



# HL SERIES

## 9m Hydraulic vertical Lighting Tower

Up to 50% energy saving/ Instant light



**LED**  
technology



9m

HYDRAULIC MAST



# HL SERIES LED LIGHTING TOWER

CONSTRUCTION,  
MINING,  
CIVIL DEFENSE,  
MILITARY FIELD







# HL SERIES LED LIGHTING TOWER

New  
**LED**  
technology

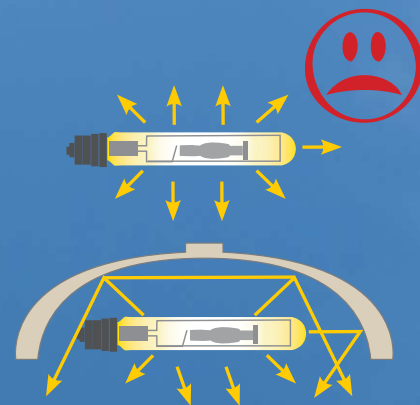
LED uses less fuel...  
Produces **more light!**



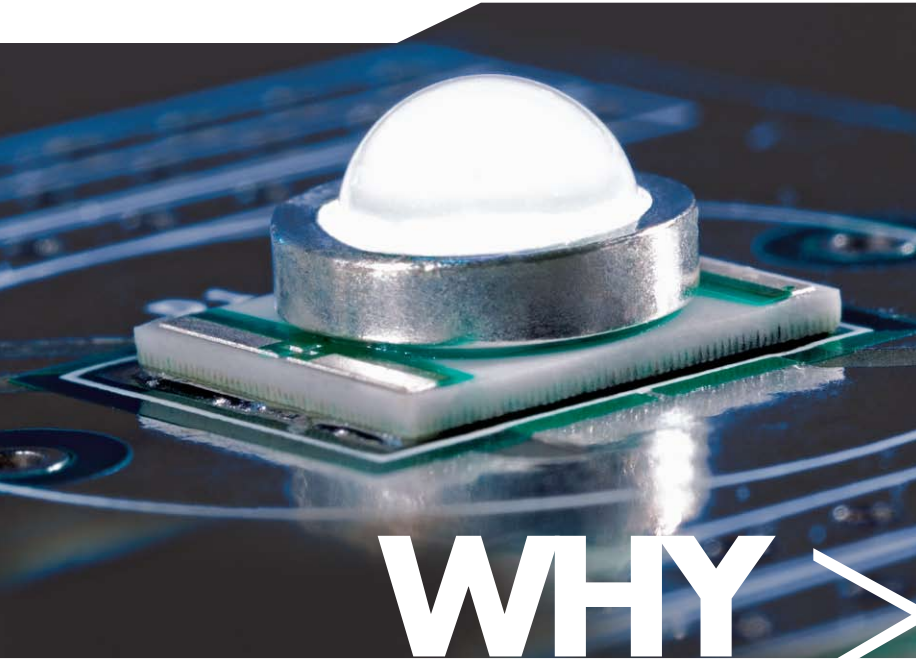
## LED TECHNOLOGY: NO WASTED REFLECTED LIGHT



€ Compared to Metal Halide sources, **LED** is spread only in the direction of the illumination and it is therefore much more efficient.



€ With traditional **METAL HALIDE LAMPS** a lot of light is wasted from the top and the lamp casing which means less efficiency and more environmental pollution.



# WHY > CHOOSE LED LIGHT

## ① INSTANT LIGHT

No strike up delay, no waiting time for the bulbs cooling

## ② ENERGY SAVING

Up to 50% less consumption than incandescent systems

## ③ LONG-LIFE

Five times longer than best traditional lamps

## ④ LOWER ENVIRONMENTAL IMPACT

Thanks to its lower consumption and to the lack of hard to dispose of materials, such as mercury

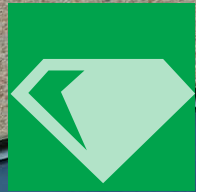
## ⑤ MORE SAFETY

Low voltage used, no ultraviolet infrared radiation.

Instant light  
**no strike up** delay







# up to 50% energy saving instant light

The new **BRUNO HL SERIES** lighting tower IS THE SPECIALIST FOR RENTAL.

With its hydraulic elevation system, it is an indispensable piece of equipment in mining and oil field, as well as in the rental sector, in public and private construction, and in civil defence. It stands out for its versatility, compactness, toughness and easiness of use.

It guarantees instant light with no strike up delay and with no waiting time for the bulbs cooling. This technology avoids, therefore, the risk of dark periods in areas with video supervisory. NO REFLECTED LIGHT IS WASTED.





# COMPARING LIGHTING TECHNOLOGIES

- ▶ Fuel consumption almost halved for the same illuminated surface;
- ▶ Much more even illumination of the area, resulting in better average visibility of the entire illuminated surface;
- ▶ Exceptional uniformity ratio between maximum and medium Lux for less glare (which could cause problems to the operator) thanks to a more uniformly diffused light.

These are the main improvements given by a **BRUNO** lighting tower with **8 LED modules of 250W each**, for a total power of **2000W**, compared to the same tower with **4 metal halide lamps of 1000W each** and a total power of **4000W**.

This lighting technology allows that in case of restarting there is **NO INTERVAL WITH DARK PERIODS DUE TO THE COOLING OF THE METAL HALIDE LAMPS**.

## 2000 W LED



## 4000 W METAL HALIDE



**8-hour fuel consumption lt < 7**



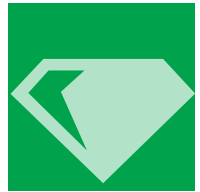
**LONGER LIFE**



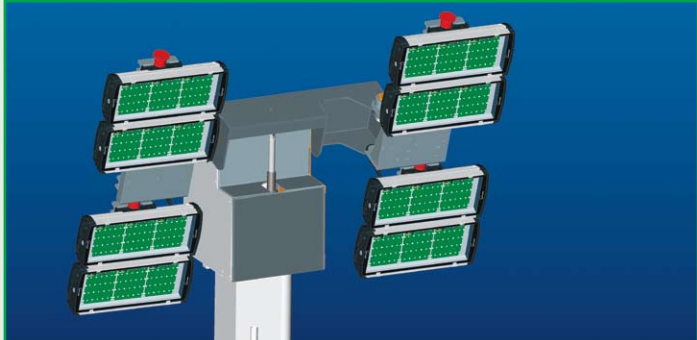
**8-hour fuel consumption lt > 14**



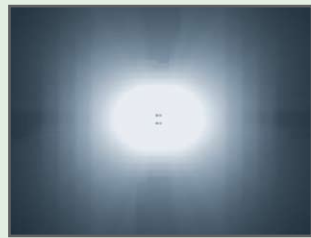
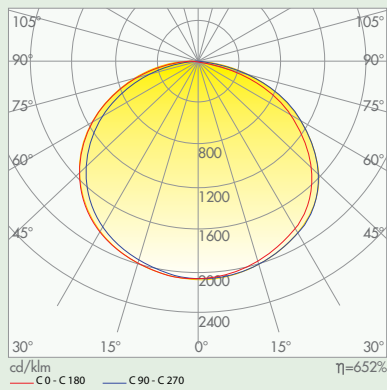
**MORE FREQUENT REPLACEMENT OF BULBS**



