

Lincoln Electric EMEAR



**VIKING 4C™**  
**AUTODARKENING HELMETS**  
**SEE CLEARLY NOW**

[www.lincolnelectric.eu](http://www.lincolnelectric.eu)





**VIKING™**  
WELDING HELMETS

**Viking 4C™ are the new high end autodarkening helmets by Lincoln.**

**They will replace the present Viking “-1” range.**



**THE NEW RANGE OF HIGH QUALITY AUTODARKENING HELMETS**



# Viking 4C™: Main Features



- 1/1/1/1 Optical Clarity
- Real Color View
- New pivot headgear
- Wide range of shades
- One of the fastest light to dark switching time in the market
- Replaceable batteries
- Multi process
- Very low TIG Amp Rating ( $\geq 2$ Amp)



**4C™ Lens Technology**  
A clear view to productivity and quality.

**A VISION FOR BETTER WELDS**

If quality and productivity are your ultimate objectives, your first priority has to be clarity. Simply put, if you can't see the work, you can't do the work. 4C technology technology provides a framing lens that provides a better, clearer view of the welding puddle.

The 4C Lens Technology applies to Lincoln Electric's VIKING™ welding helmets – including the 480 series, 460 series and 380 series – maintains the same welding luminance transmittance level, but 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 that use multiple welding processes, including stick, MIG and TIG, fabrication, automotive parts, appliances and more. Whatever the task at hand, 4C technology gives you a clear view for productivity and quality.



**A VISION FOR BETTER WELDS**  
**BETTER CLARITY, LESS COLOR**

Now you can make a good view even better. Upgrading to VIKING 380, 380 and 380 series with 4C technology allows the view screens on these helmets to reach a 1:1 ratio of clarity and the visibility is improved by reducing the lime green tint.

**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 and improves weld quality.

**EASY ON THE EYES**

Improved visibility and less eye strain means greater comfort for the welder. This combination of an improved view of the work plus adds up to better work.



**4C™ Technology**

1. Clarity - Optical Clarity	3. Color - Light/Lime tint OFF
2. Color - Real Color View	4. C-View - True-Depth View Any Angle

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# Viking 4C™ : 1st Generation vs 4C™ Generation

## 1st Generation



Designed for Industrial use

Fast Switching Light to dark

1/1/1/1 Optical Clarity

Real Color View

Pivot Headgear

Super Low TIG Amp Rating

3 Years Warranty Period

Wide Variable Shade in 2450 Series

Replaceable Batteries in all Series

Low Battery Indicator Light in all Series



## 4C™ Generation







# The new 4C™ Lens Technology



Clear vision just became clearer.

1. **C**larity – Optical Clarity 1/1/1/1
2. **C**olor – Real Color View
3. **C**arat – Light Weight ADF
4. **C**ut – Even Shade From Any Angle

Significant reduction of green tinting, providing better viewing quality

### In-Active State



Previous 1/2/1/1 In-Active



NEW 4C™ In-Active

### Active State



Previous 1/2/1/1 Optical Clarity



NEW 4C™ 1/1/1/1 Clarity



# Do all the processes you need !



- **Stick**
- **TIG**
- **Pulsed TIG**
- **MIG**
- **Pulsed MIG**
- **Flux Cored**
- **Gouging**
- **Grinding**





## Viking 4C™ range has n°3 different series :

### «1840» :

- External shade control
- 96x47mm view size



### «2450» :

- Internal shade control
- 97x62mm view size






### «3350» :

- Internal shade control
- 95x85mm view size





# Distinctive features among the series :

	1840	2450	3350
➤ Viewing Area :	 Normal 96x47mm	 Bigger 97x62mm	 Biggest 95x85mm
➤ Variable Shades :	DIN 9÷13 Ext Control	DIN 5÷13 Int Control	DIN 5÷13 Int Control
➤ N° of sensors	2 sensors	4 sensors	4 sensors
➤ TIG Amp Rating	DC/AC≥2A	DC/AC≥2A	DC/AC≥2A

**NEW!**

**Improved sensitivity for low Amp TIG !**





## Strenghts (1/2) :



- **4C™ and 1/1/1/1 Optical Class**  
Clarity and Real Colors !

