

YOUR CHALLENGES  
DRIVE OUR SMART  
SOLUTIONS

**inspire**



# LIGHTING SOLUTIONS FOR MINING ENVIRONMENTS

AUGUST 2018

**BEKA**  
Schröder 

# WHY

# YOU SHOULD USE BEKA SCHRÉDER SOLUTIONS

BEKA Schröder is Africa's leading manufacturer of luminaires and glass fibre poles. We design and manufacture all our products in our ISO 9001:2000 certified factory. BEKA Schröder complies with IEC 60598 standards. Our products are certified by the South African Bureau of Standards.



For details on our Ex Classified luminaires visit:  
[www.beka-schreder.co.za/  
BEKA\\_Ex\\_Classified\\_Luminaires\\_Brochure](http://www.beka-schreder.co.za/BEKA_Ex_Classified_Luminaires_Brochure)

## EXPERTISE

BEKA Schröder has been recognised as the leader in luminaire design and manufacture for a wide range of applications. We specialise in offering the exact amount of light where and when it is required. This is achieved by a local team of lighting application engineers with the relevant experience and expertise to deliver an exact solution for your requirement.

## PAYBACK

The LED lighting solutions can provide in excess of 70% energy savings compared to the traditional light sources, when combined with lighting control systems. These savings can be translated into a shorter payback period and thus continued savings for the lifespan of the luminaires.

## EFFICIENCY

The luminous efficacy of LEDs is constantly increasing, this means that LEDs are producing more and more light with the same amount of energy. BEKA Schröder combines the best LED and driver configurations to achieve better efficiency out of luminaires.

## WELL-BEING

With the colour rendering that is up to four times better than traditional light sources, LED luminaires increase color perception and recognition. This increases the safety and visual comfort in a mining space.

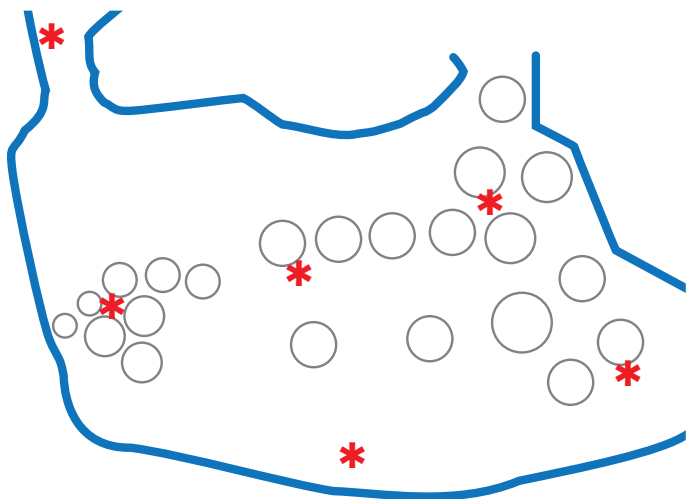
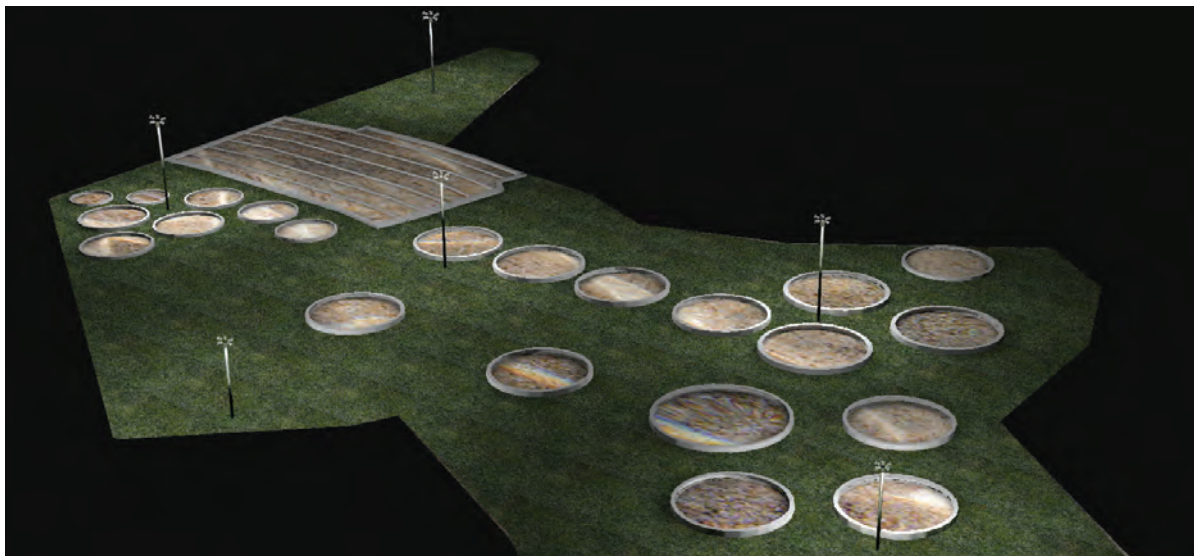
## QUALITY