## 2000 W LED



### POLAR DIAGRAM



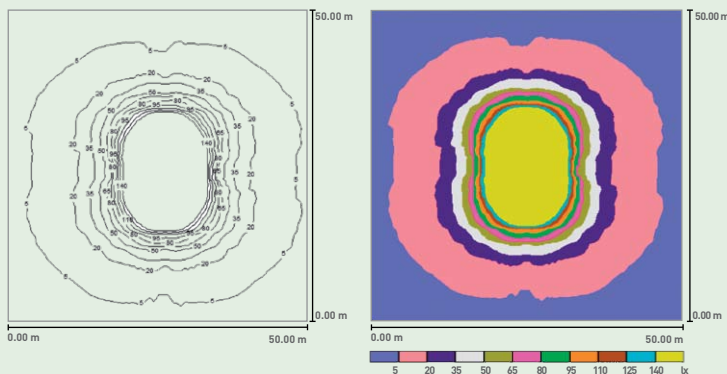
◀ on 2500 m<sup>2</sup>

Average Lux	42
Min Lux	0,82 😊
Max Lux	606 😊



The Exceptional uniformity ratio between maximum and medium Lux allows a **lower glare to the operator** thanks to the greater homogeneity of the light diffused.

### ISOLINES AND LIGHT COLOUR



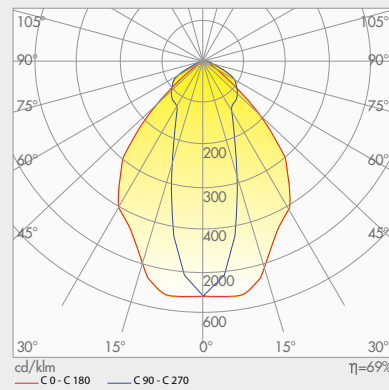
⊖ A much more **uniform illumination** of the area concerned results in better average visibility of the entire illuminated surface.

TEST CARRIED OUT WITH 180° INCLINATION WITH RESPECT TO THE GROUND

## 4000 W METAL HALIDE



### POLAR DIAGRAM



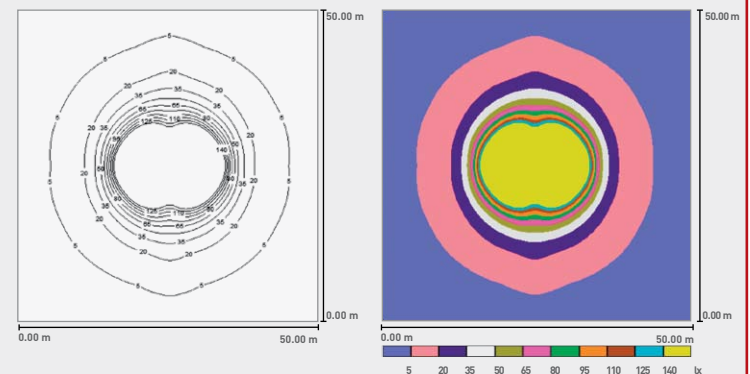
◀ on 2500 m<sup>2</sup>

Average Lux	41
Min	Lux 0,32 😞
Max	lux 1019 😞



Due to the significant difference between maximum and average Lux, **scattered light is very uneven** and can **dazzle** the operator.

### ISOLINES AND LIGHT COLOUR



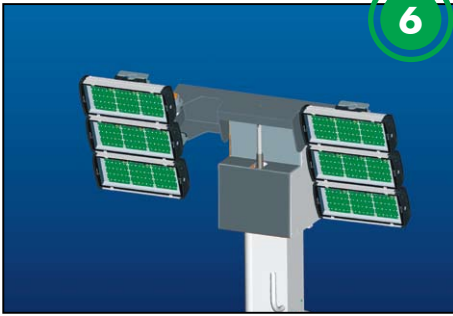
Lesser homogeneity of the lighting of the area results in **lower average visibility** of the entire illuminated surface.

TEST CARRIED OUT WITH 180° INCLINATION WITH RESPECT TO THE GROUND

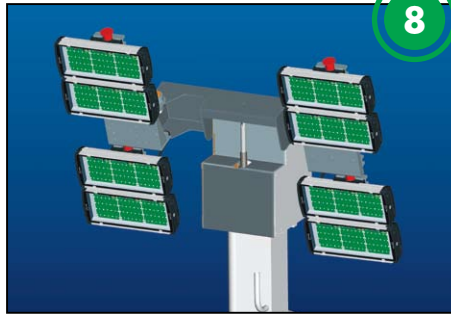
# LIGHT HEADS CONFIGURATIONS

The **BRUNO** lighting tower with **LED technology** can be equipped with three different regulation systems of its lighting modules: **MANUAL**, by locking knobs; **ELECTRIC**, via motorized piston; **DUAL**, using both these mechanisms at the same time. It is also possible to have a configuration system that allows a particular light diffusion thanks to a different arrangement of the extra-clear 4 mm thick tempered glasses.