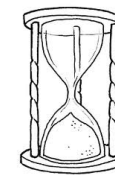
**NEW!**



- **Light to dark switching : 0,04ms**  
One of the fastest products in the market !



- **Delay control, dark to light : 0,1÷1s**  
Fully adjustable for any application



- **Grind mode available**  
Viking 2450/3350: DIN3.5 Viking 1840: DIN4  
Exellent view during pre & post weld activities !





## Strengths (2/2) :



- **Magnifying 'cheater' lens capable**  
Easy to add Lincoln Electric lenses



- **Light weight, full coverage shell**  
Sheds spatters and resists impacts

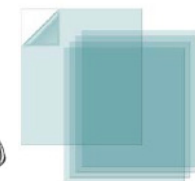


- **New pivot headgear**  
Gives more comfort.  
With adjustment for distance from face

**NEW!**



- **Included accessories**  
Helmet bag, Bandana, Extra lenses





# 1840- 4C™ Series

2 available designs :



**Black**  
K3023-3-CE



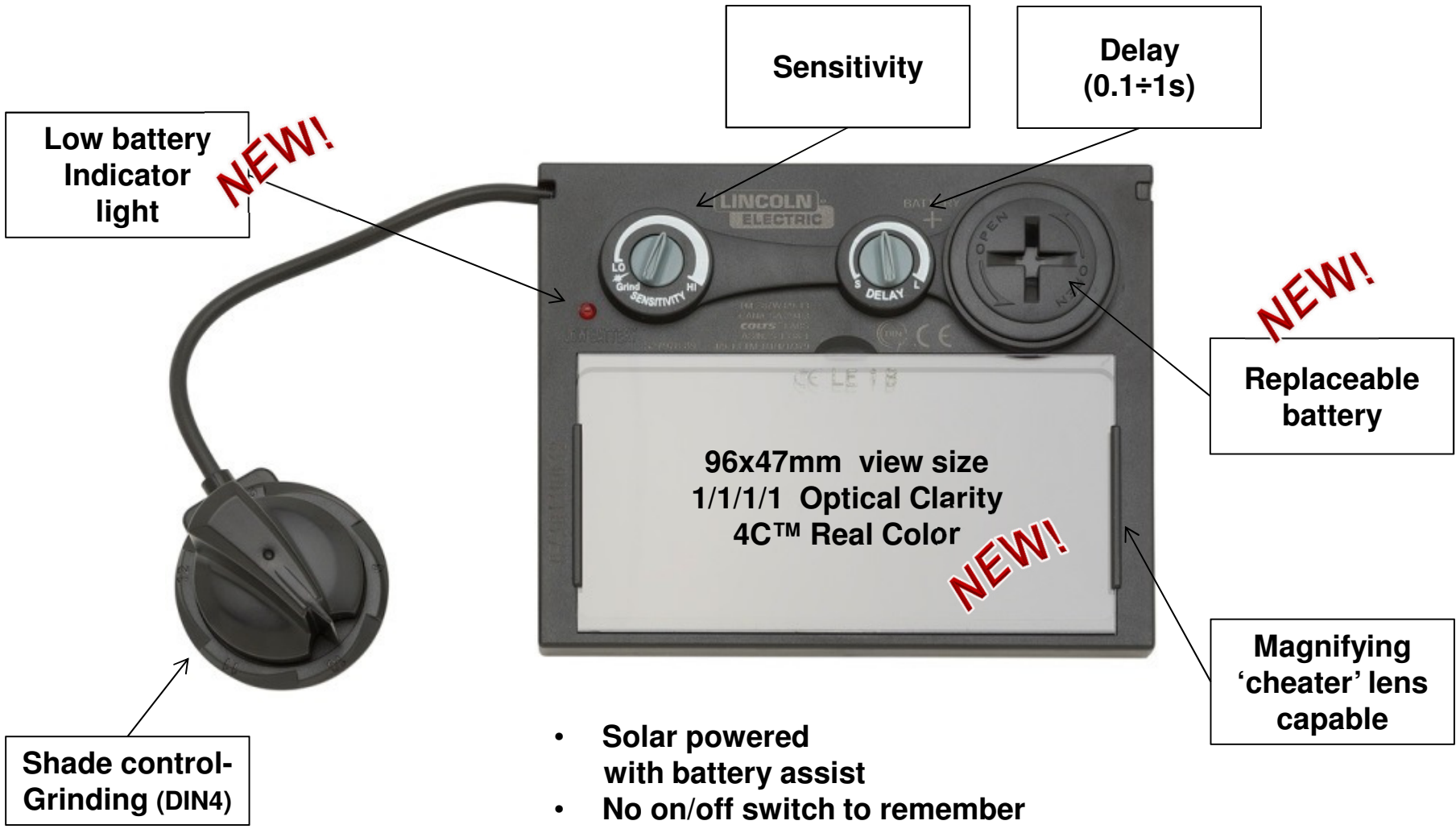
**Tribal**  
K3024-3-CE





# 1840- 4C™ Series

ADF (autodarkening filter) :



- Solar powered with battery assist
- No on/off switch to remember





# 2450- 4C™ Series

2 available designs :



