

Vision Solutions and Services to Maximize Production Efficiency and Product Quality

New

# Papertech's High Performance WebLED™ -28

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WEBVISION™ + WEBINSPECTOR™ = TotalVision

Automated Event Capturing & Web Inspection Systems

# WebLED-28 – High Performance LED Light

New

- ✓ **More light results in better image quality:** Over 300 watts of light power allows cameras to be set at faster shutter speeds and with greater depths of field to deliver sharper images in all locations.
- ✓ **Reduced utility costs:** With less than 70 watt average power usage, and no instrument cooling air below 50°C, the energy savings are substantial.
- ✓ **Reduced maintenance costs:** LED life of over 5 years significantly reduces maintenance costs and ensures no lost time between bulb changes. Plus many built-in important life extending safety features.
- ✓ **Improved safety:** Cool to the touch operation eliminates any fire hazard and operator burns. No flicker design is more operator friendly.



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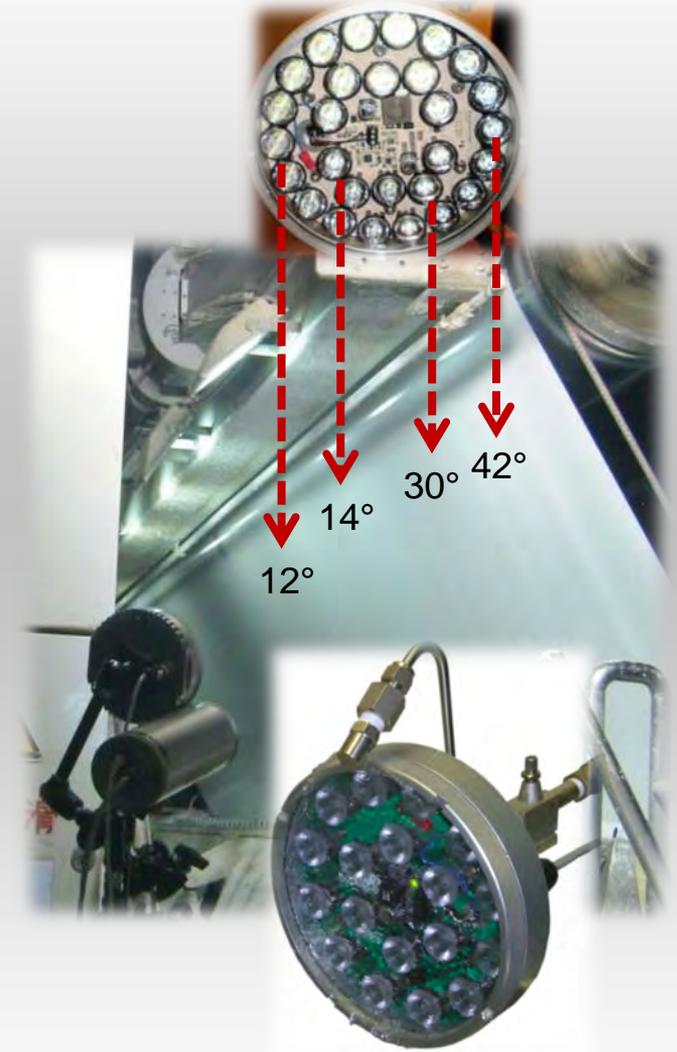
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# WebLED-28 – High Performance LED Light

- ✓ **Upgrade ready:** optimized for WebVision digital cameras and compatible with all analog cameras.
- ✓ **Fits everywhere:** ultra compact size allows placement in previously impossible locations plus light output is software remote optimized.
- ✓ **Works anywhere:** designed for extreme conditions; is corrosion, caustic & mechanical impact resistant, and protected against immersion.
- ✓ **Lens cleaning:** CleanJet™ ensures light surface stays clean in all conditions.
- ✓ **Custom lighting:** MultiOptic™ allows the light pattern to be optimized for virtually all locations.