Real measure of quality is measured in maintenance requirements and mean time between failures of a luminaire. BEKA Schröder offers the longest time between failures. This is achieved by using the best material to manufacture the luminaires, and concepts such as ThermiX® for thermal management of LEDs.







# SAVE ON ENERGY & MAINTENANCE COSTS

## INDUSTRIAL AREA LIGHTING



### TOTAL SAVINGS\*

	ENERGY SAVINGS	35.4%
	TCO <sup>1</sup> Savings over 15 years	R609 950
	ROI <sup>2</sup>	3.2 years
	CO <sub>2</sub> <sup>3</sup>	404 tons

### CASE STUDY



LEDflood-maxi

#### LED Lighting

Symbol	Luminaire	Qty	Wattage (W)	Total Wattage (W)
*	LEDflood-maxi 279W	37	279	10 323



Projectolux 400W

#### Conventional Lighting

Equivalent Luminaire	Qty	Wattage (W) <sup>**</sup>	Total Wattage (W)
PROJECTOLUX 400W HPS	37	432	15 984

\*Total savings calculations are indicative of what can be expected in a typical application using similar products.

\*\*Includes ballast losses

<sup>1</sup> Total Cost of Ownership

<sup>2</sup> Return on Investment

<sup>3</sup> Equivalent Carbon Dioxide

# WHICH PRODUCT SELECTION

Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
8 - 13W	1 220 - 1 630	≥126 lm/W	4 000K	50 000 hours (L80)	≥80	90-305V 50Hz



## OPTIWAY

Industrial LED bulkhead

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Total cable length	Distance between connection boxes	Number of connection boxes
102m	5m	21
107m	7.5m	15
102m	10m	11



## OPTILINK with OPTIWAY Connect

Optional plug-in system for underground mining applications

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Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
19 - 55W	2 390 - 7 012	≥128 lm/W	4 000K 3 000K (optional)	100 000 hours (L70)	≥70	198-264V 50Hz



## LEDnova-mini

Industrial LED bulkhead

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Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
75 - 81W	8 563 - 9 243	≥125 lm/W	4 000K 3 000K (optional)	90 000 hours (L70)	≥70	108-305V 50Hz



## LEDnova-midi

Industrial LED bulkhead

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Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
9 - 279W	1 328 - 36 759	≥132 lm/W	4 000K 3 000K (optional) 5 700K (optional)	100 000 hours (L70)	≥70	198-264V 50Hz



## LEDlume range

High-power LED street light

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Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
108 - 240W	11 948 - 31 050	≥129 lm/W	4 000K	60 000 hours (L70)	≥70	198-264V 50Hz