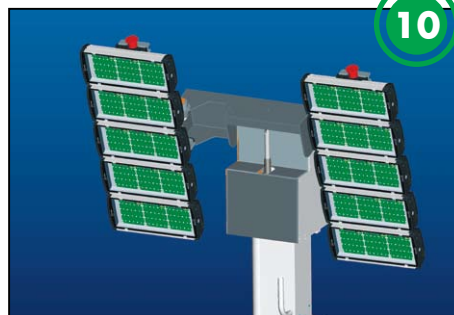
## LED MODULAR SYSTEM



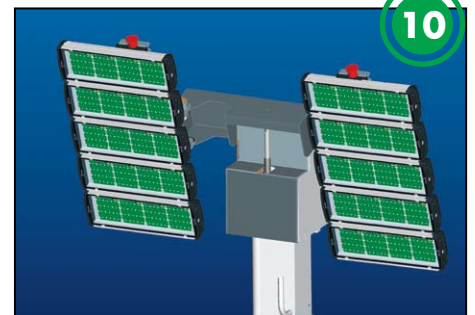
6 LIGHT HEADS  
1500 W



8 LIGHT HEADS  
2000 W



10 LIGHT HEADS  
2500 W



10 LIGHT HEADS  
3300 W

## HIGH QUALITY LIGHTING MODULES



The **BRUNO** LIGHTING TOWERS WITH LED TECHNOLOGY can come with two different types of lighting modules:

- ▶ one, with 36 LEDs for a total of 250 W;
- ▶ and the other one with 48 LEDs for a total of 330 W.

For all versions, **BRUNO** uses CREE LEDs, certified according to **IESLM.80.2008** standard to guarantee L70 (IES TM-21-11) at **50,000 hours** (equivalent to 70% of initial brightness after 50,000 hours of operation).

The lighting heads are manufactured in Italy by **BESTLUX**. The aluminum "from the full", cut, drilled and milled by fully automated machines.

The components are closed in together with extra-clear **4 mm thick** tempered glass to **guarantee IP 65 protection** thanks to its special sealing and adhesive injected in their seats.

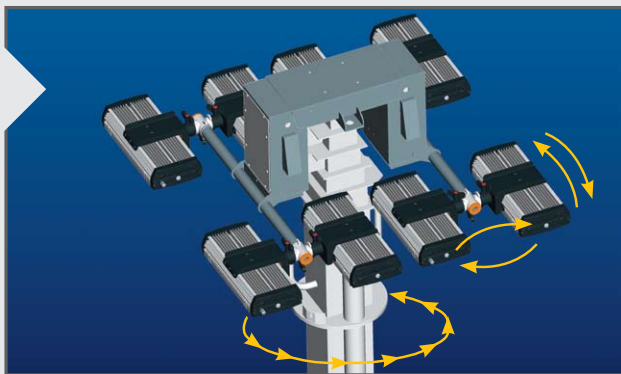






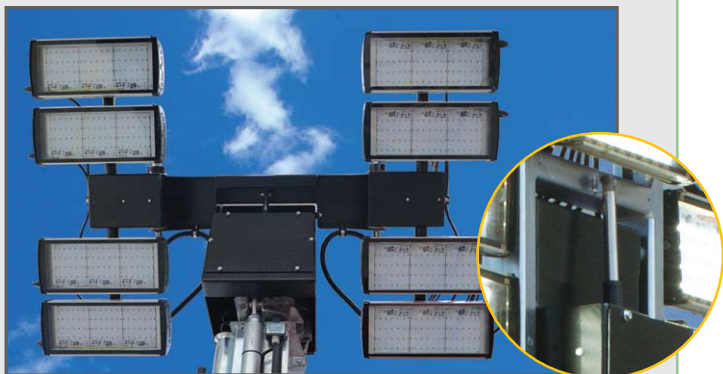
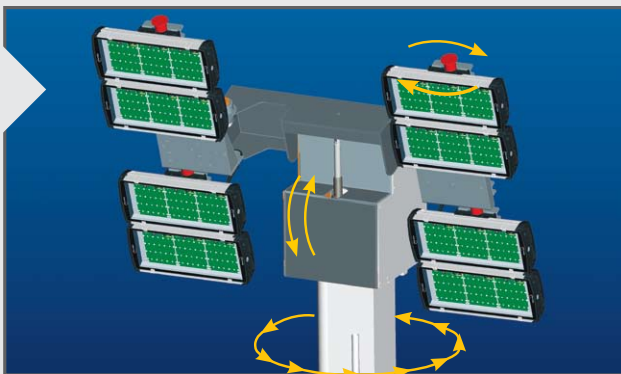
## MANUAL REGULATION

1



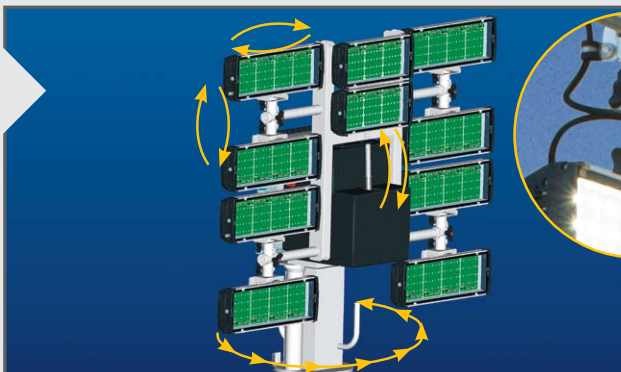
## ELECTRIC REGULATION

2



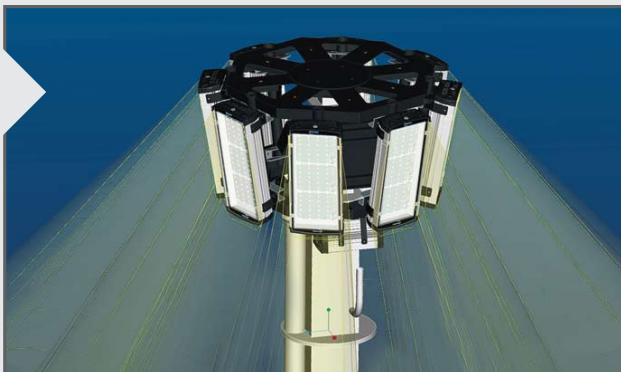
## DUAL REGULATION: manual+electric tilt

3



## SOFT LED LIGHT

4



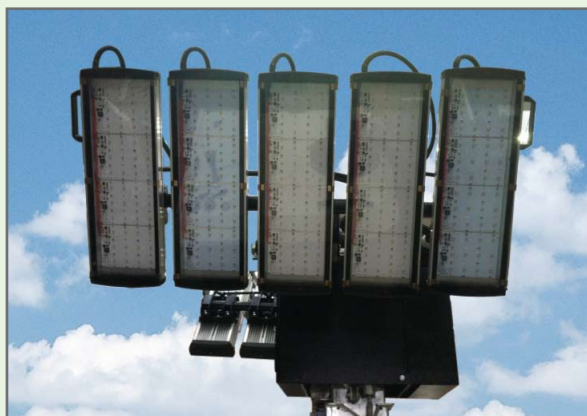


# SPECIAL FOR THE MINING INDUSTRY



Designed and built for use in particularly **HEAVY WORKING CONDITIONS** and on bumpy grounds such as quarries, mining sites etc., this special version is equipped with a trailer approvable for road circulation; extremely robust, **250 lt** tank to ensures over **170 hours** of autonomy.

