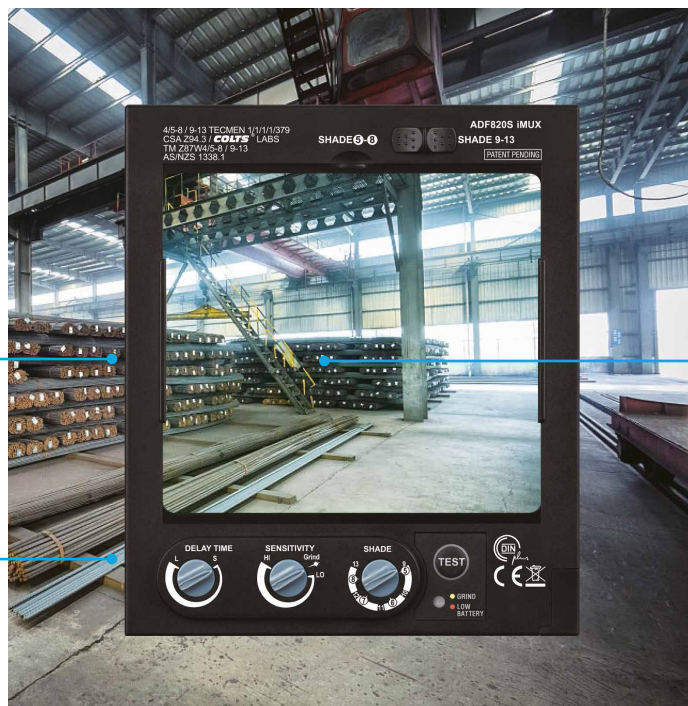
High impact resistance

Australian and New Zealand
Standard AS/NZS 1337.1 compliant.

2 year auto-darkening lens warranty

Solar powered with battery backup.
Automatic on/off, so ready to weld at
any time. Low amperage TIG rated
down to 2 amps.

Weld shade 9 - 13
Cutting shade 5 - 8
Sensitivity adjustment Lo - Hi
Delay adjustment Long - Short



True colour lens

Bringing realistic colour
to the welder's world.
No more green environment
with weak colour contrasts.

TM820 FreFlow PAPR

All the great benefits with the powered air-purifying respirator.



TM820 Specifications, Parts & Accessories



TM820 Welding Helmet Specifications

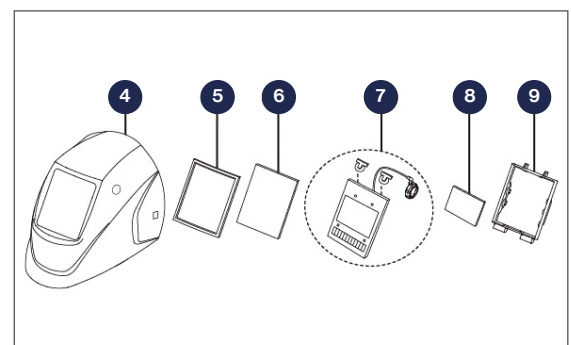
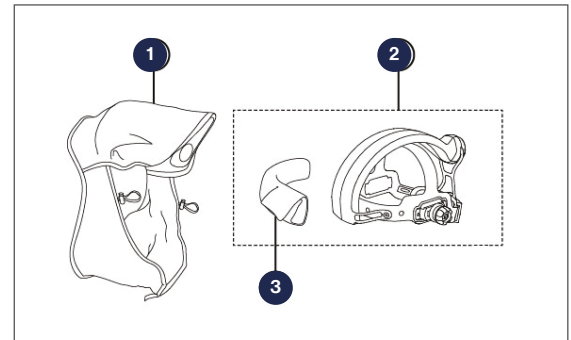
| | |
|-----------------------------------|--|
| Optical Class | 1/1/1 highest optical class with high definition lens technology (EN379) |
| Viewing Area | 95 x 85mm |
| Lens Shade | Variable Shade 5-8 / 9-13 |
| Light State | DIN 3.5 |
| Shade Control | Internal |
| Sensors | 4 |
| On/Off | Automatic On / Off |
| Power Supply | Solar cell + Battery replaceable, 1*CR2450 lithium battery |
| Switch Time | 1/25,000 s. from Light to Dark |
| Sensitivity Control | Low-High, by infinite dial knob |
| Delay Time (Dark to Light) | 0.1-1.0s by infinite dial knob |
| Low TIG Amps Rated | 2 amps |
| Grind Mode | Yes, External grinding button |
| Helmet Weight | Standard Helmet 645g, Respiratory version 880g |
| Magnification Lens | Lens holder, to fit standard 108x51 magnification lenses |
| Operating Temperature | -10°C to +55°C |
| Storing Temperature | -20°C to +70°C |
| Application Range | Stick Welding (DC&AC). TIG(DC,DC Pulse);TIG AC(Pulse),Excellent low amperage TIG response. MIG/MAG; MIG/MAG Pulse. Plasma Cutting/ Welding; Grinding; Oxyacetylene Welding/Cutting; |
| Warranty | Auto darkening lens: 2 years |
| Standards | Helmet: AS/NZS1337.1:2010 High impact rated Lens: AS/NZS1338, EN379 |
| FreFlow connection | Bayonet connect hose |

Spare Parts

| Item | Qty | Code |
|---------------------------------|-----|------------|
| 1 Face seal | 1 | WSHWR82016 |
| 2 Headgear with air connection | 1 | WSHWR82015 |
| 2 Headgear (non-air) | 1 | WSHWR82014 |
| 3 Sweatbands | 1 | WSHWR82006 |
| 3 Sweatband for Freflow | 1 | WSHWR82005 |
| 4 Helmet Shell | 1 | WSHWR82017 |
| 4 Helmet Shell for FreFlow | 1 | WSHWR82018 |
| 5 Rubber frame | 1 | WSHWR82007 |
| 6 Outside cover lens | 1 | WSHWR82003 |
| 7 Auto darkening filter(ADF820) | 1 | WSHWR82012 |
| 8 Inside cover lens | 1 | WSHWR82004 |
| 9 Lens Holder | 1 | WSHWR82008 |

Optional

| Item | Qty | Code |
|---|-----|------------|
| 10 Front Leather Throat Protection | 1 | WSHWR95040 |
| 11 Rear Extended Hood able to fit to most Welding Helmets | 1 | WSLCHX0200 |
| 12 Tecmen TM820 Helmet Adapter for Hardhat | 1 | WSHWR82050 |



10 Front Leather Throat Protection

- Added leather throat protection for TECMEN welding helmets.
- Protects your neck and upper chest/shoulders from molten metal, sparks and flames.

12 Helmet Adapter for Hardhat

- Adapter to attach your hardhat to the Tecmen TM820 welding helmet. Designed to fits most hardhats.