**Black**  
K3028-3-CE



**Street Rod**  
K3035-3-CE



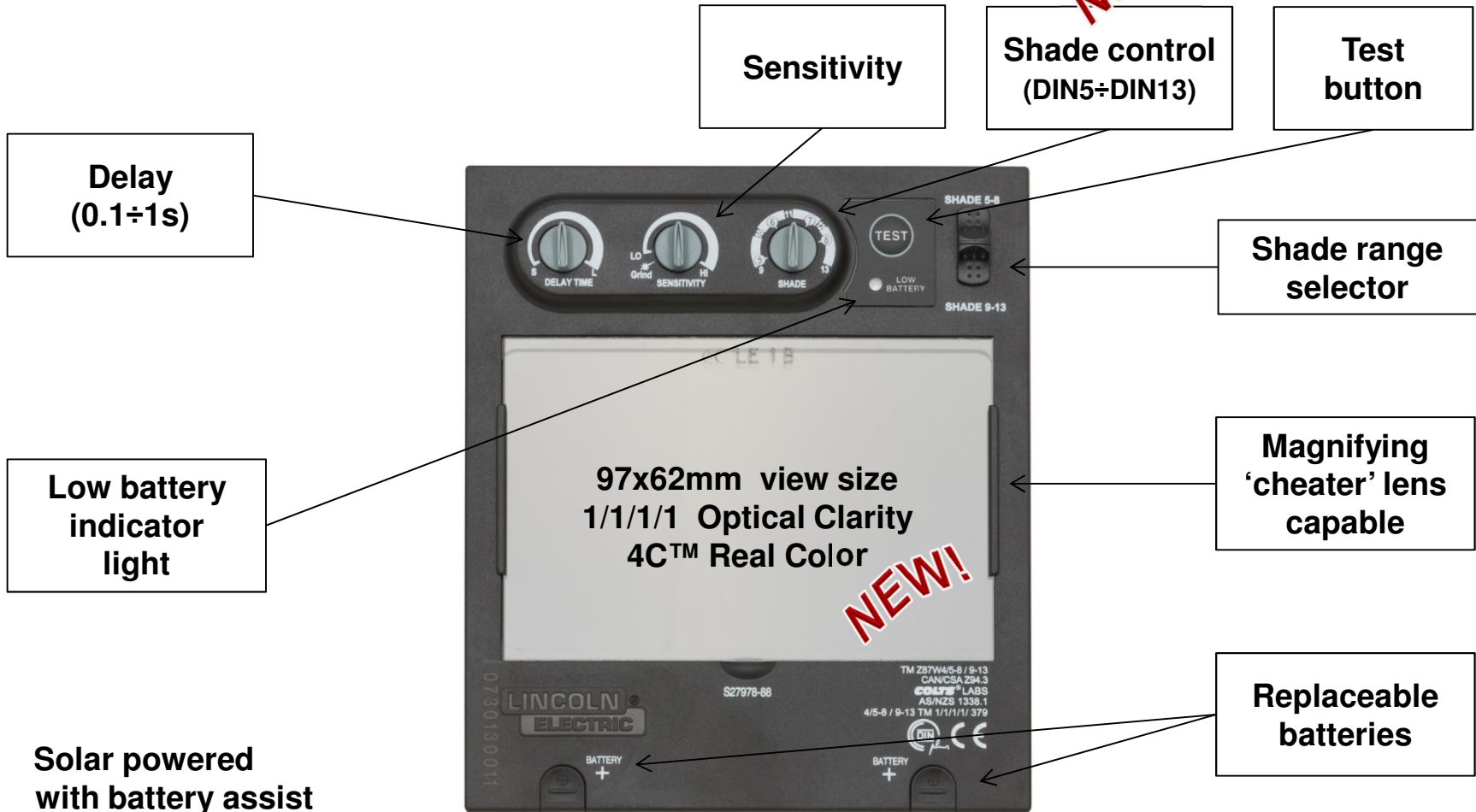


# 2450- 4C™ Series

ADF (autodarkening filter) :



**NEW!**



- Solar powered with battery assist
- No on/off switch to remember

**NEW!**

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# 3350- 4C™ Series

3 available designs :



**Black**  
K3034-3-CE



**Motorhead**  
K3100-3-CE



**Mojo**  
K3101-3-CE





# 3350- 4C™ Series



ADF (autodarkening filter) :

- Solar powered with battery assist
- No on/off switch to remember
- One of the biggest screens available in the market!



Shade range selector

Test button

Low battery indicator light

Magnifying 'cheater' lens capable

Delay (0.1÷1s)

Sensitivity

Shade control (DIN5÷DIN13)

Replaceable battery

**NEW!**

LINCOLN ELECTRIC  
SHADE 5-8    SHADE 9-13  
S27978-104  
CE LE TB  
95x85mm view size  
1/1/1/1 Optical Clarity  
4C™ Real Color  
DELAY TIME    SENSITIVITY    SHADE    TEST  
L S    Hi Grind    13    BATTERY  
TM 257MA/5-13 CAN/CSA 2943 CONFORMING LABS AS/NZS 1538.1 415-8 / 9-13 TM 1/1/1/1/379





# Certificates



**Viking helmets are CE certified\* by DINCERTCO, the highly reputed German certification organization of TÜV and DIN.**



\* PPEs (Personal Protection Equipments) must be CE certified by a third party (opposite to equipments, for which the CE certificates are self-declarations)



# Helmet Range Overview

	Linc Screen II	1740 series	1840 4C™ series	2450 4C™ series	3350 4C™ series
