

COLD LIQUIDS

SAFETY EQUIPMENT



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EYE PROTECTION



Afrox Wraparound Specs

Ultra-lightweight design for comfort and balance. Large moulded-in side shield for extra protection. Polycarbonate lens for high impact resistance and UV absorption. Available in clear shade lens and amber shade lens. Meets ANSI Z87.1 and CE EN166

Description	Item Number
Clear	W053730



Afrox Wraparound Vented Specs

Lightweight wraparound design. One-piece distortion-free polycarbonate lens which eliminates lens dislodging on impact. Improved comfort and peripheral vision. Temple venting system which allows air flow to reduce heat build-up. Interlocking temple hinge which reduces temple dislodging. Available in clear shade lens and green shade 2,5 lens. Meets ANSI Z87.1 and CE EN166

Description	Item Number
Clear	W053135



Afrox Medium Range Specs

Ultra-light and ultra-durable for a consistently secure and comfortable fit. 9,5 base lens provides more than 180 degrees of coverage. High impact 100% polycarbonate lens is scratch resistant, reduces static and eliminates more than 99,9% of harmful UV-A and UV-B rays. Available in clear shade lens and smoke shade lens. Meets ANSI Z87.1 and CE EN166

Description	Item Number
Smoke	W053731



Grinding Goggles Heavy Duty

Lightweight soft PVC frame fits comfortably to contours of face. Spectacles can be worn underneath. Impact resistant and optically correct lens. Diamond anti-fog coating and anti-scratch. Meets ANSI Z87.1 and CE EN166

Item Number	W012799
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Welding Goggles

50 mm lift-front goggle. Soft PVC (free from cadmium). Coated frame. Lift-front locks in open or closed position. Adjustable elastic headband. Four capped vents ensure good indirect ventilation. Suitable for use over prescription eyewear. Meets ANSI Z87.1 and CE EN 175

Item Number	W012257
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PROTECTIVE CLOTHING



Chrome Leather Apron

- Chrome leather welding apron with bib and reinforced straps
- 90 x 60 cm

Item Number

W053076



Leather Apron

- Furniture leather apron with bib, reinforced strap attachments, suitable for welding
- 60 x 90 cm

Item Number

W050228



Standard Leather Spats

- Full boot/shoe coverage and protection

Item Number

W053071

HEAD & FACE PROTECTION



Transarc® OHE410 Auto-Darkening Helmet

- High quality electronic welding helmet built to exacting professional standards
- Provides complete, reliable lightweight protection and is also extremely comfortable to wear
- Equipped with a high quality shade 4/9-13 electronic auto-darkening filter lens
- Switching time from clear to dark is approx. 0,005 s (0,5 ms), providing quick and effective protection
- Powered by solar cells with an enclosed back-up lithium battery
- Ability to work hands-free
- Optimal protection from eye damage caused by the welding arc

Description	Item Number
Transarc® OHE410 Auto-Darkening Helmet	W500063
Transarc® OHE410 Replacement Auto Lens	W500064
Transarc® OHE410 Inner Protect Lens PO10	W500065
Transarc® OHE410 Headgear Incl Nut Bolts	W500066
Transarc® OHE410 Comfort Band PO2	W500067
Transarc® OHE410 Outer Protect Lens PO10	W500068
Transarc® OHE410 ADF Frame Retainer	W500069



Afrox Industrial Self-Darkening Helmet

- Full protection of the ears, neck and throat
- Made from PA material with rubber fibres (almost unbreakable, high temperature resistance)
- Lightweight, well balanced helmet
- Enlarged space in front of the mouth and nose for more comfortable breathing (reduction of CO₂ concentration)
- Smooth round edges all around the perimeter for better comfort
- Aerodynamic design for fume deflection
- Front loaded ADF, easy to change the front cover plates
- Adjustable shade 9 - 13
- Adjustable sensitivity
- TIG detection down to 5 amp
- Optical quality 1/1/1/1
- 3 year warranty

Description	Item Number
Afrox Industrial Self-Darkening Helmet	W053221
Afrox Industrial and Afrox Elite External Lens Covers 10 pck	W053153
Afrox Industrial Internal Lens Covers 10 pck	W053154

11



Electronic Lens for Afrox Industrial

- Adjustable shade 9 - 13

Item Number	W053211
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Afrox Scull Cap with Back Flap

- Worn under helmet for head and neck protection
- Applications: MIG and electrical arc welding

Item Number	W053033
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Helmet Flip Front 108 x 51 mm

- Polypropylene welding helmet for MIG, TIG and arc welding
- Lightweight and perfectly balanced for comfort
- Offers full protection and complies with EN175
- Extremely flexible, strong, moisture resistant and naturally heat resistant
- Flip front lens holder
- Fully adjustable ratchet type headgear by push button

Item Number W053151



Filter Lenses

Our shaded and clear lenses are a standard size of 108 x 51 mm replacements for flip front helmets. They offer high quality eye protection for all types of arc welding, including the necessary protection against ultra-violet rays. Clear cover plates, inserted in front of the shaded lenses protect them from molten metal spatter and typical wear.