DC CURRENT  
**48V**  
Option

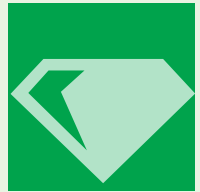


▲ 10 light heads



▲ Electric tilt ajustement





The lighting tower is equipped with 4 HYDRAULIC LEGS [1, 2] adjusted through their control panel [3] and with 17.5" TYRES.



▲ Up and Down button to rise and lower the hydraulic mast

▲ Standard control panel

# BOX LIGHT

## BOX LIGHT-2000 LED, THE SPECIALISTS FOR RENTAL SPEC

Box Light is a very versatile lighting unit with no engine and no alternator, that can be powered by a generating set or the electric mains

- ▶ 8 projectors with Power LED lamps 250W each
- ▶ Lamps rotate, swivel and tilt (option)
- ▶ 9M MAX TOWER HEIGHT
- ▶ 350° column rotation with friction locking stop at any position
- ▶ Easy manual rotation of the support column
- ▶ Hydraulic system security
- ▶ 4 extendable outriggers, swiveling and reclining
- ▶ Forklift pockets
- ▶ Foot compartment to reduce clutter during transport
- ▶ Placement leveller
- ▶ Maintenance doors on both sides
- ▶ Dry weight 390 kg
- ▶ Transport dims: 117 x 111 cm x 227 cm High
- ▶ Deployed dims: 247 x 241 cm x 9 METERS

Versatile  
no engine  
and alternator



QGBL-16 control panel  
with mains input

### MANUAL REGULATION 1

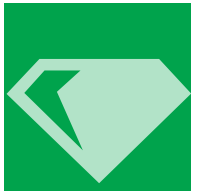


### ELECTRIC TILT 2



The **BOX LIGHT** can be equipped with manual [1] or electric adjustment of the heads [2] with a piston for vertical lifting of the headlights to direct the light in a single direction.





## SPECIAL LED LIGHTING MULTI - TOWER STATION

### FOR MINING FIELDS



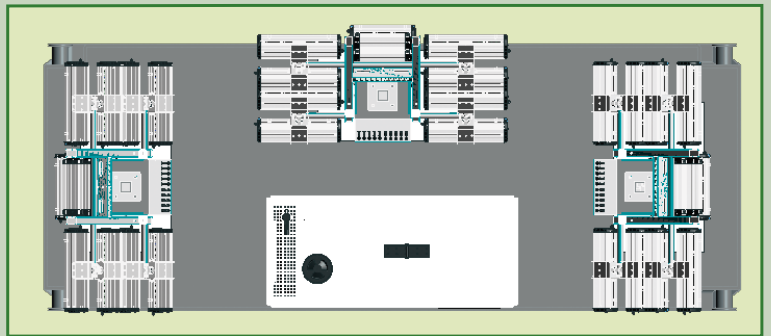
#### MAIN FEATURES

- ▶ **9000W (or more)** led lights with 30 light heads to adjust the towers at different heights.
- ▶ Electric tilt regulation on each tower combine the rotation of the masts with the adjustment of the light heads to optimize the choice of the light direction.
- ▶ Possibility of loading 2 x multi-towers LED lighting stations in one 40' HC container.

#### POSSIBILITY OF CUSTOMIZATION

- ▶ The Multitower can have 3 or 4 headlights to achieve an omni-directional distribution of the light.

30 LIGHT HEADS = 3000 W ▶



### SPECIAL APPLICATION FOR THE **MILITARY AND CIVIL DEFENCE**



#### MAIN FEATURES

The **BRUNO** lighting tower with LED TECHNOLOGY also suits application in special fields through the implementation of special versions with technical, functional and environmental characteristics specific for use in the military and civil defence fields.

SUITABLE FOR APPLICATIONS IN **harsh conditions**



▲ Dust filters

# STANDARD EQUIPMENT

- Hydraulic mast made of galvanized steel
- Maximum height 9 m
- Rotation 350°
- Fast and automatic deployment with safety system
- 140 litres fuel tank
- Noise level 60 dB(A)
- Liquids bunding
- 4 deploying stabilizers



## CLASSIFICATION

SL



▲  
SITE LIGHT

BL



▲  
BOX LIGHT

SB



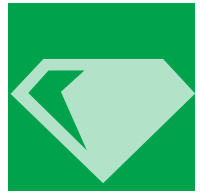
▲  
SOFTLIGHT BOX

MT



▲  
MINING TOWER





# HL SERIES DIESEL Water Cooled

**1500 rpm** - 50 Hz - cos φ 0,8 - 220V - 240V    **1800 rpm** - 60 Hz - cos φ 0,8

## HL SERIES

MODEL	NUMBER OF HEADS	W per lamp	TOTAL W	50 HZ				60 HZ				Aspiration	TANK L	DIMENSIONS cm			MAXIMUM SIZE cm			WEIGHT kg	STANDARD PANEL		
				kva max	kva cont	kva max	kva cont	kva max	kva cont	cm <sup>3</sup>	KV/m 1500 rpm			KV/m 1800 rpm	fuel consumption (l/h) 1500 rpm*	fuel consumption (l/h) 1800 rpm*	L	W	H			L	W