Lens switching Speed (sec)	1/10.000	1/25.000	1/25.000	1/25.000	1/25.000
Variable Shade/Control	9-13 External	9-13 Internal	9-13 External	5-13 Internal	5-13 Internal
Magnifying «Cheater» Lens Capable	-----	Yes	Yes	Yes	Yes
Grind Mode Shade/Control	-----	DIN4/Internal	DIN4/External	DIN3.5/Internal	DIN3.5/Internal
Light Sensitivity Control	-----	Continuous	Continuous	Continuous	Continuous
Delay Control Dark to Light (sec)	0,70 Fixed	0.1÷1 Fully Adjustable	0.1÷1 Fully Adjustable	0.1÷1 Fully Adjustable	0.1÷1 Fully Adjustable
Arc Sensors	2	2	2	4	4
TIG Amp Rating	10	> 5 Amp AC/DC	≥ 2 Amp AC/DC	≥ 2 Amp AC/DC	≥ 2 Amp AC/DC
Cartridge Size (mm)	110x90mm	110x90mm	110x90mm	114x133	114x133
View Size (mm)	97x44	96x42.5	96x47	97x62	95x85
Temperature Range	Operating Storage				
	-5°C ÷ 55°C -20°C ÷ +70°C	-10°C ÷ +55°C -20°C ÷ +70°C	-10°C ÷ +55°C -20°C ÷ +70°C	-10°C ÷ +55°C -20°C ÷ +70°C	-10°C ÷ +55°C -20°C ÷ +70°C
Weight (g)	496	528	532	595	595
Optical Clarity	1/2/1/2	1/1/1/2	1/1/1/1	1/1/1/1	1/1/1/1
HeadGear	Standard LS	Standard Viking	Pivot	Pivot	Pivot
Battery Type	Solar Cells No battery required	2 AAA Alkaline	1 CR2450 Battery	2 CR2450 Batteries	1 CR2450 Battery
	 <p><b>LINC SCREEN II</b> K2953-1-CE</p>	 <p><b>Black</b> K3282-1-CE</p>	  <p><b>Black</b> K3023-3-CE</p> <p><b>Tribal</b> K3024-3-CE</p>	  <p><b>Black</b> K3028-3-CE</p> <p><b>Street Rod®</b> K3035-3-CE</p>	   <p><b>Black</b> K3034-3-CE</p> <p><b>Motorhead®</b> K3100-3-CE</p> <p><b>Mojo®</b> K3101-3-CE</p>