Uom	Description	Weld Current Range	Process	Process Area	Item Number
Proclear					
Each	Clear glass	All	All	Indoor/outdoor	W053046
Protec					
Each	1 000 hr clear lens	All	All	Indoor/outdoor	W053157
Polytec					
Each	Inner clear lens (impact)	All	All	Indoor/outdoor	W053158
Protane 8					
Each	Protane 8	Up to 100 A	MMA	Indoor/outdoor	W053165
Protane 10					
Each	Protane 10	100 to 200 A	MMA	Indoor	W053161
Protane 12					
Each	Protane 12	Over 300 A	MMA	Indoor	W053160

HAND PROTECTION



Working Leather Gloves

Replacement Item Image	Material Name	Detailed Description	Size and Length of Glove	Material Makeup	Certification	Material Number
	Candy striped cow split leather working glove	Inside elastic back, three-piece patched palm. Leather winged thumb and index finger. Protective leather strap on knuckles. Lined palm and wrist protector	26,67 cm length, 13 cm width of palm. Economic laminated 6,5 cm cuff	Cow split leather and cotton, light cotton or polyester palm lining	CE EN3880-2123	W051001
	Short leather working glove	Chrome cow split leather. Unlined. Polypropelene stitching. Lock and back stitched seams	27 cm length, 12,5 cm width of palm. 7 cm chrome leather cuff	Cow split leather glove and cuff with polypropelene thread	N/A	W051005

Synthetic Gloves

Replacement Item Image	Material Name	Detailed Description	Size and Length of Glove	Material Makeup	Certification	Material Number
	Latex coated assembling glove	Latex coated glove. Textured natural latex palm on a 10 gauge polycotton knit liner. Comfortable fit. Knit wrist. Excellent grip and flexibility	26 cm length, 11,5 cm width of palm	10 gauge polycotton knit liner. Latex coated palm and fingertips	CE420&388-4142	W051033



Welders' Gloves

Replacement Item Image	Material Name	Detailed Description	Size and Length of Glove	Material Makeup	Certification	Material Number
	Classic red welders' gauntlet	Red split leather welding gauntlet, fully lined for comfort and feel. Stitched with fire retardant thread to provide extra strength and durability. All cow split leather. Polycotton lining. Lock and back stitched	40 cm length, 13,5 cm width of palm	Cow split leather. 1,3 mm up thickness. Polycotton lining	N/A	W051021
	Classic blue and yellow welders' gauntlet	High quality blue butt hide gauntlet with reinforced palm and knuckle bar. Fire retardant stitching provides additional strength and durability	40 cm length, 13,5 cm width of palm	Cow split leather. Thickness 1,3 mm up. Polycotton sock lining. Sock lined split leather gauntlet with reinforced palm and knuckle bar	N/A	W051023
	TIG welders' glove	High quality TIG glove made from soft pig grain leather on palm, and split leather cuff. Unlined. Lock and back stitched	28 cm length, 11 cm width of palm	Pig grain and split leather. Thickness up to 1,1 mm	N/A	W051024
	General purpose handling glove	All chrome double leather palm. Unlined. Lock and back stitched	30 cm length, 12,5 cm width of palm. 10 cm chrome leather cuff	Chrome leather. 1,2-1,4 mm thickness. Chrome leather gauntlet and cuff with polypropylene thread. Unlined	N/A	W051027

HEARING PROTECTION

Replacement Item Image	Item Description	Features	Noise Reduction	Certification	Item Number
	Arox Hush disposable corded earplug	Non-allergenic. Designed for high noise exposure	37 dB	N/A	W050781
	Arox exclusive earmuff	Enhanced noise reduction and comfort. Flexible padded headband. Dielectric design	30 dB	CE EN 352	W053038
	Arox Hush disposable uncorded earplug	Non-allergenic. Non-irritating. Designed for high noise exposure	37 dB	N/A	W050780
	Laser Lite disposable corded earplug - pack of 100	Non-irritating, non-allergenic. Ideal for small ear canals. Tapered and pre-shaped. Follows the contour of the ear canal. Easy insertion and a comfortable natural seal. Winged end promotes optimum insertion depth and easy grasp for removal	35 dB	N/A	W053702
	Howard Leight QB3 banded hearing protector	Semi-aural protection. Super soft pads rest outside the ear for outstanding comfort. Patented band design prevents ear pads from touching dirty or contaminated surfaces. Lightweight and portable - designed especially for environments with intermittent noise hazards	23 dB	N/A	W053040
	Laser Lite disposable uncorded earplug - pack of 200	Non-irritating, non-allergenic. Ideal for small ear canals. Tapered and pre-shaped. Follows the contour of the ear canal. Easy insertion and a comfortable natural seal. Winged end promotes optimum insertion depth and easy grasp for removal	35 dB	N/A	W053718