**SL**

### SL SITE LIGHT LED

#### SINGLE-PHASE

SL 9506 KL	6	250	1500	5,3	4,5	6,5	6	KOHLER KDW702	686	5,0	5,9	0,6	0,6	N	140	245	130	230	245	280	920	1050	MCP 120-80
SL 9508 KL	8	250	2000	5,3	4,5	6,5	6	KOHLER KDW702	686	5,0	5,9	0,8	0,7	N	140	245	130	230	245	280	920	1100	MCP 120-80
SL 9808 KL	8	250	2000	8,6	7,6	9,5	9	KOHLER KDW1003	1028	7,6	9,1	0,8	0,8	N	140	245	130	230	245	280	920	1120	MCP 120-80
SL 9810 KL	10	250	2500	8,6	7,6	9,5	9	KOHLER KDW1003	1028	7,6	9,1	1	1	N	140	245	130	230	245	280	920	1150	MCP 120-80
SL 9606 PK	6	250	1500	6,2	5,6	7,5	6,8	PERKINS 403D 07G	761	5,4	6,6	0,6	0,6	N	140	245	130	230	245	280	920	1050	MCP 120-80
SL 9608 PK	8	250	2000	6,2	5,6	7,5	6,8	PERKINS 403D 07G	761	5,4	6,6	0,8	0,7	N	140	245	130	230	245	280	920	1100	MCP 120-80
SL 9808 PK	8	250	2000	8,8	8	10	9	PERKINS 403D 11G	1131	8,4	10,3	0,8	0,8	N	140	245	130	230	245	280	920	1120	MCP 120-80
SL 9810 PK	10	250	2500	8,8	8	10	9	PERKINS 403D 11G	1131	8,4	10,3	1	1	N	140	245	130	230	245	280	920	1150	MCP 120-80
SL 9810 PK	8 + 2	250	3140	8,8	8	10	9	PERKINS 403D 11G	1131	8,4	10,3	1,3	1,3	N	140	245	130	230	245	280	920	1180	MCP 120-80

**BL**

### BL BOX LIGHT LED

BL 9004	4	250	1000	-	-	-	-	-	-	-	-	-	-	-	-	110	110	230	260	260	920	800	QGBL - 16
BL 9006	6	250	1500	-	-	-	-	-	-	-	-	-	-	-	-	110	110	230	260	260	920	830	QGBL - 16
BL 9008	8	250	2000	-	-	-	-	-	-	-	-	-	-	-	-	110	110	230	260	260	920	860	QGBL - 16
BL 9010	10	250	2500	-	-	-	-	-	-	-	-	-	-	-	-	110	110	230	260	260	920	890	QGBL - 16

**SB**

### SB SOFTLIGHT BOX LED

#### SINGLE-PHASE

SB 9508 KL	8	250	2000	5,3	4,5	6,5	6	KOHLER KDW702	686	5,0	5,9	0,8	0,7	N	140	245	130	230	245	280	920	1120	MCP 120-80
SB 9608 PK	8	250	2000	6,2	5,6	7,5	6,8	PERKINS 403D 07G	761	5,4	6,6	0,8	0,7	N	140	245	130	230	245	280	920	1180	MCP 120-80

**MT**

### MT MINING LIGHT LED

#### SINGLE-PHASE

MT 9810 PK	10	330	3300	8,8	8	10	9	PERKINS 403D 11G	1131	8,4	10,3	1,3	1,3	N	250	244	190	225	419	237	920	2000	MCP 120-80
MT 9810 KL	10	330	3300	8,6	7,6	9,5	9	KOHLER KDW1003	1028	7,6	9,1	1,4	1,3	N	250	244	190	225	419	237	920	2000	MCP 120-80

\*Consumption is calculated with all the lights turned on at the same time

Technical data not binding

## CONTROL PANELS

\*OPTION

The control panel includes an electronic control board, a circuit breaker, a safety acoustic alarm, warning lights, digital indicators and engine protections, fuel level manometer as well as two buttons for the raising and descent of the mast. On the control panel there are 4 switches, one for each spotlight.

The distribution panel includes two single-phase sockets (the first of 16A and the second one of 32A) with a circuit breaker. An auxiliary entry for the mains to allow supply to the lamps even when the engine is switched off is available as option. In this case the switching can be manual or automatic.



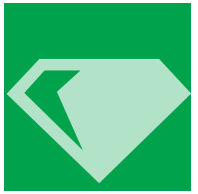
- |                                    |                                     |
|------------------------------------|-------------------------------------|
| 1 Electronic control board SPG 120 | 6 16A Single-phase socket 3P        |
| 2 Emergency stop button            | 7 Circuit breaker + 4 lamp switches |
| 3 Starter key                      | 8 Spark plug light indicator        |
| 4 32A Single-phase socket 3P       | 9 Mains plug (OPTION)               |
| 5 Up/down push buttons             | 10 Deep sea controller (OPTION)     |

9m





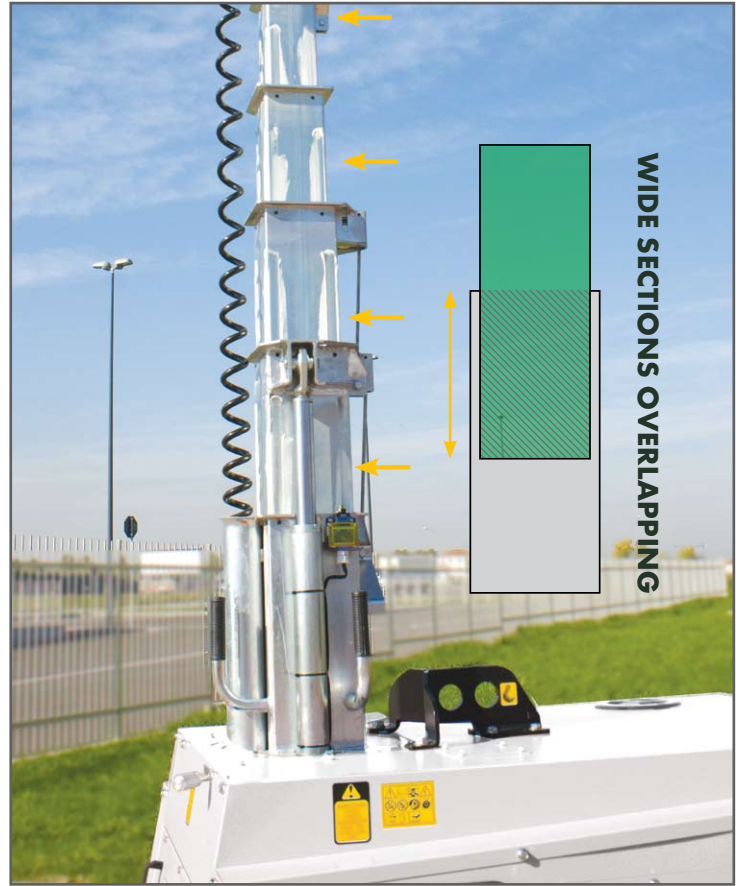
# HYDRAULIC MAST



THE HYDRAULIC MAST WITH A ROTATION OF 350° on industrial bearings is equipped with a double safety braking system: the first one is useful to KEEP THE ORIENTATION of the spotlights on the working area; the other SAFETY BRAKE avoids involuntary spins of the mast during transport.

