

CENTURION





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The highly durable Unilux Centurion is an industrial-grade strobe light designed for the surface inspection of steel. With its heavy duty construction, the unit is engineered to withstand the harsh environments of hot mills, cold reduction mills, and temper or skin pass lines, where high-speed problems such as wrecks, cobbles, and strip breaks are likely to occur. Defects one millimeter in diameter and smaller, previously seen only by slowing down the mill, are readily visible at full-production speeds ranging from 50 meters (164 feet) to 2250 meters (7382 feet)



Automatic synchronization to line speed

Single or dual light head configurations

100% strip inspection at full production speed

Heavy duty construction

per minute. Bruises, bulges, dimples, edge cracks, grind marks, chatter and friction digs are just a few of the problems operators can see while inspecting at a safe distance from the strip. Available with one light head or two, the Centurion covers areas up to 3 meters (10 feet) at a distance of 2.5 meters (8 feet) from the strip. Centurion's power and consistency enable mill operators and inspectors to catch problems before further processing occurs, saving hundreds of thousands of dollars a year in scrap and eliminating customer rejection.

The Centurion Advantage

- Durable design suited for harsh environments
- Immediate knowledge of production defects
- Dual light heads provide maximum strip width coverage for entry and exit inspection

Key Features

- Mounts 2.5 meters from the surface to avoid damage from strip breaks
- Remote control or independent operation
- Line speed synchronization for inspection efficiency
- Motorized focus adjustment to fit strip width
- Press-to-test system analysis switch
- Adjustable light intensity

Applications

METALS: Hot mills, cold mills, temper mills and skin pass lines

Accessories.





Proportional Line Speed Option

The Analog Line Speed Kit processes the synchronization signal used to keep the H71 light heads in sync with the mill. A 0 ~ 10VDC or 4 ~ 20mA signal is used to ensure everything is timed perfectly.

External Trigger Inputs

The Centurion can be synchronized to operate from external trigger points through the Trigger Connector. External signals synchronize the flash rate over the range of 30 F/M to 6,000 F/M (12,000 F/M optional). A built-in limiting feature reduces the maximum power delivered to the flash lamp and keeps the flash rate synchronized to the external signal while reducing the brightness proportionally.



Interconnect Cable

Whenever more than one Centurion System is needed, use the 4.6m (15 foot) Interconnect Cable to synchronize the two together.

Remote Control Options

Basic Remote Control

The Basic Remote Control features full control settings for power, intensity, flash rate and internal and external triggering.

Features:

- Remote on/off switch
- Four light intensity levels
- Switch between internal or external triggers
- Set up for automatic line synchronization when used with rotary encoder



Deluxe Remote Control

The Surface Inspection Lighting Controller (SILC) features full menu control of all functions and automatic tracking with pre-set storage. A two-line digital character display simplifies operation and supplies line speed information.

Features:

- Adjustable intensity (30 100%)
- Auto sync to line speed
- Metric or English options
- Sealed membrane switches
- Controls multiple light heads
- Easy set-up menu





Specifications

POWER INPUT

- 200, 220 or 240 VAC (jumper selectable) 50/60 Hz
- 2500 VA max

TRIGGERING

Standard

- Pulse Source: +2.5 V pk min, ≥ 100 microseconds pulse width
- Current Sink: ≥ 12 VDC @ 10 mA rating
- Video: 1 V p-p nominal unterminated. Trigger from 30 Hz frame rate or 60 Hz field rate

Optional

• Analog proportional line speed input for synchronizing flash rate to line speed (0-10 VDC or 4-20 mA, requires SILC Deluxe Remote Control)

Manual Mode

- 30 Flashes/Minute (F/M) to 6,000 F/M (12,000 F/M Optional)
- Automatically limits H71 light head maximum flash rate options (6,000 F/M, 12,000 F/M)
- 1 F/M resolution
- 100ppm/°C accuracy

TRIGGER SUPPLY

- Regulated 12 VDC current limited @ 100 mA, available at "Trigger In" connector
- Designed to meet SELV requirements of VDE 0805 and IEC 950 Safety Specifications

TRIGGER OUTPUT

• Open collector signal to synchronize the driving of a second unit - available at the "Sync Out" connector

REMOTE CONTROL SUPPLY

- 12 VDC current limited @ 500 mA for controller unit available at the "Remote Connector"
- Designed to meet SELV requirements of VDE 0805 and IEC 950 Safety Specifications

ENERGY OUTPUT

- (Standard) 8 joules per flash @ 6,000 F/M
- (Optional) 4 joules per flash @ 12,000 F/M

Lamp

• Xenon gas type, plug-in assembly

Lamp Output

• 2,000 Lux (186 foot candles) at 2.5 meters (8 feet) 100% intensity at maximum flash rate

FLASH DURATION

• 20 microseconds

PHYSICAL

Light Head with Yoke

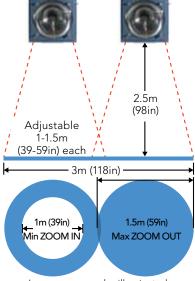
 Dimensions: 643.9mm (25.35in) x 556mm (21.89in) x 512.6mm (20.18in)
Weight: 36.02kg (79.4lb)

Power Supply

 Dimensions: 609.6mm (24in) x 508mm (20in) x 285.8mm (11.25in) Weight: 59.87kg (132lb)

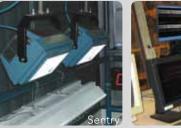
Environmental

• Continuous operating temperature range 0-50°C (32-122 °F)



Larger areas can be illuminated by moving the light head further from the strip surface.

Other Unilux products for the steel industry include:









Bringing Quality to Light

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