# Replacement Parts (includes LSII, Viking 1740 & Viking 4C)



	Part Number	Description	Dimensions	Qty/ pk	Linc Screen II	1740 series	1840 series	2450 Series	3350 Series
Accessory	KP3046-100	CHEATER LENS 1.00 MAG	51 x 108 mm FRAME, 1.0 MAG	1		○	○	○	○
Accessory	KP3046-125	CHEATER LENS 1.25 MAG	51 x 108 mm FRAME, 1.25 MAG	1		○	○	○	○
Accessory	KP3046-150	CHEATER LENS 1.50 MAG	51 x 108 mm FRAME, 1.5 MAG	1		○	○	○	○
Accessory	KP3046-175	CHEATER LENS 1.75 MAG	51 x 108 mm FRAME, 1.75 MAG	1		○	○	○	○
Accessory	KP3046-200	CHEATER LENS 2.00 MAG	51 x 108 mm FRAME, 2.0 MAG	1		○	○	○	○
Accessory	KP3046-225	CHEATER LENS 2.25 MAG	51 x 108 mm FRAME, 2.25 MAG	1		○	○	○	○
Accessory	KP3046-250	CHEATER LENS 2.50 MAG	51 x 108 mm FRAME, 2.5 MAG	1		○	○	○	○
Consumable	KP3043-1	1740 1840 OUTSIDE CLEAR COVER LENS	114 x 100 x 1.5 mm	5		○	○		
Consumable	KP3283-1	1740 INSIDE CLEAR LENS	95.9 x 47.2 x 1.0 mm	5		○			
Consumable	KP2897-1	1840 INSIDE CLEAR COVER LENS	96 x 51.6 x 1.0 mm	5			○		
Consumable	KP2898-1	2450 3350 OUTSIDE CLEAR COVER LENS	114 x 133 x 1.0 mm	5				○	○
Consumable	KP2931-1	2450 INSIDE CLEAR COVER LENS	98.5 x 66.5 x 1.0 mm	5				○	
Consumable	KP3044-1	3350 INSIDE CLEAR COVER LENS	94.7 x 89.7 x 1.0 mm	5					○
Consumable	KP3323-1-CE	LS2 COVER LENS KIT (2 OUTSIDE 2 INSIDE)	N/A	2 + 2	○				
Consumable	KP2930-1	SWEATBAND	N/A	2		○	○	○	○
Consumable	KP3324-1-SB	SWEATBAND	N/A	1	○				
Spare	KP3284-4	1740 ADF CARTRIDGE	DINS 110 X 90 mm	1		○			
Spare	KP2853-3	1840 ADF CARTRIDGE	DINS 110 X 90 mm	1			○		
Spare	KP2932-3	2450 ADF CARTRIDGE	114 X 133mm	1				○	
Spare	KP3045-3	3350 ADF CARTRIDGE	114 X 133mm	1					○
Spare	S27978-55	ADF HOLDER	N/A	1		○	○		
Spare	S27978-33	ADF HOLDER	N/A	1				○	○
Spare	S27978-54	BLACK REPLACEMENT SHELL	N/A	1			○		
Spare	KP3282-SH	BLACK REPLACEMENT SHELL	N/A	1		○			
Spare	S27978-31	BLACK REPLACEMENT SHELL	N/A	1				○	○
Spare	KP3324-1-CE	HEADGEAR REPLACEMENT	N/A	1	○				
Spare	KP2929-1	HEADGEAR REPLACEMENT	N/A	1		○			
Spare	KP3908-1	HEADGEAR REPLACEMENT (PIVOT TYPE)	N/A	1		○	○	○	○
Spare	S27978-58	OUTSIDE COVER LENS SEAL	N/A	1		○	○		
Spare	S27978-32	OUTSIDE COVER LENS SEAL	N/A	1				○	○