THE HYDRAULIC GALVANIZED STEEL MAST reaches a maximum of 9 METERS IN HEIGHT and is composed of 7 EXTENDABLE SECTIONS. The final part of each section is reinforced by a thick properly welded ring. The easy sliding of the sections and the perfect vertical alignment are favoured by distance rings placed on each side.

The WIDE SURFACE OF THE SECTION'S OVERLAP guarantees better STABILITY and LONG LIFE of the lighting unit. The raising time is 11 SECONDS, and the descent lasts just 19 SECONDS; the speed is further reduced to prevent counterblows that may damage the metal halide lamps.



▲ Hydraulic mast in galvanized steel with multiple sections



▲ Mast's external reinforcement plates on each section



▲ Safety mast block for best road stability



▲ Lighting mast wind brake



▲ 350° pivoting mast on bearings with clutch type braking system



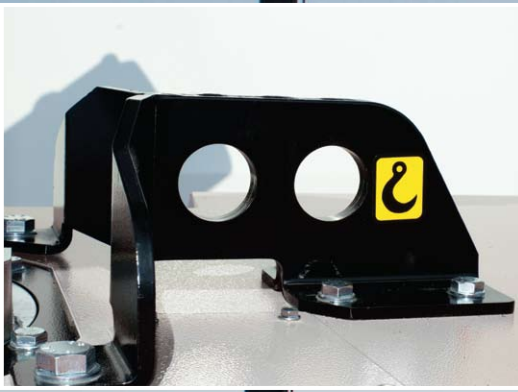
# EASY HANDLING

The **HL SERIES** is accurately equipped to enable easy and efficient use. One single operator will be able to set up and run the lighting tower without assistance.

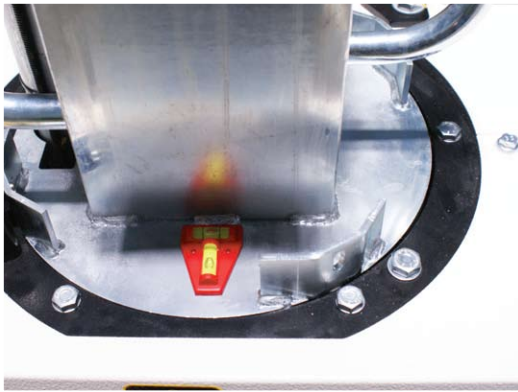
The lighting tower **HL SERIES** can be easily placed with a crane through its **CENTRAL LIFTING EYE** or with a **FORKLIFT** thanks to the guides on the base.

Optimal stability is obtained through the **FOLDING HANDLES** placed on **4 STABILIZING FEET** and verifying the proper setting through the **POSITIONING LEVELS**. The **STABILIZING FEET** are all adjustable to ensure stability.

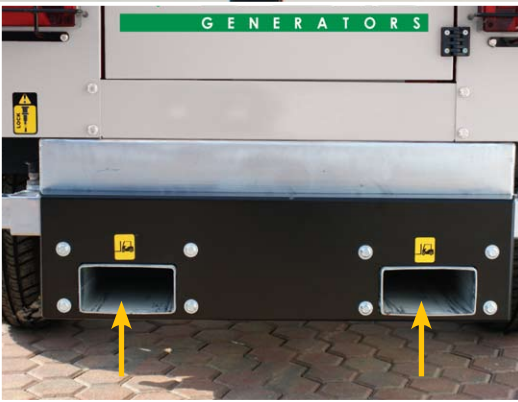
A **KIT TO STEER THE LIGHTHEADS FROM THE GROUND** is available as option.



◀ Central lifting eye



◀ Positioning levels



◀ Forklift guides



◀ 350° pivoting mast on bearings with clutch type braking system



▲ 4 extractable, adjustable and reclinable stabilizers

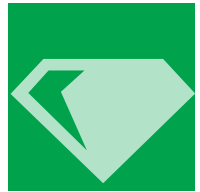


▲ Folding handles stabilizing feet



▲ Easy regulations of the lamps

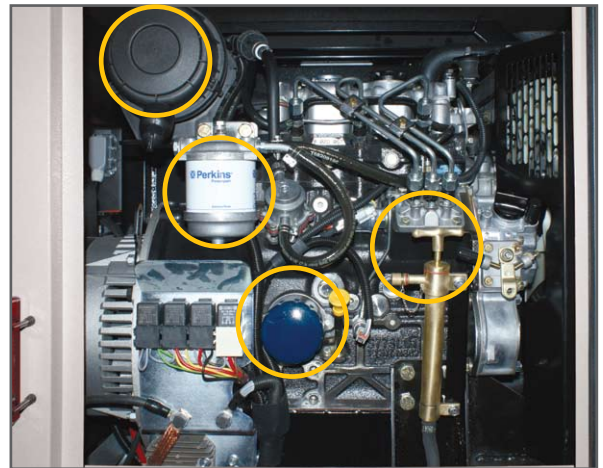




### MAINTENANCE OPERATIONS MADE EXTREMELY EASY.

A WIDE DOOR on the rear side allows easy and fast access to THE ENGINE/ALTERNATOR COMPARTMENT. The filters, all placed on the engine's side, can be easily and quickly replaced. ACCESS TO THE HYDRAULIC SYSTEM AND THE REACTIVE BALLASTS is gained by removing the metal panel placed on the front part of the lighting unit. Two panels on the control board's side allow access to the BATTERY COMPARTMENT and to the REAR OF THE ALTERNATOR.

A WATERTIGHT NAUTICAL TYPE CAP, on the top of the canopy facilitates the control of the liquid level in the radiator, while an OIL EXTRACTION PUMP on the filter's side makes oil change easier. The lighting tower has a TOOLS BOX for ordinary maintenance and spare lamps.