RESPIRATORY PROTECTION

Replacement Item Image	Item Description	Homologation	Features	Item Number
	Afrox Dust Mask FF2 - Pack of 20 Without valve	AZ 2006/26	<ul style="list-style-type: none"> ■ Afrox disposable respirators (maintenance-free) provide lightweight, comfortable protection against a variety of hazards at an economical price ■ Twin elastic headband, adjustable nose bridge and a foam rubber nose seal ■ High level of protection to include mechanically and thermally generated particulates up to 10 times the standard ■ Ideal for use when exposed to dust, silica, coal and lead dust, glass fibre and zinc oxide 	W053715
	Dust Mask FF2 - Pack of 10 With valve	AZ 2006/27	<ul style="list-style-type: none"> ■ Afrox disposable respirators (maintenance-free) provide lightweight, comfortable protection against a variety of hazards at an economic price ■ Twin elastic headband, adjustable nose bridge and a foam rubber nose seal ■ High level of protection to include mechanically and thermally generated particulates up to 10 times the standard ■ Ideal for use when exposed to dust, silica, coal and lead dust, glass fibre and zinc oxide 	W053716

AFROX SELF-RESCUE DIVISION (SRD)

AfroxPac self-contained self-rescuers (SCSRs) are closed-circuit, chemical oxygen generating, body-worn emergency breathing devices. They comply with the stringent SABS 1737 standard for SCSR which is a legislated requirement for any short duration body-worn SCSR deployed in South African mines.

AfroxPac SCSRs generate oxygen by reacting the moisture in the breath of the user with potassium superoxide contained within the device. This produces a rapid and effective supply of oxygen. At the same time carbon dioxide is absorbed by the chemical, making the device completely self-contained with no exposure to atmospheric toxins.

AfroxPacs are produced at Afrox's Germiston factory according to strict quality and environmental standards (ISO 9001 and ISO14001). Afrox has designed, manufactured and marketed AfroxPac SCSR since 1996.

By 2022, more than 550 000 Afroxpac self-contained self-rescuers had been supplied to the mining industry.



AfroxPac 35i

The AfroxPac 35i enhances the proven technology of the AfroxPac by improving the bag material and ensuring containment of the oxygen-generating chemical. This provides added protection against inadvertent exposure to high temperatures. The AfroxPac 35i has been proven in independent monitoring of thousands of units selected from the toughest of underground conditions to continue to deliver life-saving oxygen - on average at better than the rated duration of a new unit - even after years of exposure to harsh conditions.

- Self-contained, escape-type breathing apparatus, which mine workers can carry on their persons, for use in an emergency
- SANS 1737:2008 compliant
- Rated duration: 30 minutes at a ventilation rate of 35 $\text{L}\cdot\text{min}^{-1}$
- Ergonomically designed to be continuously worn on the body
- Oxygen source: potassium superoxide (KO_2)
- Silicone-based heat resistant breathing bag
- Internal seal ensures chemical containment and prevents migration of chemical to breathing bag



AfroxPac 35i Self-Contained Self-Rescuer

AfroxPac 35i is a self-contained, closed-circuit, chemical oxygen-generating, body worn escape type emergency breathing apparatus.

Rated Duration

30 minutes at a ventilation rate of 35 $\text{l}\cdot\text{min}^{-1}$

Resting Duration

>120 minutes at a ventilation rate of 10 $\text{l}\cdot\text{min}^{-1}$

Oxygen Generation

At Start-Up (1-2 minutes)	Spec: 19%	Typical: >20%
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In Use (10 minutes to termination)	Spec: 21%	Typical: >90%
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Carbon Dioxide¹

Maximum	Spec: 3%	Typical: < 2%
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Average	Spec: 1,5%	Typical: 1% at 30 min
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Breathing Resistance

Inhalation/Exhalation	Spec: 1 kPa	Typical: < 0,7 kPa
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Sum of Resistance	Spec: 1,6 kPa	Typical: < 1,3 kPa
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Functional Performance

Post-durability testing breathing duration >30 minutes



Mass

Full Set (Including case)	2,4 kg
Breathing Apparatus	1,2 kg

Dimensions

Height	195 mm
Width	172 mm
Hip-Out	101 mm

Oxygen Source

Potassium superoxide (KO₂)

Activation

Oxygen generation is initiated by moisture in the exhaled breath of the user. No 'self-starter' is required