# Marketing Tools

Dedicated pages in the catalogue.  
(Can be used as leaflet)

**IM2067rev0 -10 languages**  
**IM2068rev0 -10 languages**  
**IM2069rev0 -10 languages**  
(English, Italian, German, Spanish, French, Dutch, Polish, Finnish, Portuguese, Russian).



**4C lens technology**  
a clear view to productivity and quality.

**A VISION FOR BETTER WELDS**

If quality and productivity are your ultimate objectives, your first priority has to be clarity. Simply put, if you can't see the work, you can't do the work. 4C technology provides a filtering lens that provides a better, clearer view of the welding puddle.

The 4C Lens Technology upgrade to Lincoln Electric's VIKING® welding helmets – including the 1840 series, 2450 series and 3350 series – maintains the series' existing luminous transmittance level, but 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 that use multiple welding processes, including stick, MIG and TIG fabrication, automotive parts, appliances and more. Whatever the task at hand, 4C technology gives you a clear view to productivity and quality.

**A vision for better weld.**

**Better clarity, less color**

Now you can make a good view even better. Upgrading the VIKING 1840, 2450 and 3350 series with 4C technology allows the view screens on these helmets to reach a 1-1-1 optical clarity rating and the visibility is improved by reducing the lime green tint.

**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 and improves weld quality.

**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.

**4C™ Technology**

1. Clarity – Optical clarity 1/1/1
2. Colour – Real Colour View
3. Carat – Light Weight ADF
4. Cut – Even Shade From Any Angle

2 LINCOLN ELECTRIC

IM2069  
07/2015  
REV00

**VIKING™ 4C™ 3350 SERIES**  
**AUTO-DARKENING HELMETS**  
4.50X5.25 STANDARD REPLACEMENT LENS

OPERATOR'S MANUAL

**ENGLISH**

**CE**

GRAPHICS MAY VARY

**LINCOLN ELECTRIC**

LINCOLN ELECTRIC EUROPE S.L.  
c/o Balmes, 89 - 8ª 2ª, 08008 Barcelona, Spain  
www.lincolnelectric.eu





# Packaging Information



## In the box

- Viking Helmet
- User Manual (in paper)
- Helmet bag
- Bandana
- Extra cover lenses (2 inside, 5 outside)

## Packaging

- Color Carton Box  
dim. 31.3X26.9X26.8cm (LxWxH)
- Weight Kg 1,85.
- Total 48 units on Europallet: 12 units per layer, 4 layers. Total weight about 110kg.





# Warranty



**WARRANTY PERIOD  
INCREASED TO 3 YEARS ON VIKING 4C™ !**

**WARRANTY PERIODS FOR OTHER HELMETS : 1 YEAR ON LINC SCREEN II, 2 YEARS ON VIKING 1740**



## Launch dates



HELMET	LAUNCH DATE
K3034-3-CE (Viking 3350 Black) K3100-3-CE (Viking 3350 Motorhead) K3028-3-CE (Viking 2450 Black)	5th November AND in any case not before the Viking «-1» are depleted
All remaining designs	25th November

### IMPORTANT:

Please note that until 25th Nov the available quantity will be limited:  
do not order full pallets and do not make actions for big qty before that  
date.



