



# VIKING<sup>®</sup> AUTO DARKENING WELDING HELMETS

WITH 4C<sup>™</sup> LENS TECHNOLOGY



# See Clearly Now

## 4C™ Lens Technology

The new 4C ADF Technology improves the performance of the lens in the 4 most important categories to the welder:

- 1. Clarity - Optical Clarity 1/1/1/1
- 2. Color - Real Color View
- 3. Carat - Light Weight
- 4. Cut - Even Shade From Any Angle

The 4C Lens Technology upgrade to Lincoln Electric's VIKING® welding helmets – including the 1840 series, 2450 series and 3350 series – improves visibility and reduces eye strain by minimizing the traditional lime green coloring in the helmet view screen.

4C technology is ideal for a range of industries such as general fabrication, power generation, shipbuilding, structural, offshore and pipeline that use multiple welding processes, including Stick, MIG and TIG. Whatever the task at hand, 4C technology gives you a clear view to productivity and quality.



Foose  
Impostor™  
K4181-3

Inactive State



Previous 1/1/1/1 Inactive



NEW 4C Inactive

Active State



Previous 1/1/1/1 Optical Clarity



NEW 4C 1/1/1/1 Clarity



## A VISION FOR BETTER WELDS

### Better Clarity, Real Color View

Now you can make a good view even better. Upgrading the VIKING 1840, 2450 and 3350 series with 4C technology preserves the existing 1-1-1 optical clarity rating, but improves visibility by reducing the lime green tint.

### Easy On The Eyes

Improved visibility and less eye strain means greater comfort for the welder. This combined with an improved view of the weld puddle adds up to better welds.

### Wide-Screen View

4C technology enables you to not only see better, but also see more. The large viewing area gives you a full range of vision in relation to the welding area, which enhances operator control.

### Increased Battery Life

The longer you can see clearly, the more you can weld. And more welds mean higher productivity. Improvements to the ADF's circuitry enables more performance from the battery. Now you can keep welding, increase your productivity and get more from your helmet lens.



Cheater lens capable



Hard hat capable



Comfortable Headgear

#### Processes »

Stick, TIG, Pulsed TIG, MIG, Pulsed MIG, Flux-Cored, Gouging, Grinding, Plasma Cutting

#### Applications »

All

# 3350 Viking Helmets



3350 Black  
K3034-3

Born to Weld™  
K3616-3

Hot Rodder™  
K4440-3

Steampunk™  
K3428-3

Mojo®  
K3101-3



Code Red®  
K4034-3

Motorhead®  
K3100-3

Twisted  
Metal®  
K3248-3

3350 All  
American®  
K3175-3

Jessi vs. the  
Robot™  
K3372-3



3350 White  
Tail Camo™  
K4412-3

Zombie™  
K4158-3

Polar Arc™  
K3255-3

Terracuda®  
K3039-3

Impostor™  
K4181-3

## KEY FEATURES

The VIKING 3350, our top-of-the-line helmet series, provides the best optical clarity available in a welding helmet today and the largest viewing area in its class. The 3350 Series offers a pivot style headgear designed for greater comfort and optimal fit.

- 4C Lens Technology
- Perfect 1/1/1 optical clarity rating (EN379)
- Largest viewing area in the VIKING line
- Superior comfort with the pivot style headgear
- Longer battery life
- 3 year warranty

# 2450/2450D Viking Helmets



2450 Black  
K3028-3

Jessi the Welder™  
K4437-3

Street Rod®  
K3035-3

Heavy Metal®  
K3029-3

Graveyard Shift®  
K3099-3



2450 All  
American®  
K3174-3

2450 White  
Tail Camo™  
K4411-3



2450D Black  
K3230-3



Comes with helmet bag,  
Bandana and Lenses

## KEY FEATURES

The VIKING 2450, the latest evolution in our mid-priced auto-darkening helmet line, provides the best optical clarity available in a welding helmet today. The 2450 Series offers an improved headgear for greater comfort and flexibility. Choose from six unique graphic designs.

- 4C Lens Technology
- Perfect 1/1/1 optical clarity rating [EN379]
- Fastest switching speed in its class
- Up to 28% larger viewing area versus competitive helmets
- Designed for long hours of comfortable wear with the new pivot style headgear
- 3 year warranty

With all the features of our standard 2450, the 2450D helmet gives you access to three modes – welding, cutting, and grinding – with a user-friendly LCD screen digital interface. Just one helmet with one cartridge produces a full spectrum shade 4-13 with variable sensitivity and delay.

# 1840 Viking Helmets



1840 Black  
K3023-3

Aztec™  
K4175-3

1840 All  
American®  
K3173-3



1840 Comes with helmet bag,  
Bandana and Lenses

## KEY FEATURES

The VIKING 1840, an economical auto-darkening helmet, provides operators with the best optical clarity available in a welding helmet today. External controls allow for quick and easy shade changes. The 1840 Series offers an improved headgear for greater comfort and optimal fit. Choose from our unique graphic designs.

