

# EYE PROTECTION

Designs for Comfort and Protection





## INTRODUCTION



Your eyes are your most important tools. And we at WORKSafe are committed to their protection. Our extensive range of eyewear can carry you from the workplace to the street. Dedicated to your eye protection needs, we spare no expenses and efforts to deliver the solid products you deserve.

## ASIAN FIT DESIGN

We understand the unique needs of workers in the region. That's why our eyewear is specially adapted for Asian Facial Structures. This ensures a secure fit every time you put them on, for uncompromised comfort and protection.

## SETTING THE STANDARD

All our WORKSafe eyewear comply with these two standards: Singapore's SS473:2011 and the American USA ANSI/ISEA Z87.1-2015, ANSI Z87.1-2010 or ANSI Z87.1-2003. Select models also comply with EN166:2001 and AS/NZS 1337.6:2007.

## WE PROVIDE A COMPLETE SERVICE

We value your time, and believe that your eyewear hunt should be as hassle-free as possible. Enjoy a seamless and customised experience when you choose WORKSafe eyewear.



### One Stop Solution

These opticians also man our fully equipped laboratory. Here, we can complete the whole process, from fabrication to delivery.



### Mobility

Our in-house licensed opticians are happy to come to you, providing on-site sight tests.



### Convenience

We have an expansive network of authorised optical retail outlets across Singapore. Order and collect with ease! Save time and unnecessary fees.



*\* Our Safety Prescription Lab: Our frames and lenses are tested twice. First at third-party testing labs, then once more in-house.*





## IN-HOUSE OPTICAL SERVICE

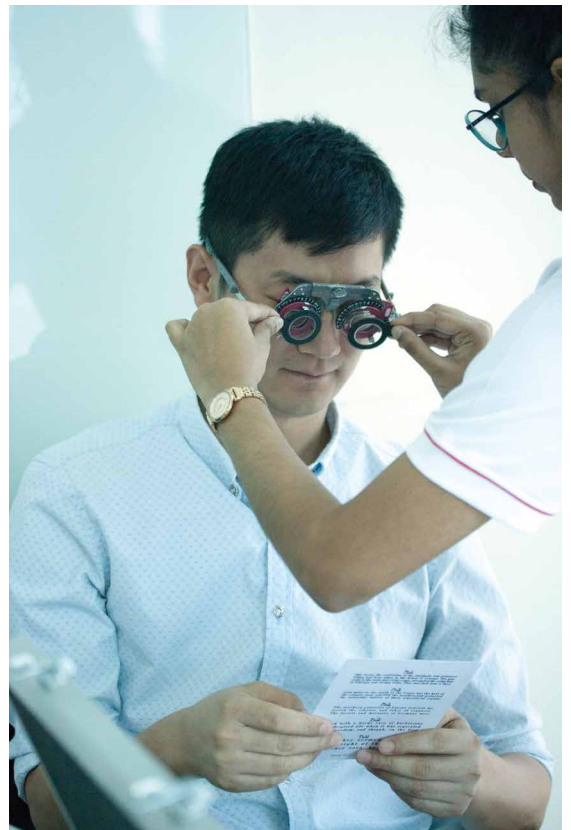
### PDS Safety Prescription (SRX) Eyewear Services

The concept of PDS Safety Prescription (SRX) Eyewear Services is based on a system of convenience, whereby we provide a complete service comprising refraction, edging, fitting and dispensing of SRX eyewear. Our in-house licensed opticians are certified by the Optometrists & Opticians Board (OOB) and Ministry of Health (MOH) Singapore.



## MOBILE OPTICAL SERVICES

Our opticians are happy to travel to your workplace to conduct the necessary optical tests. We provide a professional-grade eye screening at your convenience. Enquire today!



# **PRESCRIPTION EYEWEAR**







## VECTOR E3062

VECTOR glasses provide serious protection for serious work. Durable and rugged without sacrificing comfort, these reliable frames offer your eyes the defences they deserve.

- Patented detachable side shields can be removed in 2 easy steps
- Fold the temples and slide side shields outwards to unlock
- Lightweight and durable TR90 frame
- Impact-resistant polycarbonate side shields
- Integrated nose pads
- Tested to ANSI Z87.1-2015 standard and complies with SS473:2011 standards



### PRODUCT CODE

**340WSE3062-C1** | Matt Black frame,  
Clear lens HC

### PRODUCT CODE

**340WSE3062-C2** | Matt Red frame,  
Clear lens HC



## URANUS E3060

Simplicity isn't a bad thing: these glasses are a no-frills and effective option for defence, comfort and style. They also come with a rounded side shield that fits nicely on your cheek.

- Lightweight impact-resistant polycarbonate (PC) frame
- Broad impact-resistant side shield for side protection
- Integrated universal-fit nose pads
- Complies with ANSI/ISEA Z87.1-2015 and SS473:2011 standards



### PRODUCT CODE

**340WSE3060-C1** | Matt Black frame,  
Clear lens HC

### PRODUCT CODE

**340WSE3060-C2** | Matt Blue frame,  
Clear lens HC





## RETRO E3059

With detachable eye shields that affix onto a sleek frame, these timeless and classy glasses are right at home at the workplace and on the streets. Durable at work and fashion-forward on the streets, these adaptable glasses will serve you well.

- Fold the temples and lift and slide side shields outwards to detach them
- Impact-resistant polycarbonate side shields
- Slender and slim frame fits in most pockets of shirts and pants
- Durable stainless steel frame with lightweight temples
- Comfortable silicon nose pads
- Grippy thermoplastic rubber (TPR) temple tips
- Tested to ANSI Z87.1-2015 standard and complies with SS473:2011 standards



### PRODUCT CODE

<b>340WSE3059-C1</b>	Black frame, Clear lens HC
<b>SIZE</b>	58

## STEDA II E3055

Stronger, more durable and extra comfortable. The enhanced design of WORKSafe® Steda II - successor of our popular Steda, is now better with metal-free design.

- Lightweight impact-resistant nylon/polycarbonate frame
- Dual density injected anti-slip skull-grip temples
- Impact-resistant integrated TR90 side shields
- Comfortable ABS/thermoplastic rubber (TPR) browguard
- 3-point adjustable temple inclination for better fit
- Integrated universal-fit nose pads
- Metal-free: does not contain any metal parts
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



SINGAPORE  
REGISTERED  
DESIGN:  
D2009/260/B

### PRODUCT CODE

<b>340WSE3055-C2</b>	Matt Black frame, Clear lens HC
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### PRODUCT CODE

<b>340WSE3055-C3</b>	Wooden pattern frame Clear lens HC
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## STEED R E3052

Steed R, the superior successor of our most well-received model, is now enhanced with the addition of adjustable temple inclination.

- Lightweight impact-resistant TR90 frame
- Vented TPR browguard
- Dual density injected anti-slip skull-grip TR90 temples
- Impact-resistant integrated TR90 side shields
- 7-point adjustable temple inclination for better fit
- Soft thermoplastic rubber (TPR) universal-fit nose pads
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**340WSE3052A4C57** | Grey, Clear frame,  
Clear lens HC

## KUIPER E3045

The Kuiper, pronounced "KAI-PER", is capable of being a prescription protective eye glass, or just a simple piece of plano protective eyewear. Grip and comfort are its key-points. The Kuiper features extra-large super-grippy nose pads and large rubber-tipped temples.

- Lightweight hypo-allergenic full nylon frame
- Anti-slip skull-grip temples
- Impact-resistant integrated side shields
- Soft grippy thermoplastic rubber (TPR) universal-fit nose pads
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**340WSE3045-C1** | Coffee frame,  
Clear lens HC



### PRODUCT CODE

**340WSE3045-C2** | Charcoal frame,  
Grey lens HC



### PRODUCT CODE

**340WSE3045-C3** | Translucent Grey frame,  
Clear lens HC





## STEED E3041

A steed; a trusted companion; a dependable workhorse; made of durable long-lasting polycarbonate and lightweight TR90 plastic. For all-day comfort, the Steed sports a vented frame that helps with fogged lenses and comfy rubber tips on all skin-contact points. The Steed is also able to accommodate extremely high prescriptions and high astigmatism.

- Lightweight impact-resistant TR90 frame
- Vented thermoplastic rubber (TPR) browguard
- Dual density injected anti-slip skull-grip polycarbonate temples
- Impact-resistant integrated TR90 side shields
- Soft TPR universal-fit nose pads
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



SINGAPORE  
REGISTERED  
DESIGN:  
D2013/600/G

### PRODUCT CODE

**340WSE30411F57** | Blue, Frosted frame,  
Clear lens HC



### PRODUCT CODE

**340WSE30413C57** | Grey, Clear frame,  
Clear lens HC



### PRODUCT CODE

**340WSE30413F57** | Grey, Frosted frame,  
Clear lens HC



## RACER E3019

The WORKSafe® Racer is a sporty and stylish safety glasses featuring 4-point adjustable temple inclination to fit both Asian and Western facial profiles. Further equipped with RX insert, it is also suitable for individuals who need corrective lenses.