## Remarks



- **Central Stock: LSW**
- **Lead Time: 105 days (if not on stock)**
- **Warranty : 3 years on parts and labour**
- **Any missing European language in the IM must be translated locally by each site (European norms request the helmet to be sold with the Instruction Manual written in local language)**
- **Not possible to sell American version in Europe (not CE compliant)**



## **Additional Information**





# Competitors (1/3)

Trader/ Manufacturer	Item Description	Product Photo	Level	LCD Viewing Area (mm)	Sensors	Variable Welding Shades	Light to Dark Switching Time (ms)	Delay Control (Dark to Light)	Tig Rating	Total Weight (g)	Optical Class
Lincoln Electric	2450 "4C"		High	97x62	4	DIN 5÷13 + Grind	0,04	0,1÷1	AC/DC 2 Amp	595	1/1/1/1 Real Color
Lincoln Electric	3350 "4C"		High	95x85	4	DIN 5÷13 + Grind	0,04	0,1÷1	AC/DC 2 Amp	595	1/1/1/1 Real Color
Miller	Titanium 9400		High	97x60	4	DIN 5÷13	0,05	0,1÷1,0	N/A	513	N/A
Miller	Titanium 9400i		High	97x60	4	DIN 5÷13	0,05	0,1÷1,0	N/A	739	N/A
Sperian/Optrel	e680		High	100x50	N/A	DIN 5÷13	0,18	Low: 0,35÷0,6 Fast 0,1÷0,35	DC 1,5 Amp	490	1/1/1/2









# Competitors (2/3)

Trader/ Manufacturer	Item Description	Product Photo	Level	LCD Viewing Area (mm)	Sensors	Variable Welding Shades	Light to Dark Switching Time (ms)	Delay Control (Dark to Light)	Tig Rating	Total Weight (g)	Optical Class
Sperian/Optrel	e670		High	100x50	N/A	DIN 9÷13	0,18	Low: 0,35÷0,6 Fast 0,1÷0,35	DC 30 Amp	490	1/1/1/2
3M/Speedglas	9100 SHIELD + 9100V / 9100X / 9100XX filter		High	45x93 / 54x107 / 73x107	3	DIN 5, 8, 9÷13	0,1	0,04÷1,3	N/A	N/A	1/1/1/2
3M/Speedglas	SL SHIELD + SL filter		High	42x93	2	DIN 8÷12	0,1	0,06÷0,25s	N/A	N/A	1/1/1/2
Sacit	Tiger TOP2		High	97x46	2	DIN 9÷13	0,04	Low: 0,3÷0,6 Fast 0,1÷0,35	4 AMP	560	N/A
Sacit	Tiger TOP1		High	104x42	2	DIN 9-13	0,05	Low: 0,3÷0,6 Fast 0,1÷0,35	4 AMP	440	N/A



# Competitors (3/3)

Trader/Manufacturer	Item Description	Product Photo	Level	LCD Viewing Area (mm)	Arc Sensors	Variable Welding Shades	Light to Dark Switching Time (ms)	Delay Control (Dark to Light)	Tig Rating	Total Weight (g)	Optical Class
Lincoln Electric	1840 "4C"		Medium	96x47	2	DIN 9÷13 + Grind	0,04	0,1÷1	AC/DC 2 Amp	532	1/1/1/1 Real Color
Esab	Warrior		Medium	98x48	4	DIN 9÷13	N/A	N/A	N/A	520	1/2/1/2
Miller	Elite		Medium	97x60	4	DIN 9÷13	0,05	0,1÷1,0	N/A	510	N/A
Miller	Performance		Medium	97x60	3	DIN 9÷13	0,05	0,1÷1,0	N/A	482	N/A
Sperian/Optrel	e650		Medium	100x50	N/A	DIN 9÷13	0,18	Low: 0,35÷0,6 Fast 0,1÷0,35	DC 30 Amp	490	1/1/1/2
3M/Speedglas	9000 SHIELD + 9002D filter		Medium	42x93	2	DIN 9÷11	0,4	0,1÷0,2s	N/A	N/A	1/2/2/3



*Good to know*

# Marks on ADFs

Following the European Norm EN379, auto-darkening filters (ADFs) must be marked according to their performances. Different marks are out of law !