- 4C Lens Technology
- Perfect 1/1/1 optical clarity rating (EN379)
- 16% larger viewing area than its competitor
- Pivot style head gear distributes weight evenly
- Convenient external shade control
- Lightweight and compact
- 3 year warranty

## ACCESSORIES AND REPLACEMENT PARTS

| Sales Number | Description                              | Dimensions                                   | Package Qty. |
|--------------|--|--|--------------|
| KP3045-3     | 3350 SERIES ADF CARTRIDGE                | STD 4 X 5                                    | 1            |
| KP3044-1     | 3350 INSIDE CLEAR COVER LENS             | 94.7 x 89.7 x 1.0 mm [3.73 x 3.53 x .04 in]  | 5            |
| KP2898-1     | 2450/2450D/3350 OUTSIDE CLEAR COVER LENS | 114 x 133 x 1.0 mm [4.5 x 5.25 x .04 in]     | 5            |
| KP2932-3     | 2450 SERIES ADF CARTRIDGE                | STD 4 X 5                                    | 1            |
| KP3243-2     | 2450D SERIES ADF CARTRIDGE               | STD 4 X 5                                    | 1            |
| KP2931-1     | 2450/2450D INSIDE CLEAR COVER LENS       | 98.5 x 66.5 x 1.0 mm [3.88 x 2.62 x .04 in.] | 5            |
| KP2931-1     | 2450D INSIDE CLEAR COVER LENS            | 98.5 x 66.5 x 1.0 mm [3.88 x 2.62 x .04 in]  | 5            |
| KP2898-1     | 2450D OUTSIDE CLEAR COVER LENS           | 114 x 133 x 1.0 mm [4.5 x 5.25 x .04 in]     | 5            |
| S27978-54    | 2450D BLACK REPLACEMENT SHELL            | N/A  | 1            |
| S27978-58    | 2450D OUTSIDE COVER LENS SEAL            | N/A  | 1            |
| S27978-55    | 2450D ADF HOLDER                         | N/A  | 1            |
| KP2853-3     | 1840 ADF CARTRIDGE                       | DINS 110 X 90                                | 1            |
| KP2897-1     | 1840 INSIDE CLEAR COVER LENS             | 96 x 51.6 x 1.0 mm [3.78 x 2.03 x .04 in.]   | 5            |
| KP3043-1     | 1840 OUTSIDE CLEAR COVER LENS            | 114 x 100 x 1.5 mm [4.5 x 3.94 x .06 in.]    | 5            |
| KP3046-100   | CHEATER LENS 1.00 MAG                    | 2 X 4.25 FRAME, 1.0 MAG                      | 1            |
| KP3046-125   | CHEATER LENS 1.25 MAG                    | 2 X 4.25 FRAME, 1.25 MAG                     | 1            |
| KP3046-150   | CHEATER LENS 1.50 MAG                    | 2 X 4.25 FRAME, 1.5 MAG                      | 1            |
| KP3046-175   | CHEATER LENS 1.75 MAG                    | 2 X 4.25 FRAME, 1.75 MAG                     | 1            |
| KP3046-200   | CHEATER LENS 2.00 MAG                    | 2 X 4.25 FRAME, 2.0 MAG                      | 1            |
| KP3046-225   | CHEATER LENS 2.25 MAG                    | 2 X 4.25 FRAME, 2.25 MAG                     | 1            |
| KP3046-250   | CHEATER LENS 2.50 MAG                    | 2 X 4.25 FRAME, 2.5 MAG                      | 1            |
| KP2930-1     | SWEATBAND                                | N/A  | 2            |
| KP3908-1     | HEADGEAR W/SWEATBAND                     | N/A  | 1            |
| KP3047-1     | HARD HAT ADAPTER                         | N/A  | 1            |
| S27978-31    | BLACK REPLACEMENT SHELL                  | N/A  | 1            |
| S27978-32    | OUTSIDE COVER LENS SEAL                  | N/A  | 1            |
| S27978-33    | ADF HOLDER                               | N/A  | 1            |

PRODUCT SPECIFICATIONS

| Product Name | Optical Clarity | Lens Switching Speed (sec) | Variable Shade/Control | Battery Replacement Type       | Magnifying "Cheater" Capable Lens | Grind Mode Shade/Control | Light Sensitivity Control | Delay Control Dark to Light (sec) | Arc Sensors | TIG Amp Rating           | Cartridge Size in. (mm)       | View Size in. (mm)       | Temperature Range  | Weight oz. (g) | Warranty |
|--------------|-----------------|----------------------------|------------------------|--------------------------------|-----------------------------------|--------------------------|---------------------------|-----------------------------------|-------------|--------------------------|-------------------------------|--------------------------|--|----------------|----------|
| 3350         | 1/1/1/1         | 1/25,000                   | 5-13 Internal          | 1 CR2450 Replaceable Battery   | Yes                               | 3.5 / Internal           | Continuous                | 0.1 - 1.0 Fully Adjustable        | 4           | DC > 2 Amp<br>AC > 2 Amp | US 5.25 x 4.50<br>(133 x 114) | 3.74 x 3.34<br>(95 x 85) | Operating:<br>-10°C - +55°C<br>(14°F - 131°F)<br><br>Storage:<br>-20°C - +70°C<br>(-4°F - 158°F) | 21<br>(595)    | 3 Years  |
| 2450         |                 |                            |                        | 2 CR2450 Replaceable Batteries |                                   |                          |                           |                                   |             |                          |                               | 3.82 x 2.44<br>(97 x 62) |  |                |          |
| 2450D        |                 |                            | 4-13 Internal          | 2 CR2450 Replaceable Batteries |                                   | 4 / Internal             | Digital Display Control   |                                   |             |                          |                               |                          |  |                |          |
| 1840         |                 |                            | 9-13 Internal          | 1 CR2450 Replaceable Battery   |                                   | 3.5 / External           | Continuous                |                                   |             |                          |                               | 2                        |  |                |          |

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company® is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.com](http://www.lincolnelectric.com) for any updated information.

The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.