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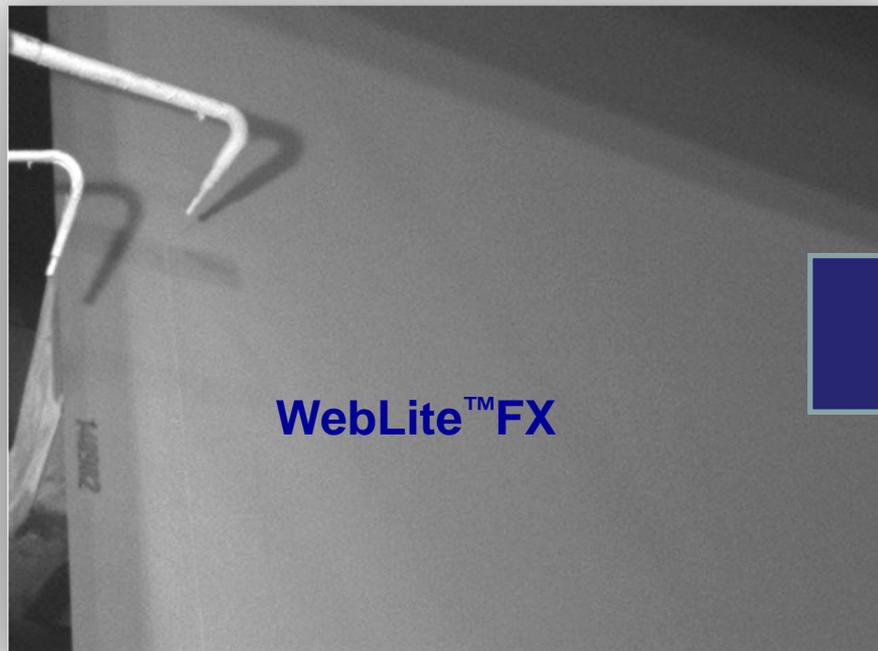
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# More Precise Event & Defect Detection

- brighter image & 4 times increase in shutter speed -



**WebLite-FX** – proven 150W HID Xenon® –  
shutter 1/2,500<sup>th</sup> sec, F2.0

**WebLED-28** – new 330W LED light –  
shutter 1/10,000<sup>th</sup> sec, F2.0

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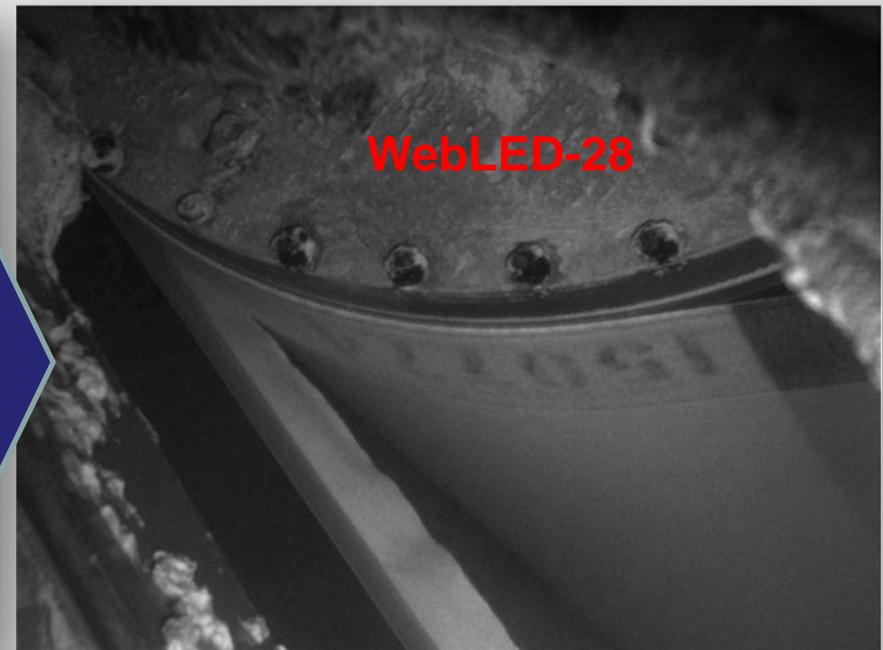
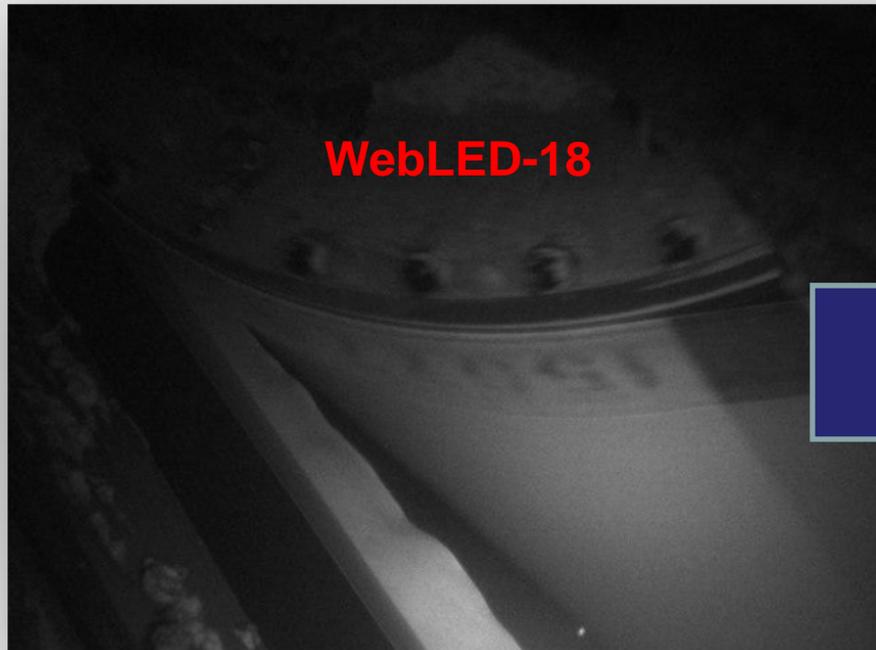
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# More Precise Event & Defect Detection