- Wraparound frame maximises peripheral vision and protection
- Dual density injected anti-slip skull-grip temples
- Soft rubber universal-fit nose pads
- Complies with EN166:2001 and SS473:2011 standards
- Tested to EN166:2001 standard and complies with SS473:2011 standards



*\*MOQ applies*

### PRODUCT CODE

**300WSE3019301** | Graphite frame,  
Clear lens HC/AF





## PLUTO E3014

WORKSafe® Pluto is a lightweight polycarbonate frame with tinted side shields moulded directly on the frame and temples to prevent glare and increasing protection.

- Lightweight impact-resistant polycarbonate frame
- Formable skull-grip stainless steel temples ensure a better fit
- Impact-resistant polycarbonate side shields
- Integrated universal-fit nose pads
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**340WSE3014A654** | Grey Translucent frame,  
Clear lens HC

## VESTA E3015

WORKSafe® Vesta combines both the weightlessness of a polycarbonate frame with the comfort of formable stainless steel temples.

- Lightweight impact-resistant polycarbonate frame
- Formable skull-grip stainless steel temples ensure a better fit
- Impact-resistant polycarbonate side shields
- Integrated universal-fit nose pads
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**340WSE3015S254** | Black frame,  
Clear lens HC



## MERCURY G2 E3013

The WORKSafe® Mercury G2, the successor of the best-selling Mercury E1140, is now sleeker and stronger than ever before.

- Corrosion-resistant stainless steel frame
- Formable rubber skull-grip stainless steel temples ensure a better fit
- Impact-resistant polycarbonate side shields
- Fully adjustable soft anti-slip silicone nose pads
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**340WSE3013A054** | Grey frame

**SIZE** | 54

## VENUS E4290

WORKSafe® Venus features strong, super-lightweight, TR90 premier polymer temples suitable for working conditions with vulnerability to corrosion.

- Corrosion-resistant, hypoallergenic stainless steel frame
- Formable temples ensure a better fit
- Impact-resistant polycarbonate side shields
- Fully adjustable soft anti-slip silicone nose pads
- Tested to ANSI Z87.1-2003 standard and complies with SS473:2011 standards



SINGAPORE  
REGISTERED  
DESIGN:  
D2011/735/J

### PRODUCT CODE

**340WSE4290SGS53** | Gunmetal/Green  
frame

**SIZE** | 53



### PRODUCT CODE

**340WSE4290SGS55** | Gunmetal/Green  
frame

**SIZE** | 55



### PRODUCT CODE

**340WSE4290B053** | Metallic Blue/Blue  
frame

**SIZE** | 53



### PRODUCT CODE

**340WSE4290B055** | Metallic Blue/Blue  
frame

**SIZE** | 55





## JUPITER E1370

- Corrosion-resistant stainless steel frame
- Formable stainless steel temples ensure a better fit
- Impact resistant polycarbonate side shields
- Fully adjustable soft anti-slip silicone nose pads
- Tested to ANSI Z87.1-2003 standard and complies with SS473:2011 standards



### PRODUCT CODE

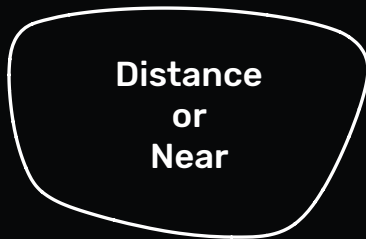
<b>340WSE1370SBS50</b>	Bronze frame
<b>SIZE</b>	50



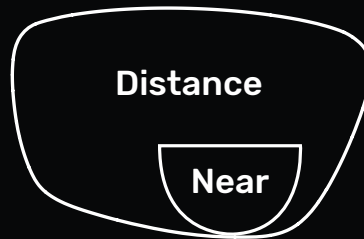




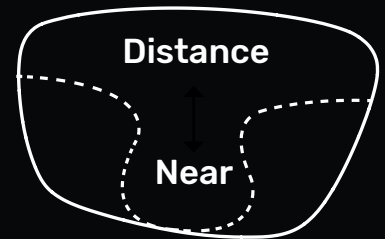
## SELECT THE TYPE OF LENS YOU NEED



Single Vision



Bi-focal flat top

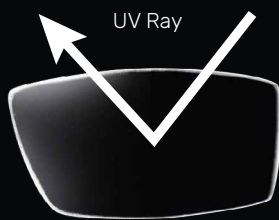


Progressive

## LENSES FEATURE

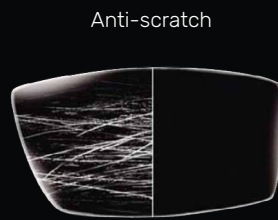
Hard coat lens (HC) provides scratch protection and hard multi-coat lens (HMC) prevents reflection.

### A) Three basic hard coat lenses (HC)



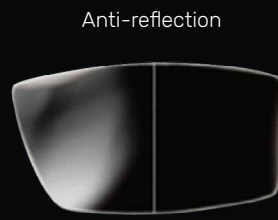
HC with UV lens

A special anti-UV coating reduces harmful radiation.



HC with hard multi-coat lens (HMC)

For increased protection against scratches.  
Improves vision by reducing reflections.



HC with tinted lens

Provides high-contrast vision. Also filters out UV and harmful blue light.

### B) Premium



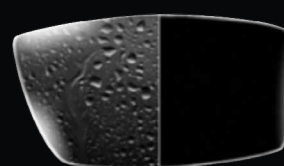
Photochromic (Clear to Grey)

Adaptable lenses that darken in sunlight to reduce UV ray exposure.



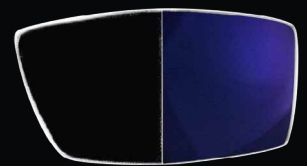
Anti-fog

Prevents misting from sudden temperature changes, improving vision.



Hydrophobic

Repels water, dirt and particles for clearer vision in wet environments.



Blue Ray

Specialised lenses that filter away blue light.



Mirror

One-way lenses that darken vision, useful for working in bright environments.



Polarized

Reduces glare from surfaces like glass, snow and water.



Transition  
Clear indoor Dark outdoor

The most popular type of photochromatic lenses.



# PLANO EYEWEAR





## AERO E3058

The WORKSafe® Aero is the successor to our popular A-Wing. Enjoy a stronger, and lighter design that is more comfortable and durable!

- Lightweight impact-resistant polycarbonate (PC) frame
- Dual density injected anti-slip skull-grip temples
- Integrated universal-fit nose pads
- Complies with ANZI/ISEA Z87.1-2015 and SS473:2011 standards



### PRODUCT CODE

**300WSE3058-C1** | Glossy Black frame,  
Clear lens HC



### PRODUCT CODE

**300WSE3058-C2** | Glossy Black frame,  
Indoor/Outdoor lens HC







## SABRE E3049

The WORKSafe® Sabre possesses thin rubberized temples, making it light, comfortable and grippy.

- Wraparound frame maximises peripheral vision and protection
- 3-point adjustable temple inclination
- Dual density injected anti-slip skull-grip temples
- Soft rubber universal-fit nose pads
- Complies with EN166:2001 and SS473:2011 standards



### PRODUCT CODE

**300WSE3049000** | Clear frame,  
Clear lens HC

### PRODUCT CODE

**300WSE3049020** | Clear frame,  
Indoor/Outdoor lens HC



## GLINDER E3048

The WORKSafe® Glinder features extendable temple length and temple inclination for a better fit. The vented soft-cushioned browguard helps absorb impact and channel sweat away from the eyes, providing extra comfort.

- Wraparound frame maximises peripheral vision and protection
- Dual density injected anti-slip skull-grip temples
- Soft rubber universal-fit nose pads
- 3-stage extendable temple length with 3-point adjustable inclination
- Vented soft-cushioned browguard and temple increase aeration and minimise fogging
- Complies with EN166:2001 and SS473:2011 standards



### PRODUCT CODE

**300WSE3048320** | Grey/Blue frame,  
Indoor/Outdoor lens  
HC

### PRODUCT CODE

**300WSE3048311** | Grey/Blue frame,  
Grey lens  
HC/AF

### PRODUCT CODE

**300WSE3048301** | Grey/Blue frame,  
Clear lens  
HC/AF





## WIDER E3050

The WORKSafe® Wider. Features a side-way 3-stage extendable self-locking tri-flex frontal frame that provides a better fit for both Asian and Western facial profiles.