Example : Viking 1840 4C™



4 / 9 - 13 LE 1 / 1 / 1 / 1 379

- Light state scale no \_\_\_\_\_
- Lightest dark state scale no \_\_\_\_\_
- Darkest state scale no \_\_\_\_\_
- Manufacturer's identification \_\_\_\_\_
- Optical class \_\_\_\_\_
- Diffusion of light class \_\_\_\_\_
- Variations in luminous transmittance class \_\_\_\_\_
- Angle dependence of luminous transmittance class \_\_\_\_\_
- Number of this standard \_\_\_\_\_

**Our filters offer the best performances**  
best : 1/1/1/1  
worst : 3/3/3/3

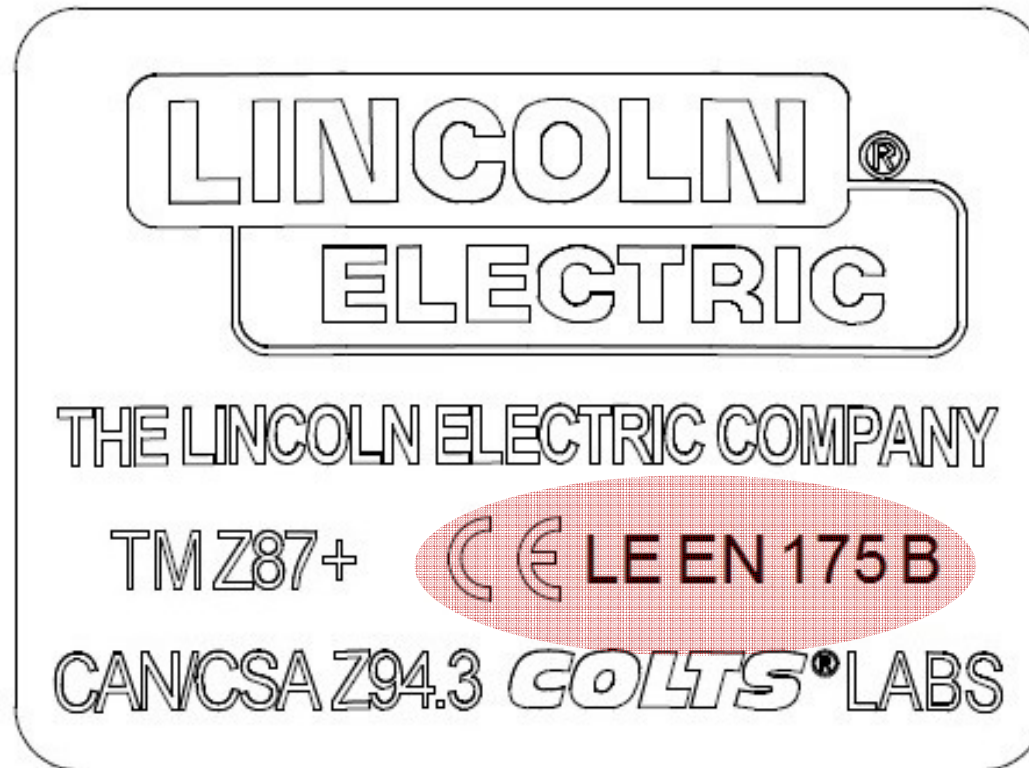
**OPTICAL CLARITY OF VIKING 4C™ ADFs :**  
ADF 1840 : 1/1/1/1  
ADF 2450 : 1/1/1/1  
ADF 3350 : 1/1/1/1



## Marks on shield

*Good to know*

Following the European Norm EN175 shields must be marked.  
Any shield not marked is out of law !







Good to know

# Marks on lenses

Following the European Norm EN166, lenses must be marked .  
Any lens not marked is out of law !