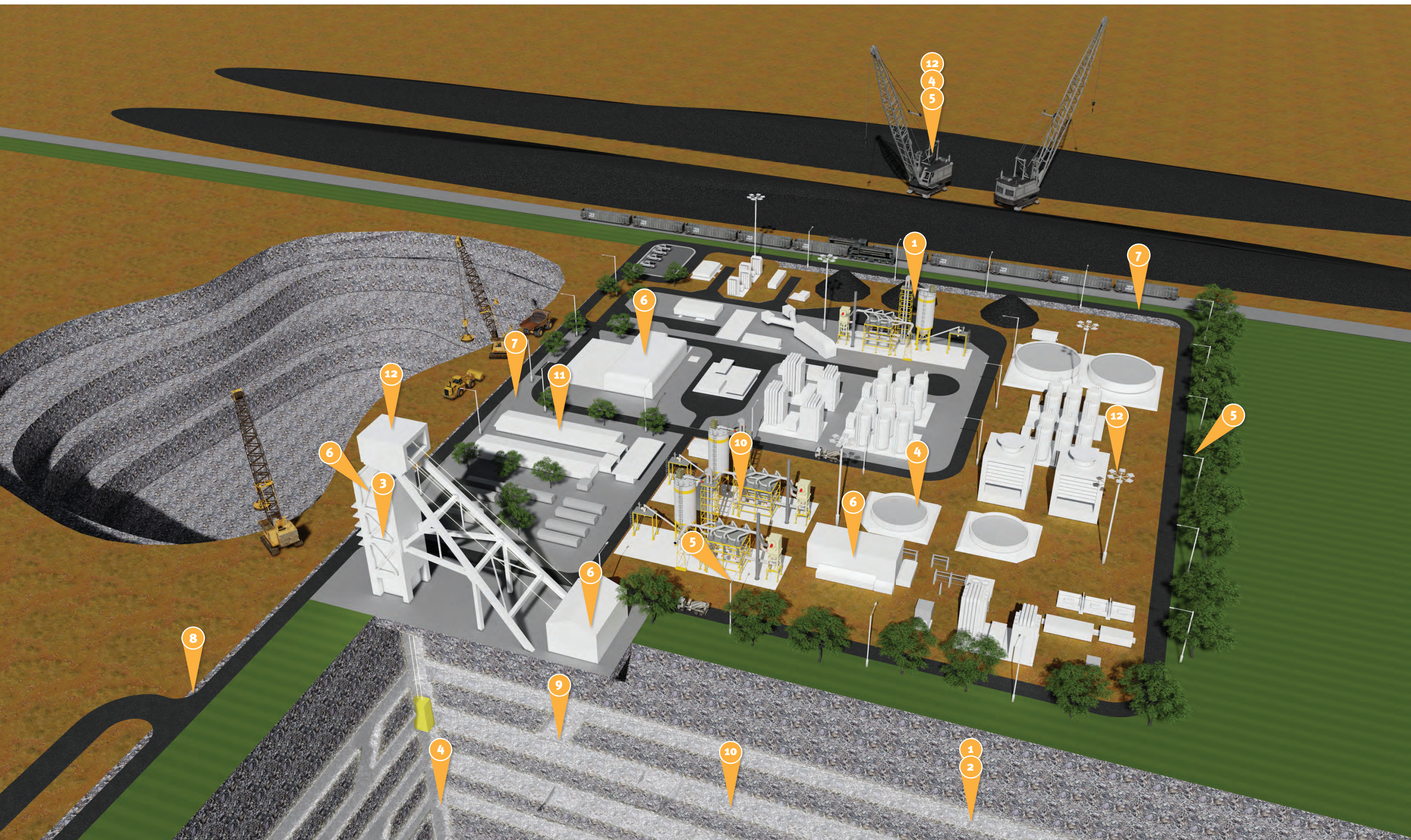
## LEDbay-midi

Multi-purpose LED floodlight luminaire

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# WHICH PRODUCT SELECTION

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## BEKA SOLAR

LED solar solution



Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI
36 - 80W	4 701 - 9 288	117 lm/W	4 000K	100 000 hours (L70)	>70



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## SOL-ONE

All-in-one LED solar solution



Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI
19 - 36W	2 064 - 4 128	≥115 lm/W	5 700K	100 000 hours (L70)	≥70



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## BEKABULK LED

LED bulkhead luminaire



Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
18W	2 400	133 lm/W	4 000K	60 000 hours (L80)	>70	230V



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## ROUGHGUARD LED

Vandal-proof LED luminaire



Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
9 - 55W	1 180 - 6 630	≥121 lm/W	4 000K	50 000 hours (L70)	≥70	198-277V 50Hz



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## BEKA VAPOURLINE LED

Industrial LED luminaire



Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
27 - 46W	4 640 - 7 380	≥160 lm/W	4 000K	80 000 hours (L80)	>80	230V



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## OMNIstar

High-power LED floodlight



Midi

Maxi

Power consumption	Lumen	Efficacy	Colour temperature	Operating hours	CRI	Input Voltage
108 - 463W	11 948 - 63 465	≥118 lm/W	4 000K	100 000 hours (L70)	≥70	198-264V 50Hz



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