- Wraparound frame maximises peripheral vision and protection
- Side-way 3-stage extendable self-locking tri-flex frontal frame
- Dual density injected anti-slip skull-grip temples
- Soft rubber universal-fit nose pads
- Complies with EN166:2001 and SS473:2011 standards



### PRODUCT CODE

**300WSE3050601** | White/Green frame,  
Clear lens HC/AF



### PRODUCT CODE

**300WSE3050311** | Grey/Blue frame,  
Grey lens HC/AF



### PRODUCT CODE

**300WSE3050320** | Grey/Blue frame,  
Indoor/Outdoor lens HC



## FOTZ E3017

The WORKSafe® Fotz is a sleek and sporty safety glasses that offers unparalleled comfort and protection with its wraparound frame and pressure-free nose pads. Uniquely designed temples and lens shape lend a sporty and trendy look to the user.

- Wraparound frame maximises peripheral vision and protection
- Soft rubber universal-fit nose pads
- Complies with ANSI/ISEA Z87.1-2010 and SS473:2011 standards



### PRODUCT CODE

**300WSE3017001** | Clear/Grey frame,  
Clear lens HC/AF



### PRODUCT CODE

**300WSE3017A611** | Grey Translucent frame,  
Grey lens HC/AF



### PRODUCT CODE

**300WSE3017A720** | Clear/Grey frame,  
Indoor/Outdoor lens HC





## ALCOR E3029

The WORKSafe® Alcor is designed to provide peripheral vision with a secure wraparound frame. The Alcor boasts an integrated brow guard to keep sweat and dirt away from your eyes.

- Wraparound frame maximises peripheral vision and protection
- Soft rubber universal-fit nose pads
- Complies with EN166:2001 and SS473:2011 standards



### PRODUCT CODE

**300WSE3029000** | Clear frame,  
Grey Translucent  
temples, Clear lens HC

### PRODUCT CODE

**300WSE3029A610** | Grey frame,  
Grey lens HC

### PRODUCT CODE

**300WSE3029A720** | Brown Translucent frame,  
Indoor/Outdoor lens HC



## ASTRIDER-E E3033

The WORKSafe® Astrider-E is an improved version of the popular Astrider. Featuring integrated cheek and side protectors, Astrider-E provides maximum protection for the user. Soft nose pads offer the wearer comfort all day long.

- Wraparound frame maximises peripheral vision and protection
- 3-stage extendable self-locking tri-flex temples with 3-point adjustable inclination
- Soft universal-fit nose pads
- Complies with ANSI/ISEA Z87.1-2010 and SS473:2011 standards



### PRODUCT CODE

**300WSE3033101** | Navy Blue frame,  
Clear lens HC/AF

### PRODUCT CODE

**300WSE3033111** | Navy Blue frame,  
Grey lens HC/AF







## SKYVO E197

The WORKSafe® Skyvo's unique curved lens lines your facial contours, giving you complete protection.

- Wraparound frame maximises peripheral vision and protection
- Integrated cheek guard for complete protection
- 3-stage extendable self-locking tri-flex temples with 3-point adjustable inclination
- Integrated universal-fit nose pads
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**300WSE197101** | Navy Blue frame,  
Clear lens HC/AF



### PRODUCT CODE

**300WSE197111** | Navy Blue frame,  
Grey lens HC/AF



### PRODUCT CODE

**300WSE197120** | Navy Blue frame,  
Indoor/Outdoor lens HC



## RAIDER E3011

The WORKSafe® Raider has opaque integrated side shields to block out glare and maximise protection. Lightweight Nylon frame available for Shiny Black frames.

- Wraparound frame maximises peripheral vision and protection
- Dual density injected anti-slip skull-grip temples
- Soft rubber universal-fit nose pads
- Complies with ANSI/ISEA Z87.1-2010 and SS473:2011 standards



### PRODUCT CODE

**300WSE3011S201** | Black frame,  
Clear lens HC/AF



### PRODUCT CODE

**300WSE3011S211** | Black frame,  
Grey lens HC/AF



### PRODUCT CODE

**300WSE3011A722** | Translucent Brown frame,  
Indoor/Outdoor lens HC





## CHASER E190

The WORKSafe® Chaser features flexible corrugated skull-grip temple tips for a more comfortable and secure fit.

- Lightweight impact-resistant polycarbonate frame
- Wraparound frame maximises peripheral vision and protection
- Soft rubber universal-fit nose pads
- Complies with EN166:2001 and SS473:2011 standards



### PRODUCT CODE

**300WSE19000** | Frosted Clear frame,  
Clear lens HC



### PRODUCT CODE

**300WSE19010** | Frosted Grey frame,  
Grey lens HC



## FIREFLY E622

The WORKSafe® Firefly's unique curved lens provides maximum protection along your facial profile.

- Lightweight impact-resistant polycarbonate frame
- Integrated cheek guard for complete protection
- Soft rubber universal-fit nose pads
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**300WSE62201** | Frosted frame,  
Clear lens HC/AF



### PRODUCT CODE

**300WSE62211** | Frosted Grey frame,  
Clear lens HC/AF



### PRODUCT CODE

**300WSE62220** | Frosted frame,  
Indoor/Outdoor HC



### PRODUCT CODE

**300WSE62230** | Frosted Grey frame,  
Grey Mirror lens HC





## MANTIS E122

WORKSafe® Mantis' lightweight wraparound lens maximises both peripheral vision and protection.

- Lightweight impact-resistant polycarbonate frame
- Wraparound frame maximises peripheral vision and protection
- Integrated cheek guard for complete protection
- Integrated universal-fit nose pads
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**300WSE12200** | Frosted frame,  
Clear lens HC



### PRODUCT CODE

**300WSE12210** | Frosted Grey frame,  
Grey lens HC



### PRODUCT CODE

**300WSE12220** | Frosted Grey frame,  
Indoor/Outdoor lens HC



## STRIDER I E261

WORKSafe® Strider I's integrated side shields maximise peripheral vision.

- Wraparound frame maximises peripheral vision and protection
- 4-stage temple extension for perfect fit
- Integrated universal-fit nose pads
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**300WSE26100** | Navy Blue frame,  
Clear lens HC



### PRODUCT CODE

**300WSE26110** | Navy Blue frame,  
Grey lens HC





## ACRUX E3022

The WORKSafe® Acrux is designed to provide maximum protection and comfort. Equipped with rubber temple tips, WORKSafe® Acrux provides a secure and comfortable grip.

- Wraparound frame maximises peripheral vision and protection
- Hi-visibility orange rubber temple tips for comfort and better grip
- Soft universal-fit nose pads
- Complies with ANSI/ISEA Z87.1-2010 and SS473:2011 standards