▲ Acces door to engine's compartment for easy maintenance



▲ Easy battery maintenance



▲ Easy alternator maintenance



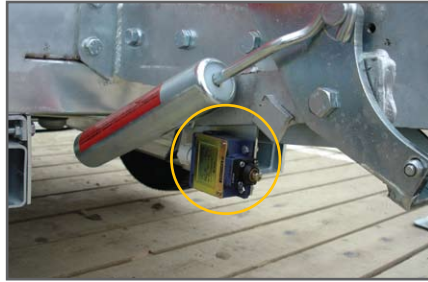
▲ Hydraulic pump maintenance compartment



▲ Watertight "nautical" type cap to access radiator



▲ Toolholder compartment



▲ Brake with safety switch



▲ Limit switch



▲ Metal earthing bar

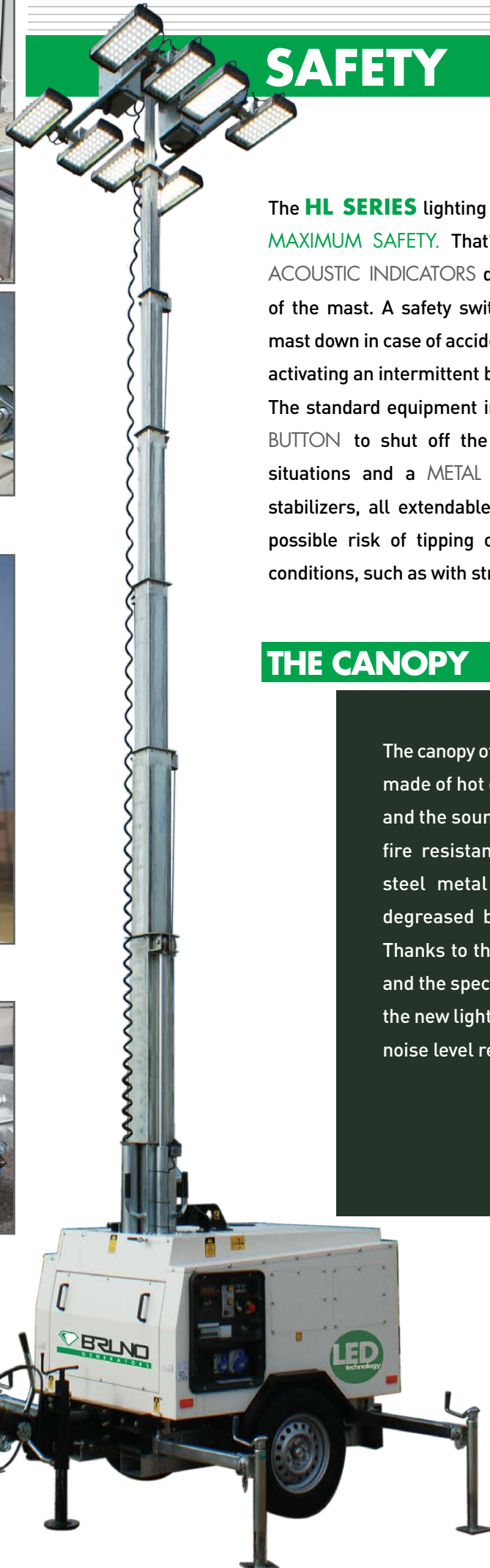
# SAFETY

The **HL SERIES** lighting tower is designed to guarantee **MAXIMUM SAFETY**. That's why it comes equipped with **ACOUSTIC INDICATORS** during deployment and descent of the mast. A safety switch will automatically send the mast down in case of accidental release of the break, while activating an intermittent buzzer.

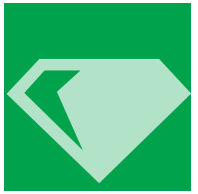
The standard equipment includes an **EMERGENCY STOP BUTTON** to shut off the engine in case of dangerous situations and a **METAL BAR FOR EARTHING**. The **4 stabilizers**, all extendable and adjustable, eliminate any possible risk of tipping over in adverse environmental conditions, such as with strong wind.

# THE CANOPY

The canopy of the lighting tower **HL SERIES** is made of hot galvanized carbon steel sheets and the soundproofing materials are highly fire resistant and self-extinguishing. The steel metal sheets are pre-washed and degreased before getting powder coated. Thanks to the advanced technical solutions and the special care in silencing the canopy, the new lighting unit achieves the maximum noise level reduction: 60 dB(A) at 7 meters.





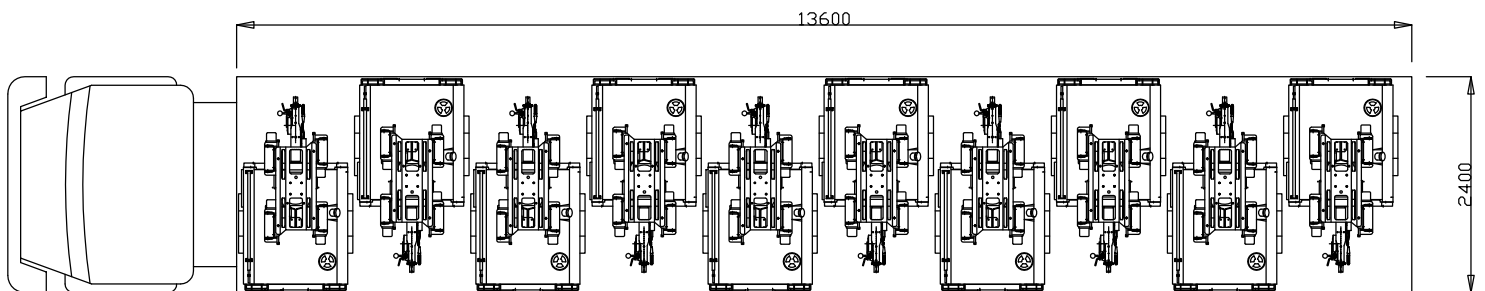


The COMPACTNESS OF THE **HL SERIES** allows quick and safe handling and MAXIMIZES THE NUMBER OF UNITS that can be loaded on a truck (up to 10 units), giving a significant reduction in transport costs.

The **HL SERIES** led lighting towers have a FUEL TANK OF 140 LITRES WITH AN EXTERNAL FUEL CAP WITH KEY.

165 HOUR AUTONOMY, a significant advantage above all on building sites because in this way refuelling can be done once a week with a considerable reduction in refuelling costs.