Breathing Bag

- 9 l volume
- Silicone coated, heat resistant
- Chemical containment: internal seal on chemical canister prevents chemical migration to the breathing bag
- Comfort mouthpiece design reduces irritation and salivation

Shelf-Life

Exceeds 10 years on the storage rack. Specific conditions of use may reduce functional performance

Identification

Individual serialisation and month of manufacture

Batch Testing

Samples for independent functional performance batch testing by CSIR Consulting and Analytical Services are independently selected and tested at a rate of 0,5 – 1% of new production

¹Input CO₂ at 4,5% in exhaled gas



Kidney Support

A

- Can be fitted to standard mining belts

Item Number

W012923

Shoulder Braces

B

- Can be fitted to standard mining belts for support

Item Number

W012922



Anti-Vibration Box

- Durable stainless steel casing for storage of SCSRs on vehicles, etc.
- Protects SCSRs against undue vibration and shock
- SCSR readily accessible during an emergency

Item Number

W012838



Mining Belt

Standard mining belt - accommodates both the cap lamp battery and self-rescuer

Item Number

W012992



Chest Harness

Makes it possible to wear the self-rescuer on the chest in cases where SCSRs cannot be worn on the belt

Item Number

W012925



Heat Simulator

- The heat simulator complements the training of mine personnel in the use of self-contained self-rescuers (SCSRs)
- By breathing air from the heat simulator, mine personnel will experience the increase in air temperature that occurs during the actual usage of a chemical SCSR in an emergency situation

Item Number	W012916
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Disposable Mouthpieces for the Heat Simulator

- For hygienic purposes, disposable mouthpieces are issued to trainees for training on the heat simulator
- One-directional flow that prevents inhalation of air exhaled by other trainees

Item Number	W022010
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Storage Racks

- Special racks to accommodate the SCSRs. Two types of racks are available:
 - Wall-mounted racks - accommodate 100 SCSRs
 - Free-standing racks - accommodate 200 SCSRs, 100 on either side

Description	Item Number
Wall-mounted	W012991
Free-standing	W012940



AfroxPac Training Materials

- Easy to use and understand training materials will show workers the right procedures during emergencies and how the relevant equipment works. Available training materials* include:
 - Training and Instruction Manual
 - Trainer's AfroxPac
 - Trainee's AfroxPac
 - Training posters
 - Training & maintenance DVD in three languages
 - Training mouthpieces and nose clips
 - Hard hat stickers

*SRD should be contacted for more details on training material item numbers

Item Number	Various
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Disposable Training Mouthpieces

- Made from medical-grade polymer
- Simulate the AfroxPac mouthpiece
- Single-use for hygiene purposes
- Blanked-off to prevent exhaled breath entering the training AfroxPac
- Easy fit and removal from the training unit breathing hose
- Individually sterilised and packaged

Item Number

W012920

Customer Support

SRD offers support in the field to assist customers in maintaining their AfroxPacs in life-saving condition, to provide training to trainers and lamproom personnel and to furnish repairs quickly and efficiently. The SRD database maintains records of each unit sold, serviced and repaired as well as details of all training and certificates issued.

Quarterly Leak test and Condition Monitoring Service

The service entails the following:

The Afrox service technician and assistant shall, in the presence of the mine official, examine all available AfroxPacs at least once every three months to ascertain that:

- The tampering seals on the closing mechanism are intact
- The moisture indicator has not changed colour from blue to pink/white
- The clamping or closing mechanism is not damaged
- The belt loops are not damaged
- The exterior of the container does not show undue damage other than fair wear and tear
- In addition to the above, a negative pressure test is conducted on all units deployed on the mine.

A report will be compiled and forwarded to the mine. Cost of service is dependent on the number of units deployed and the distance to be travelled. Emergency and ad-hoc call-outs will be charged separately.

Monthly Maintenance Service

The service entails the following:

- Monthly visual inspections for two months per quarter and a quarterly leak test and visual inspection in the 3rd month of each quarter
- Preventative maintenance by replacement of any wear-and-tear damaged components. The cost of this is included in the monthly maintenance fee
- Isolation and quarantining of any mine-damaged units (these will be separately quoted for repair).

Repairs

- Units are collected from mines
- Quotations provided within one week
- Units repaired on receipt of written order and delivered back to the mine.

Customer Training

- A trainer is available for training at customer's site
- Certificates of training are issued
- Train the Trainer, Lamproom Maintenance and Leak Tester training is available.



It's all good **when a life depends on it**

The AfroxPac 35i, enhanced with new-age materials, superior chemical containment and shielded by added durable casing reinforcement, is more robust and heat-resistant than ever before. The AfroxPac 35i self-contained self-rescuer takes personal safety to another level, because your life depends on it.

Africa's leading gases and welding solutions partner.

Customer Service Centre: 0860 020202

Shop online: www.afroxshop.co.za

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