\* For export only

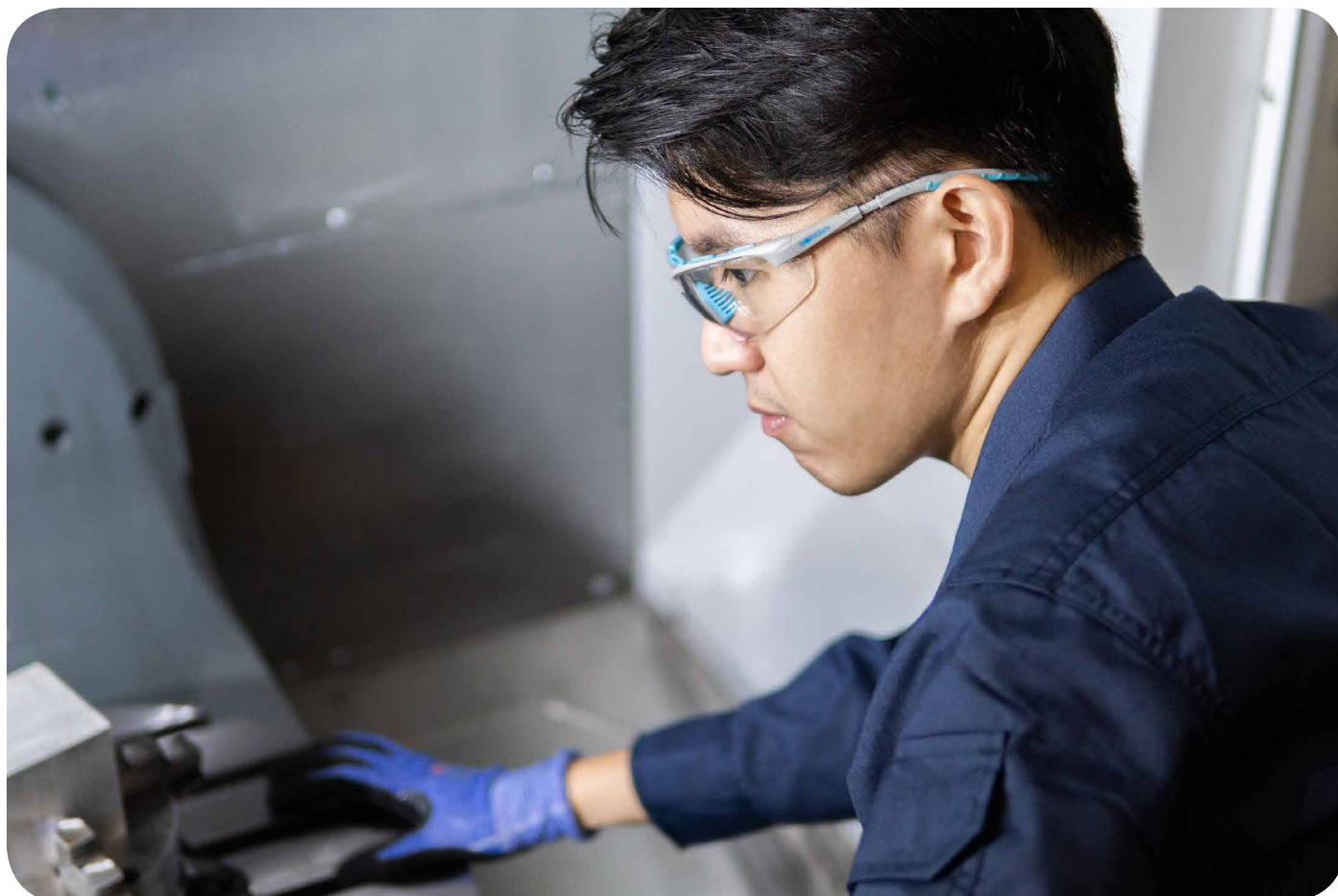


### PRODUCT CODE

**300WSE3022000** | Clear frame,  
Clear lens HC

### PRODUCT CODE

**300WSE3022A610** | Grey Translucent frame,  
Grey lens HC







## AIRSPEx E3032

Bid goodbye to boring overspecs design with the arrival of WORKSafe® Airspex. A fashionable piece with bold, sleekly designed ventilated temples and red rubber temple tips add a tinge of style and excitement to the user. WORKSafe® Airspex can be worn over prescription glasses or on its own as safety spectacles or sunglasses.

- Ventilated temples increase aeration and minimise fogging while upping the fashion quotient
- Dual density injected anti-slip skull-grip temples
- Complies with ANSI/ISEA Z87.1-2010 and SS473:2011 standards



### PRODUCT CODE

**300WSE3032301** | Graphite frame,  
Clear lens HC/AF

### PRODUCT CODE

**300WSE3032311** | Graphite frame,  
Grey lens HC/AF



## LESPEX E3030

The WORKSafe® Lespex can be worn over prescription eyewear or simply on its own. It is lightweight at 30g and built for comfortable wear.

- Wraparound frame maximises peripheral vision and protection
- Integrated universal-fit nose pads.
- Complies with EN166:2001 and SS473:2011 standards



### PRODUCT CODE

**300WSE3030000** | Frosted Clear frame,  
Clear lens HC

### PRODUCT CODE

**300WSE3030A610** | Graphite Translucent frame,  
Grey lens HC

### PRODUCT CODE

**300WSE3030A720** | Brown Translucent frame,  
Indoor/Outdoor lens HC





## DUOSPEX E387

A classic piece - unisex and sophisticated. Can be worn over prescription glasses or on its own as safety spectacles or sunglasses.

- Fits Western and Asian profiles
- Dual density injected anti-slip skull grip temples for snug fit
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**300WSE387201** | Matt Black frame,  
Clear lens HC/AF

### PRODUCT CODE

**300WSE387211** | Matt Black frame,  
Grey lens HC/AF



## V-SPEX EDK1

WORKSafe® V-Spex can be worn over prescription eyewear or simply on its own. It also features vented side shields to increase aeration and minimise fogging.

- Wraparound frame maximises peripheral vision and protection
- Lightweight impact-resistant polycarbonate frame
- Vented side shields increase aeration and minimise fogging
- Integrated universal-fit nose pads
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**300WSEDK100** | Clear frame,  
Clear lens HC

### PRODUCT CODE

**300WSEDK101** | Frosted Grey frame  
Grey lens HC





## STINGER E3031

WORKSafe® Stinger - an acetate anti-fog lens goggle that offers good protection. Its chemical-resistant lens is paired with a soft rubber nose that accommodates most Western and Asian facial profiles.

- Cellulose acetate anti-fog lens by Jebsen-Mazzucchelli, Italy
- 180° panoramic lens
- Soft flexi-rubber nose cushioning
- Integrated air ventilation system and cheek protector
- Fully adjustable headband
- Can be worn over prescription eyewear
- Suitable for use with half-masks and filtering face masks
- Complies with EN166:2001 F and SS473:2011 standards

### PRODUCT CODE

<b>310WSE3031-C2</b>	Translucent Clear frame, Clear AF lens with Black WORKSAFE® woven headband
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SINGAPORE  
REGISTERED  
DESIGN:  
D2013/439/B





## BLUESTEEL E304

The WORKSafe® Bluesteel safety goggles is built with an integrated ventilation system for people who wear prescription eyewear. Bluesteel goggles also offer unparalleled visibility with its anti-fog coating.

- Flexible body and anatomical nose cushioning adapts to face for snug fit
- Fully adjustable headband
- Integrated cheek protector
- Suitable for use with half-masks and filtering face masks
- Complies with ANSI Z87.1-2003 and SS473:2011 standards

### PRODUCT CODE

**310WSE304901** | Grey frame, Clear lens  
HC/AF, Dark Grey  
WORKSafe® headband



## ASTRONIX E302

The WORKSafe® Astronix provides unfettered side visibility with 180°-panoramic lens. Scratch-resistant and affordable, they can even be worn over prescription eyewear.

- Flexible body and anatomical nose cushioning adapts to face for snug fit
- Fits over most prescription eyewear
- Fully adjustable headband
- Integrated ventilation system and cheek protector
- Suitable for use with half-masks and filtering face masks
- Complies with ANSI Z87.1-2003 and SS473:2011 standards

### PRODUCT CODE

**310WSE302101** | Graphite frame, Clear lens  
HC/AF, Dark Grey  
WORKSafe® headband







## BIONIX E303

WORKSafe® Bionix is a wraparound panavision goggles with integrated ventilation system, dual density rubber body and soft rubber nose cushioning to provide total eye protection in optimal comfort, even in extreme situations.

- Can be worn over prescription eyewear
- Fully adjustable headband
- Integrated cheek protector
- Suitable for use with half-masks and filtering face masks
- Complies with ANSI Z87.1-2003 and SS473:2011 standards

### PRODUCT CODE

**310WSE303501** | Orange frame, Clear lens HC/AF,  
Dark Grey WORKSafe® headband



## STRIKE E301

WORKSafe® Strike safety goggles is designed for comfort. The upper and lower parts of the body are frosted to protect against light reflection and glare.

- Flexible body adapts to face for snug fit
- Fully adjustable headband
- Integrated ventilation system and cheek protector
- Suitable for use with half-masks and filtering face masks
- Complies with ANSI Z87.1-2003 and SS473:2011 standards

### PRODUCT CODE

**310WSE301101** | Frosted Clear frame,  
Clear lens HC/AF, Light Grey  
WORKSafe® headband



**WORKGard®**  
SAFETY MADE EASY



**WORKGARD  
EYEWEAR**



## WORKGard<sup>®</sup> FIREWING

Tastefully accented with a splash of colour, these futuristic frames offer no-nonsense protection at your workplace. Comfortable and light, you can wear these for hours on end!

- Clear and light translucent frame
- Durable hard coated lenses
- Integrated TPR nose pad
- Tested to ANZI/ISEA Z87.1-2015 and SS473:2011 standards



### PRODUCT CODE

**300WGE3064-C1** | Translucent clear frame,  
Clear Lens HC







## WORKGard® E3037

The WORKGard® E3037 safety glasses is a wraparound nylon frame with integrated side shields to maximise peripheral vision and protection.

- 3-stage extendable temple length for perfect fit
- Integrated universal-fit nose pads
- Complies with ANSI/ISEA Z87.1-2010 and SS473:2011 standards



### PRODUCT CODE

**300WGE3037S200** | Black frame, Clear lens HC

## WORKGard® E3038

The WORKGard® E3038 is a flexible safety goggle with integrated ventilation system for maximum comfort and protection.

- Fits over most prescription eyewear
- Fully adjustable headband
- Integrated ventilation system and cheek protector
- Suitable for use with half masks and filtering face masks
- Complies with ANSI Z87.1-2003 and SS473:2011 standards



### PRODUCT CODE

**310WGE3038A901** | Translucent Light Blue  
frame, Clear lens HC/AF,  
Black headband



SWORIKER<sup>®</sup> RX







## SWORKE® RX MAXIMUS X

SWORKE® Maximus X makes everything becomes exchangeable on an easy way. Changing your components is no longer belongs to be professional technique.