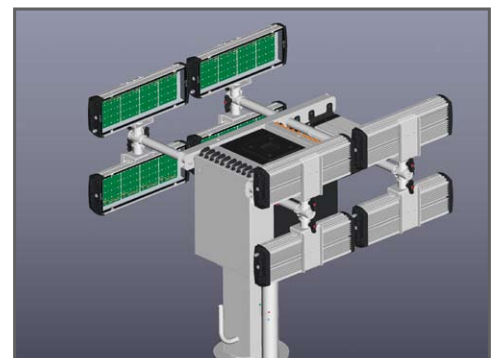
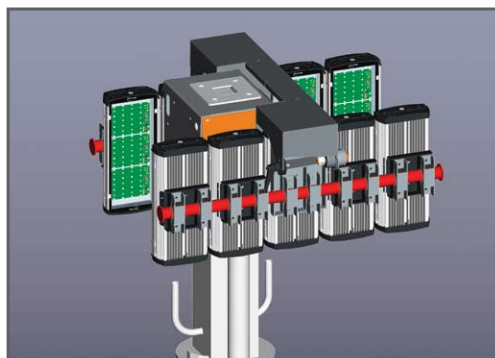
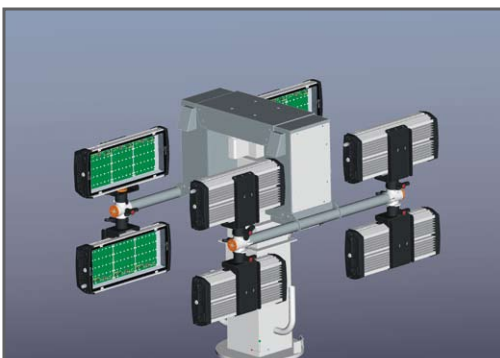
**165 WORKING HOURS, COMPARED TO 80 HOURS WITH METAL HALIDE LAMPS.**



**140 litres**  
up to **TWO** weeks  
of **fuel autonomy**

◀ Fuel tank cap with key

## LED LIGHTS POSITIONING DURING TRANSPORT



▲ Extremely compact during transport

# SPECIAL OPTIONS

## AIR INTAKE SHUTOFF VALVE CHALWIN TYPE

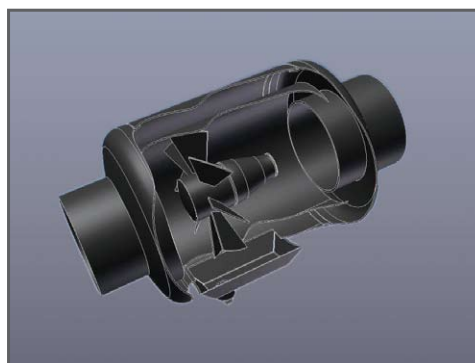
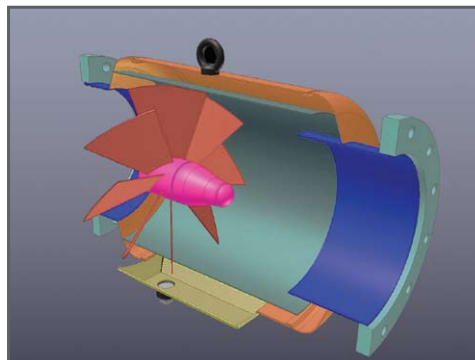
Diesel engines are a potential source of ignition when used in areas where combustible gas, vapours or dusts may exist. The resulting conflagration can lead to catastrophic consequences for personnel, production and the environment. The CHALWYN AIR INTAKE SHUT DOWN VALVE is a device designed to automatically and safely stop a diesel engine should it start to overspeed due to a combustible mixture being drawn into the engine intake.

### MECHANICAL CHALWIN VALVE



Mechanical Chalwin valve - available as option for the small ratings

## SPARK ARRESTOR



▲ Special vanes rotate gases and separate carbon by centrifugal force

# OPTIONS

STANDARD EYE



SPECIAL EYE



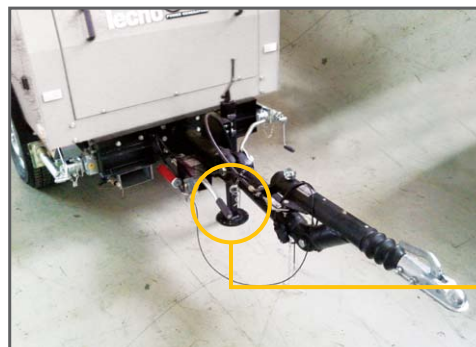
SEVERAL DIFFERENT DIAMETERS AVAILABLE



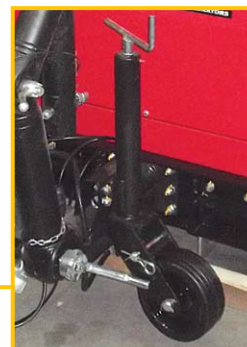
WATERPROOF DOCUMENTS HOLDER



WHEEL CHOCKS



ADJUSTABLE TOWBAR



JOCKEY WHEEL AVAILABLE AS OPTION





## Low fuel consumption for LED Lighting Tower: the truly eco solution

This new hydraulic lighting tower is equipped with a BUNDED BASE SYSTEM TO CONTAIN 125% OF THE FLUID of the unit avoiding oil or fuel leaks that could contaminate the soil. In addition, the hydraulic mast works with BIODEGRADABLE HYDRAULIC OIL.

The **HL SERIES** is equipped with engines complying with the European regulations on emissions.

Fully banded tank



**BGG UK Ltd**

Unit8/9 Gladepoint  
Lordswood Industrial Estate  
Gleaming Wood Drive  
Chatham, Kent, ME5 8RF

**Tel:** +44 (0) 1634 200304

**Fax:** +44 (0) 1634 560510

**e-mail:** info@bgguk.com

**web:** www.bgguk.com

**BGG Deutschland GmbH**

Dieselstrasse 19

73037 Göppingen

**Tel:** +49 (0) 7161987996-0

**Telefax:** +49 (0) 7161 987996-90

**e-mail:** info@bggde.net

**web:** www.bggde.eu

**BGG ASIA Pte Ltd**

17 Jurong Port Road,  
Block F Singapore 619092

**Tel:** +65 (0) 6566 9919

**Fax:** +65 (0) 6562 1191

**e-mail:** info@bggasia.com

**web:** www.bggasia.com



**BRUNO S.R.L.**

S.S. 91 KM. 0,600

83035 GROTTAMINARDA (AV) – ITALY

**Tel** +39 0825 421005 / **Fax** +39 0825 426169

**e-mail:** export@brunogenerators.it

**web:** www.brunogenerators.it