- Impact-resistant polycarbonate (PC) frame
- Dual density injected anti-slip skull-grip temples
- Easy exchangeable lens design
- Comfortable and exchangeable PC/thermoplastic rubber (TPR) browguard
- Easy adjustable TPR to stainless steel over moulding nose pads



### PRODUCT CODE

**300SWK3061-C1** | Matt black frame,  
Clear lens HC/AF



### PRODUCT CODE

**340SWK3061-C2** | Matt white frame,  
Clear lens HC/AF



### PRODUCT CODE

**330SWK3061-L04** | Maximus X Spare Lens,  
Photocromic HC  
(from Clear to Grey)



### PRODUCT CODE

**330SWK3061-L01** | Maximus X Spare Lens,  
Indoor/Outdoor lens HC



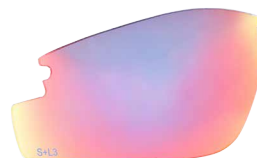
### PRODUCT CODE

**330SWK3061-L03** | Maximus X Spare Lens,  
Blue Revo HC



### PRODUCT CODE

**330SWK3061-L02** | Maximus X Spare Lens,  
Red Revo HC







**SWORKE<sup>®</sup> RX COBRA**

Technically majestic, this serpentine masterpiece brings the most versatility, style and safety.

- 5-point temple inclination allows greater fit
- Re-engineered enlarged venting ports along the brow of the facepiece aid in air movement and flux in high velocity conditions
- Tough and durable browguard channels perspiration away from your eyes
- Adjustable inclining sweat-resistant nose pads
- Switchable lens system
- Grippy wraparound temples maximises grip
- Removeable Rx lens carrier available for corrective vision
- Tested to ANSI Z87.1-2015 standard and complies with SS473:2011 standards



**PRODUCT CODE**

**300SWK3053M201R** | Matte Black frame,  
Clear lens HC/AF



**PRODUCT CODE**

**300SWK3053601R** | Shiny White frame,  
Clear lens HC/AF



**PRODUCT CODE**

**300SWK3053A601R** | Translucent Grey  
frame, Clear lens  
HC/AF



**PRODUCT CODE**

**330SWK3053L202S** | Cobra Spare Lens,  
Versa-lens HC



**PRODUCT CODE**

**330SWK3053L101S** | Cobra Spare Lens,  
Grey HC/AF



**PRODUCT CODE**

**330SWK3053L001S** | Cobra Spare Lens,  
Clear lens HC/AF





## SWORKE® RX PRIMUS

We wanted a bold frame, bold and tough as nails. So we engineered one.

- Broad frame provides the best molecular circulation - designed for ease of air flow
- Switchable lens system - choices of polarized lenses available
- Switch temples to adjustable headband for more vigorous activity
- Sweat-resistant nose pads and sponge browguard cushions against huge impact
- Removeable Rx lens carrier available for corrective vision
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**300SWK3002A001R** | Electric Matte Grey frame, Clear lens HC/AF



### PRODUCT CODE

**300SWK3002601R** | Shiny White frame, Clear lens HC/AF



### PRODUCT CODE

**300SWK3002S201R** | Shiny Black frame, Clear lens HC/AF



### PRODUCT CODE

**300SWK3002M201R** | Matte Black frame, Clear lens HC/AF



### PRODUCT CODE

**330SWK3002L593** | Primus Spare Lens, Red Revo Polarized HC



### PRODUCT CODE

**330SWK3002L393** | Primus Spare Lens, Blue Revo Polarized HC



### PRODUCT CODE

**330SWK3002L103** | Primus Spare Lens, Grey Polarized HC



### PRODUCT CODE

**330SWK3002LA892** | Primus Spare Lens, Purple Revo HC



### PRODUCT CODE

**330SWK3002L102** | Primus Spare Lens, Silver Revo HC



### PRODUCT CODE

**330SWK3002LA992** | Primus Spare Lens, Multi Revo HC



### PRODUCT CODE

**330SWK3002L101** | Primus Spare Lens, Grey HC/AF



### PRODUCT CODE

**330SWK3002LA101** | Primus Spare Lens, Yellow HC/AF



### PRODUCT CODE

**330SWK3002L001** | Primus Spare Lens, Clear HC/AF





## SWORKE<sup>®</sup> RX FUSCA

Designed as a middleweight technical frame, with all the necessities, and none of the bulk.

- Hydrophilic open-cell padded browguard protects against perspiration and other irritants
- Switchable lens system - choices of polarized lenses available
- Adjustable wire-framed rubber nose pads
- Grooved, rubber-lined wraparound temples maximise grip
- Removeable Rx lens carrier available for corrective vision
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**300SWK3053M201R** | Matte Black frame,  
Clear lens HC/AF



### PRODUCT CODE

**300SWK3053601R** | Shiny White frame,  
Clear lens HC/AF



### PRODUCT CODE

**330SWK3010LA403** | Fusca Spare Lens,  
Green Polarized HC



### PRODUCT CODE

**330SWK3010L103** | Fusca Spare Lens,  
Grey Polarized HC



### PRODUCT CODE

**330SWK3010L592** | Fusca Spare Lens,  
Red Revo HC



### PRODUCT CODE

**330SWK3010L302** | Fusca Spare Lens,  
Blue Revo HC



### PRODUCT CODE

**330SWK3010LA101** | Fusca Spare Lens,  
Yellow HC/AF



### PRODUCT CODE

**330SWK3010L001** | Fusca Spare Lens,  
Clear HC/AF





## SWORKE® RX CYCLONE-X

Constructed to complement both the Asian and Western facial anatomies. It is the second version of a hurricane-like technical sports frame.

- 3-point temple adjustments allow greater face & cheek coverage
- Switchable lens system - choices of polarized and photochromic lenses available
- Vented frame
- Grooved and rubber tipped wraparound temples maximise grip
- Removeable, sweat-resistant padded browguard
- Burlly rubber nose pads cushions impact
- Removeable Rx lens carrier available for corrective vision
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**300SWK3003S201R** | Shiny Black frame,  
Clear lens HC/AF



### PRODUCT CODE

**300SWK3003601R** | Shiny White frame,  
Clear lens HC/AF



### PRODUCT CODE

**300SWK3003D401R** | Shiny Olive frame,  
Clear lens HC/AF



### PRODUCT CODE

**330SWK3003L103** | Cyclone-X Spare Lens,  
Grey Polarized HC



### PRODUCT CODE

**330SWK3003L007** | Cyclone-X Spare Lens,  
Photochromic HC  
(from Clear to Grey)



### PRODUCT CODE

**330SWK3003L592** | Cyclone-X Spare Lens,  
Red Revo HC



### PRODUCT CODE

**330SWK3003L292** | Cyclone-X Spare Lens,  
Versa-Lens HC



### PRODUCT CODE

**330SWK3003L192** | Cyclone-X Spare Lens,  
Blue Revo HC



### PRODUCT CODE

**330SWK3003L101** | Cyclone-X Spare Lens,  
Grey HC/AF



### PRODUCT CODE

**330SWK3003LA101** | Cyclone-X Spare Lens,  
Yellow HC/AF



### PRODUCT CODE

**330SWK3003L001** | Cyclone-X Spare Lens,  
Clear HC/AF







## SWORKE<sup>®</sup> RX OPTIMUS 2

An evil twin. More hardcore, more extreme, enhanced technical frame. Optimus' bad-ass brother.

- 3-point temple inclination provides versatile fit
- Switchable lens system
- Lined with numerous venting ports for ease of air flow and enhanced circulation
- High density sweat-resistant closed-cell foam browguard cushions high strength impact
- Tough sweat-resistant nose pads enhance grip in motion and cushions against impact
- Motion stable frame with anti-slip wraparound frame resists shaking
- Removeable Rx lens carrier available for corrective vision
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



### PRODUCT CODE

**300SWK3012301R** | Pearl Graphite frame,  
Clear lens HC/AF



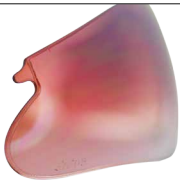
### PRODUCT CODE

**300SWK3012A301R** | Shiny Red frame,  
Clear lens HC/AF



### PRODUCT CODE

**330SWK3012L782** | Optimus 2 Spare Lens,  
Brown Revo 2Tone HC



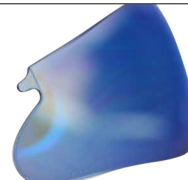
### PRODUCT CODE

**330SWK207L292** | Optimus 2 Spare Lens,  
Versa-lens HC



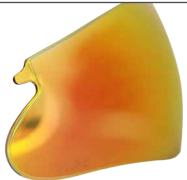
### PRODUCT CODE

**330SWK207L392** | Optimus 2 Spare Lens,  
Blue Revo HC



### PRODUCT CODE

**330SWK207L592** | Optimus 2 Spare Lens,  
Red Revo HC



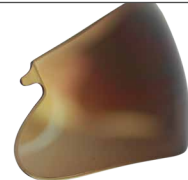
### PRODUCT CODE

**330SWK207L101** | Optimus 2 Spare Lens,  
Grey HC/AF



### PRODUCT CODE

**330SWK207L701** | Optimus 2 Spare Lens,  
Brown HC/AF



### PRODUCT CODE

**330SWK207LA101** | Optimus 2 Spare Lens,  
Yellow HC/AF



### PRODUCT CODE

**330SWK207L001** | Optimus 2 Spare Lens,  
Clear HC/AF



SWORKE® RX OPTIMUS

Our very first model. The Optimus, a pioneer technical frame featuring our signature Rx Carrier.

- Switchable lens system
- Lined with numerous venting ports for ease of air flow and enhanced circulation
- High density sweat-resistant closed-cell foam browguard cushions high strength impact
- Tough sweat-resistant nose pads enhance grip in motion and cushions against impact
- Anti-slip, moisture-resisting, wraparound temples provides motion stability
- Removeable Rx lens carrier available for corrective vision
- Tested to ANSI Z87.1-2010 standard and complies with SS473:2011 standards



PRODUCT CODE

**300SWK207301R** | Pearl Graphite frame,  
Clear lens HC/AF



PRODUCT CODE

**330SWK207L001** | Optimus Spare Lens,  
Clear HC/AF



PRODUCT CODE

**330SWK207L292** | Optimus Spare Lens,  
Versa-lens HC



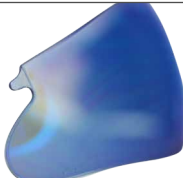
PRODUCT CODE

**330SWK207L101** | Optimus Spare Lens,  
Grey HC/AF



PRODUCT CODE

**330SWK207L392** | Optimus Spare Lens,  
Blue Revo HC









## EYEWEAR ACCESSORIES





## KLEANLENS® FIXED LENS CLEANING STATION KL461

- Applicable for plastic, polycarbonate and glass lenses
- Ideal for spectacles, goggles, faceshields and computer screens
- Safe and effective with all types of lens coatings
- Anti-fog and anti-static formula
- Content: 1 bottle of Kleanlens® 16oz lens cleaning solution—biodegradable and non-toxic; 4 boxes of Kleanlens® tissue—non-abrasive and low lint tissue
- Made in USA

### PRODUCT CODE

<b>350WSEKL461</b>	Fixed lens cleaning station,
	1 bottle of 16oz lens cleaning solution with spray pump,
	4 boxes of lens cleaning tissues



## KLEANLENS® DISPOSABLE LENS CLEANING STATION KL467

- Applicable for plastic, polycarbonate and glass lenses
- Ideal for spectacles, goggles, faceshields and computer screens
- Safe and effective with all types of lens coatings
- Anti-fog and anti-static formula
- Content: 1 bottle of Kleanlens® 8oz lens cleaning solution – biodegradable and non-toxic; 2 boxes of Kleanlens® tissue – non-abrasive and low lint tissue
- Made in USA

### PRODUCT CODE

<b>350WSEKL467</b>	Disposable lens cleaning station,
	1 bottle of 8oz lens cleaning solution with spray pump,
	2 boxes of lens cleaning



## KLEANLENS® LENS CLEANING SOLUTION KL465 (1oz)

- WORKSafe® Kleanlens® 1oz Lens Cleaning Solution
- Biodegradable and non-toxic
- Anti-fog and anti-static formula
- Applicable for plastic, polycarbonate and glass lenses
- Ideal for spectacles, goggles, faceshields and computer screens
- Safe and effective with all types of lens coatings
- Made in USA

### PRODUCT CODE

<b>350WSEKL465</b>	Lens Cleaning Solution, 1oz,
	20 bottles/box
<b>350WSEKL465R</b>	Lens Cleaning Solution Kits,
	1 bottle of 1oz Lens Cleaning Solution with spray pump,
	1 Micro-Fiber cleaning cloth,
	1 clear pouch



## KLEANLENS® LENS CLEANING SOLUTION KL463 (16oz)

- Kleanlens® 16oz Lens Cleaning Solution biodegradable and non-toxic
- Anti-fog and anti-static formula
- Applicable for plastic, polycarbonate and glass lenses
- Ideal for spectacles, goggles, faceshields and computer screens
- Safe and effective with all types of lens coatings
- Made in USA

### PRODUCT CODE

<b>350WSEKL463</b>	Lens Cleaning Solution, 16oz
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## KLEANLENS® LENS CLEANING TISSUES KL462

- Kleanlens® Lens Cleaning Tissues - non-abrasive and low lint
- Applicable for plastic, polycarbonate and glass lenses
- Ideal for spectacles, goggles, faceshields and computer screens
- Safe and effective with all types of lens coatings
- Made in USA

### PRODUCT CODE

<b>350WSEKL462</b>	Lens cleaning tissues,
	300 sheets/box





## SRX EYEWEAR HARDCASE ESC04 AND ESC03 FOR METAL FRAME

- WORKSafe® SRX eyewear hardcase keeps safety prescription spectacles from damage and dirt
- Extremely durable and provides lasting protection
- Robust and durable, it is designed to provide lasting protection for your safety spectacles

### PRODUCT CODE

<b>390WSESC04</b>	WORKSafe® SRX Eyewear Hardcase, Zipped, Black
<b>390WSESC03</b>	WORKSafe® SRX Eyewear Hardcase for Metal Frame, Zipped, Black



## MICROFIBER EYEWEAR POUCH E020

- Store and clean your safety spectacles with WORKSafe® microfiber eyewear pouch
- Handy in size and soft in texture, WORKSafe® microfiber eyewear pouch is the perfect cleaning and storage bag for your safety spectacles

### PRODUCT CODE

<b>390WSE020201</b>	WORKSafe® Microfiber Eyewear Pouch, Drawstring, Black
<b>390WSE020202</b>	WORKSafe® Microfiber Eyewear Pouch, Drawstring, Grey



## SRX MICROFIBER LENS CLEANING CLOTH ECC01

- The perfect cleaning cloth for safety eyewear - it is ideal for removing dust, dirt and smudges off lens surfaces without scratching

### PRODUCT CODE

<b>390WSECC01</b>	WORKSafe® SRX Microfiber Cleaning Cloth, Grey
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## SPECTACLE CORD

- WORKSafe® spectacle cord is perfect for users who have to take off their safety glasses frequently
- Reduce misplacement and loss of safety glasses with the use of WORKSafe® spectacle cord

### PRODUCT CODE

<b>390WSE9959002</b>	WORKSafe® Spectacle Cord
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## EYEWEAR CORD

- SWORKE® eyewear cord is perfect for users who have to take off their safety glasses frequently
- Reduce misplacement and loss of safety glasses
- Loop End 64cm Ø2mm
- Color: Black
- Comes with acrylic ball and silicone temple connector

### PRODUCT CODE

<b>390SWKEC01</b>	SWORKE® Eyewear Cord
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# SAFETY EYEWEAR GUIDE





## Step 1: Identify Hazards

Protectors should be mandatory where there is a reasonable probability of an eye or face injury that can be reduced or prevented with the use of protectors. A hazard assessment should be conducted to decide the risk of exposure in order to select the appropriate protectors needed. The safety officer or other responsible parties should pay attention to the different types of hazards and identify the sources of the hazards as stated below. After evaluating the information gathered, suitable protectors should be selected and used.

### Eye and Face Protection Selection Chart

	<b>Impact</b>	<b>Heat</b>	<b>Chemical</b>	<b>Dust</b>	<b>Light/ Radiation</b>
<b>Source</b>	<ul style="list-style-type: none"> <li>Chipping</li> <li>Grinding</li> <li>Machining</li> <li>Masonrywork</li> <li>Woodworking</li> <li>Sawing</li> <li>Drilling</li> <li>Chiselling</li> <li>Powered fastening</li> <li>Sanding</li> </ul>	<ul style="list-style-type: none"> <li>Furnace operation</li> <li>Pouring</li> <li>Casting</li> <li>Hot dipping</li> <li>Gas cutting</li> <li>Welding</li> </ul>	<ul style="list-style-type: none"> <li>Liquids</li> <li>Acid/Chemical handling</li> <li>Degreasing</li> <li>Plating</li> </ul>	<ul style="list-style-type: none"> <li>Woodworking</li> <li>Buffing</li> <li>General dusty conditions</li> </ul>	<ul style="list-style-type: none"> <li>Infrared radiation</li> <li>Ultraviolet radiation (UV)</li> <li>Lasers</li> <li>Welding: electric arc</li> <li>Welding: gas</li> <li>Cutting</li> <li>Torch brazing</li> <li>Torch soldering</li> <li>Visible light (Glare)</li> </ul>
<b>Assessment of Hazard</b>	<ul style="list-style-type: none"> <li>Flying fragments: e.g. objects like particles, sand, dirt etc.</li> </ul>	<ul style="list-style-type: none"> <li>Hot sparks</li> <li>Splash from molten metals</li> <li>High temperature exposure</li> </ul>	<ul style="list-style-type: none"> <li>Chemical splash, droplets and sprays</li> <li>Irritating mists</li> </ul>	<ul style="list-style-type: none"> <li>Nuisance dusts</li> <li>Fine dusts</li> </ul>	<ul style="list-style-type: none"> <li>Optical radiation</li> <li>Poor vision</li> </ul>
<b>Eye Protection</b>	<ul style="list-style-type: none"> <li>Spectacles with side shields</li> <li>Goggles</li> <li>Faceshields worn over spectacles or goggles</li> <li>Welding helmet/ Loose-fitting respirator worn over spectacles or goggles</li> <li>Full face respirators</li> </ul>	<ul style="list-style-type: none"> <li>Spectacles with side shield</li> <li>Goggles</li> <li>Faceshields worn over goggles</li> <li>Loose-fitting respirator worn over spectacles or goggles</li> <li>Full face respirators</li> </ul>	<ul style="list-style-type: none"> <li>Goggles, eyecups and cover types</li> <li>Faceshields worn over goggles</li> <li>Loose fitting respirator worn over spectacles or goggles</li> <li>Full face respirators</li> </ul>	<ul style="list-style-type: none"> <li>Goggles, eyecaps and cover types</li> <li>Full face respirators</li> </ul>	<ul style="list-style-type: none"> <li>Welding helmets, welding shields or welding respirator (arc)</li> <li>Welding goggles, welding helmets or welding faceshield (gas, cutting, brazing)</li> <li>Spectacles or welding faceshield (soldering)</li> <li>Typical shades                             <ul style="list-style-type: none"> <li>-arc: 10-14</li> <li>-gas welding: 6-8</li> <li>-cutting: 3-6</li> <li>-brazing: 3-4</li> <li>-soldering: 2</li> </ul> </li> <li>Spectacles or faceshield (glare)</li> </ul>

## Step 2: Selection of Safety Eyewear

### 2.1 Minimum Requirements

Meets International Safety Standards, e.g. ANSI Z87.1-2015/2010, SS473:2011, EN166:2001, GB, JIS, AAS, AS/NZS 1337.6:2007 and CSA Z94.3-1988

### 2.2 Optical Quality

Optical Class	Spherical Refractive Power	Astigmatic Refractive Power	Prismatic Refractive Power
1	±0.06 diopters	±0.06 diopters	±0.12 diopters
2	±0.12 diopters	±0.12 diopters	±0.12 diopters

### 2.3 High Impact Rating

#### 2.3.1 American Standards ANSI/ISEA Z87.1

Type of Eye Protectors	High Mass Impact, Pointed Projectile, Wt.: 500g (17.6oz.) Size: 25mm (1") Ht.: 127 cm (50")	High Velocity Impact Projectile				Markings: Manufacturer's Identification: WORKSafe®: "W"	
		Steel ball 6.35mm (0.25") Wt.: 1.04g (0.037oz.) Velocities: 45.7m/s to 91.4m/s (150 ft/s to 300ft/s)		Steel ball 6.00mm (0.24") Wt.: 0.86g (0.030oz.) Velocities: 50.9m/s to 101.5m/s (167 ft/s to 333ft/s)			
			Velocity		Velocity	Frames	Lens
Spectacles/ Readers/ Magnifiers	Frame & Lens	Frame & Lens	45.7m/s (150ft/s)	Frame & Lens	50.9m/s (167ft/s)	W Z87+	W +
Goggles	Frame & Lens	Frame & Lens	76.2m/s (250 ft/s)	Frame & Lens	84.7m/s (278 ft/s)	W Z87+	W Z87+
Faceshields	Frame/Crown & Lens	Frame/Crown & Lens	91.4m/s (300 ft/s)	Frame/Crown & Lens	101.5m/s (333 ft/s)	W Z87+	W Z87+





## 2.3.2 EN166

Types of Eye Protector	Projectile Speed of Steel Ball		
	Low energy impact 45m/s or 162km/h	Medium energy impact 120m/s or 432km/h	High energy impact 190m/s or 984km/h
Spectacles Goggles Faceshields	Applicable Applicable Applicable	N.A. Applicable Applicable	N.A. N.A. Applicable

## 2.4 Lens Materials

Generic Materials	Types	Optical Quality	Minimum Mechanical Strength	Chemical Resistance	Weight
Mineral Material	Hardened Glass Laminated Glass	Excellent Excellent	12m/s (3mm) 12m/s (3mm)	Excellent Excellent	Heavy Heavy
Organic/Synthetic	CR-39 Plastic Acetate Polycarbonate	Excellent Excellent Excellent	12m/s (3mm) 45m/s 45m/s	Good Very good Very Good (if coated)	Light Lighter Lightest

## Step 3: Understanding Standard Markings

### 3.1 ANSI/ISEA Z87.1 Marking Requirements

Type of Mark	Lenses & Replacement		Frame	Marking for Complete Device (no replaceable parts)
	Spectacles	All Other		
All protectors shall bear the markings below.				
<b>Manufacturer's Mark or Logo</b>	Yes	Yes	Yes	Yes
<b>Standard(Non-Impact Rated)</b>				
Plano		Z87	Z87	Z87
Rx		Z87	Z87-2	Z87-2
The following shall be required only when claims of impact rating, a specific lens type and/or use are made by the manufacturer.				
<b>Impact Mark</b>				
Impact Rated Plano, Readers/Magnifiers	+	Z87+	Z87+	Z87+
Impact Rated Rx	+	Z87+	Z87-2+	Z87-2+
<b>Lens type</b>				
Clear				
Welding	W shade	W shade		W shade
UV Filter	U scale number	U scale number		U scale number
Visible Light Filter	L scale number	L scale number		L scale number
IR Filter	R scale number	R scale number		R scale number
Variable Tint	V	V		V
Special Purpose	S	S		S
<b>Use</b>				
Splash/Droplet			D3	D3
Dust			D4	D4
Fine Dust			D5	D5



### 3.2 ANSI/ISEA Z87.1 Marking Sequence

Markings can follow a top to bottom sequence or a left to right sequence.

DISCLAIMER: The information below is provided to demonstrate examples of resulting product markings compliant with ANSI/ISEA Z87.1-2015. Such information is not meant to be all-inclusive and is provided for illustrative purposes only.

Device	Manufacturer's Mark Or Logo	Standard Mark	Impact Mark	Lens Type	Use	Resulting Mark
<b>LENSES</b>						
Goggle or faceshield, non-impact rated (UV)	W	Z87		U3		W Z87U3
General purpose spectacle, non-impact rated (shade 2.0)	W			W2.0		W W2.0
<b>FRAME</b>						
Goggle impact rated, fine dust rated	W	Z87	+		D5	W Z87+D5
Goggle, non-impact rated, dust rated	W	Z87			D4	W Z87D4
Goggle, non-impact rated, splash rated	W	Z87			D3	W Z87D3
Prescription spectacle w/o side protection	W	Z87-2				W Z87-2
Prescription spectacle, impact rated	W	Z87-2	+			W Z87-2+
<b>COMPLETE DEVICE</b>						
Goggle, faceshield (UV & IR)	W	Z87		U6 & R2		W Z87U6R2
Goggle, faceshield, impact rated, splash rated (shade 5)	W	Z87	+	W5	D3	W Z87+W5D3

### 3.3 EN166

#### FRAME

W	EN STANDARD	F	XXXCE
Identification of the manufacturer WORKSafe®	EN166	Resistance to high speed particles	Test Laboratory Identification

#### LENS

3-1.7	W	1	F	K	N
Code no. of UV Filter with good colour recognition- Shade no.	Identification of the manufacturer WORKSafe®	Optical Class	Resistance to high speed particles	Resistance to surface damage by fine particles	Resistance to fogging

### 3.4 Wearers' comfort & acceptance in accordance with SS473 standards

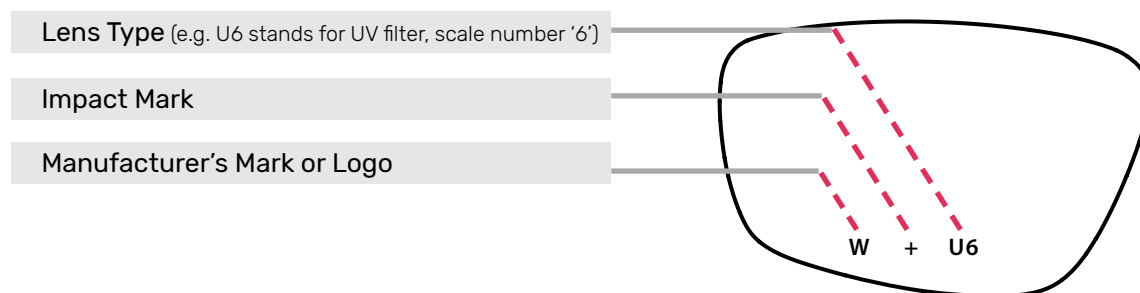
- Lightweight for prolonged wearing and use
- Good fitting with temple length adjustment
- Good fitting for different nose bridges with temple inclination height adjustment
- Eye and bridge sizes suitable for Western or Asian people
- Pressure points reduced by soft, tri-flex or dual density anti-slip temples
- Well ventilated or with anti-fog features
- Polycarbonate lens must have durable anti-scratch and anti-fog coating for clarity
- Material should withstand tropical climate, high humidity and temperature

### 3.5 Additional consideration for goggles in accordance with SS473 standards

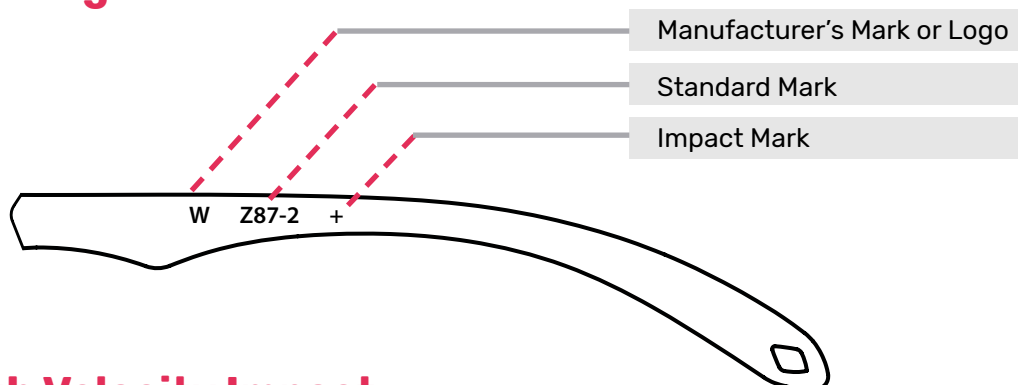
- Wide vision for panoramic view
- Good face sealing for better protection and comfort
- Wide headband for increased comfort
- Able to wear over prescription spectacles
- Choice of lens material such as acetate, propionate or polycarbonate



## Marking on Lens



## Marking on Frames



## High Velocity Impact

New ANSI Z87.1-2015 allows the use of a steel ball of diameter 6mm (0.24"), travelling at 50.9m/s (167 ft/s) or a steel ball with diameter 6.35mm (0.25") travelling at 45.7m/s (150 ft/s) when conducting the high velocity impact test on the complete devices.

### Safety Prescription (SRX) Lens Material Qualification

Representative SRX lens must be tested to resist high velocity impact using steel ball of either diameter 6mm and 6.35mm as specified in Section 2.3.1.

### Safety Prescription (SRX) Lens Mounting Qualification

Complete SRX eyewear with representative test lens and retention system shall be capable of resisting high velocity impact using steel ball of either diameter 6mm and 6.35mm as defined in Section 2.3.1.

## Protectors Providing Filtration of Optical Radiation

### Special Purpose Filters

Special purpose filters, both tinted and extra dark, marked "S", may or may not comply to requirements for welding, UV and visible light filters, but shall comply with the transmittance requirements for special purpose lenses.

### Visible Light Filters

Protectors marked L1.3 to L3 must meet transmittance requirements of traffic signal recognition and UV transmittance of ANSI Z80.3-2010, American National Standard for Ophthalmics - Nonprescription Sunglasses and Fashion Eyewear Requirements. While protectors marked L4 to L10 are too dark to be used for driving, they shall meet UV transmittance requirements of ANSI Z80.3-2010.

### Transmittance of Non-Lens Components

If a spectacle claims to meet the transmittance requirements of welding, UV and infrared filter lenses, the side shields of the spectacles shall be tested to the maximum scale number of the lens with which they will be fitted. Wraparound lenses which have the side protection as part of the lenses will be subjected to the same testing.

### Angular Dependence of Luminous Transmittance

Requirements for angular dependence of luminous transmittance for welding filters have also been added to address visual effect that welders can find both dangerous and disturbing.

## Droplet and Splash, Dust and Fine Dust Hazard

In ANSI Z87.1-2015, the tests for droplet and splash, dust, and fine dust hazards are intended to determine the capability of the protector to keep liquid splashes or sprays, large dust and fine dust particles, from reaching the wearer's eyes. Eyewear that pass each test are marked additionally with D3, D4, and D5 respectively. (Refer to table 3.5.1)





## Important Notes for Safety Prescription (SRX) Eyewear

- 1. Minimum Lens Thickness of SRX Lens**  
SRX eyewear must be fitted with impact rated SRX lens with a minimum thickness of 2mm (0.08")
- 2. SRX Optical Requirements - Refractive Power, Astigmatism, Prism and Prism Imbalance for RX Protectors and Magnifiers**  
SRX lens must be tested according to and comply with the tolerance on refractive power, astigmatism, prism and prism imbalance as stated in ANSI Z80.1-2010, American National Standard for Ophthalmics - Prescription Ophthalmic Lenses Recommendations.
- 3. SRX Lens Mounting Qualification**  
Complete SRX eyewear with representative test lens and retention system shall be capable of resisting high mass and high velocity impact. A new lens retention test is required of prescription safety laboratories fabricating impact rated SRX eyewear to determine their ability to consistently produce lenses that will be retained in the various frame types they choose to sell. SRX frame manufacturers must also test their frames to this lens retention test.
- 4. SRX Lens Material Qualification**  
Representative SRX lens must be tested to resist high velocity impact using a steel ball of diameter 6mm (0.24") travelling at 50.9m/s (167 ft/s) or a steel ball with diameter 6.35mm (0.25") travelling at 45.7m/s (150 ft/s).
- 5. SRX Lens Carrier (RX Insert)/SRX Eyewear with Lift Fronts**  
The complete device with prescription lenses in +5.0 and -5.0 diopters fitted in the carrier, behind the plano eyewear shall be tested. RX lens carrier used behind plano protectors shall be marked with the manufacturer's mark or logo but not any other Z87 markings. Complete devices with SRX eyewear and lift fronts shall be tested with the lift front in the "up" position.
- 6. SRX Side Shield Attachment**  
SRX eyewear must be equipped with side shields that can be securely or permanently attached to pass the side impact test.

## ANSI/ISEA Z87.1-2015 Standard

The American National Standards Institute (ANSI) has approved and issued the new ANSI/ISEA Z87.1-2015 American National Standard for Occupational and Educational Eye and Face Protection (ANSI Z87.1-2015). This standard went into effect May 28, 2015, and updates the 2010 version. While the scope of the standard remains mostly unchanged, there are a number of modifications that have significant impact. The following outlines these changes and how they impact eye protection and the methods companies use to select safety products.

### Important Changes

ANSI Z87.1-2015 continues to focus on product performance and reflects the need to streamline testing methods to harmonize with global standards to allow new and innovative designs to protect against hazards, meet end-users needs and workplace regulations. This consists of acceptance of protectors known as "magnifiers" and "readers" that have lenses, or portion of lenses that have magnification properties. The new Z87.1-2015 standard fine-tunes the hazard-based structure of choosing protectors, a concept first introduced in 2010. In the revised standard, additional emphasis has been placed on enabling users to select protectors suitable for their working environment and providing end-users with information to facilitate the selection process.

### Optical Requirements of Refractive Powers

ANSI Z87.1-2015 specifies that the telescope and observer shall be qualified by resolving pattern 40 of the test pattern instead of pattern 20. The revised standard states that the average refractive power of lenses with astigmatism is used instead of each meridian.

### Physical Requirements of Drop Ball Impact Resistance

ANSI Z87.1-2015 elaborates on the specifications of testing apparatus used in the drop ball test. The projectile will be dropped from a height of 127cm (50") through a loose fitting guide tube with a smooth internal diameter ending 10cm (4") above the point of contact. The revised standard eliminates the need to perform drop ball testing for a protector that is first tested to and meet the requirements of impact resistance.

## SS473:2011 Singapore Standard

According to clause 5.3 of the SS473: Part 2:2011 Singapore Standard, eye protectors (plano and prescription eye protectors) must comply and be marked in accordance with any of the following standards or their equivalent: ISO, EN (Europe), ANSI (USA), CSA (Canada), AS/NZ (Australia/New Zealand) and JIS (Japan). All WORKSafe® eyewear comply with SS473 as well as ANSI/ISEA Z87.1 standards, and, if indicated, EN166 standards.

## Purchase Care

**Follow these care instructions for long-lasting comfort and protection!**

1. To avoid breaking or bending your spectacle frame, handle your glasses with both hands. Pull both ear rails simultaneously when putting on or taking off your glasses.
2. When not in use, store your glasses in a case like the WORKSafe® SRX
3. If you haven't got a case, be sure to place your WORKSafe® safety eyewear upright, so the lenses don't get scratched or scuffed.
4. Clean your glasses regularly with microfiber cloths or with WORKSafe® Kleanlens® solution; or by washing them with mild soap and water.
5. Avoid exposing your glasses to extreme temperatures, under direct sunlight, or during your bath. Smoke, heat and steam can damage the lens coating.

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