- 20 times increase in shutter speed -



**WebLED-18** – previous generation 65W LED light – shutter 1/2,000<sup>th</sup> sec, F1.8

**WebLED-28** – new 330W LED light – shutter 1/40,000<sup>th</sup> sec, F1.8

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# More Precise Event & Defect Detection

- Existing lighting upgrade benefit -



**Existing lighting** – analog colour camera with poor quality light – shutter 1/500<sup>th</sup> sec

**WebLED-28** – new 330W LED light – shutter 1/5,000<sup>th</sup> sec

**Result:** Usable image, events can be diagnosed, over 80% reduction in power usage, cool light, smaller size, no operator blinding, much less maintenance = **payback immediate**

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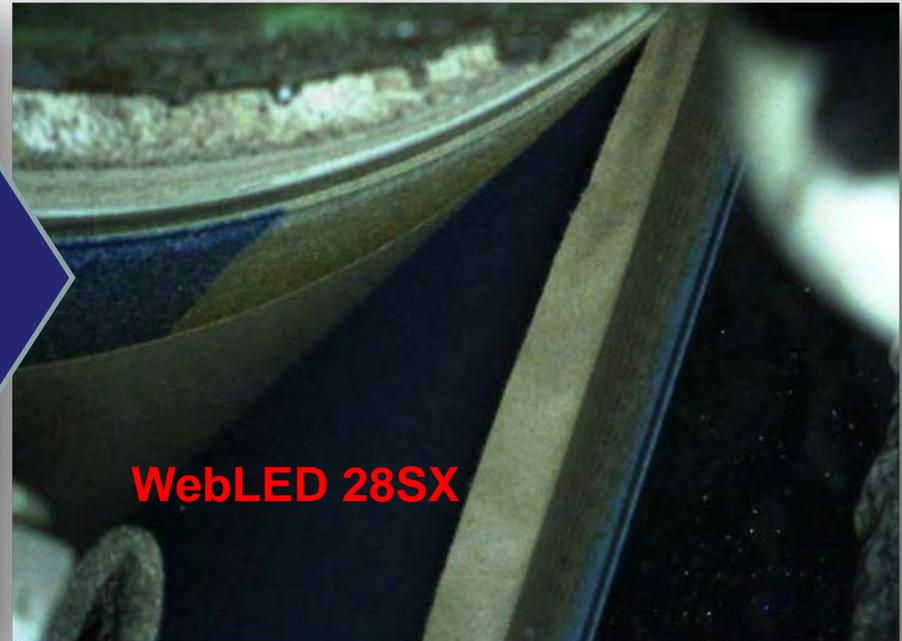
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# More Precise Event & Defect Detection

- Existing lighting upgrade benefit -



Existing lighting – analog colour camera with poor quality light – shutter  $<1/500^{\text{th}}$  sec

WebLED-28 – new 330W LED light – shutter  $1/20,000^{\text{th}}$  sec

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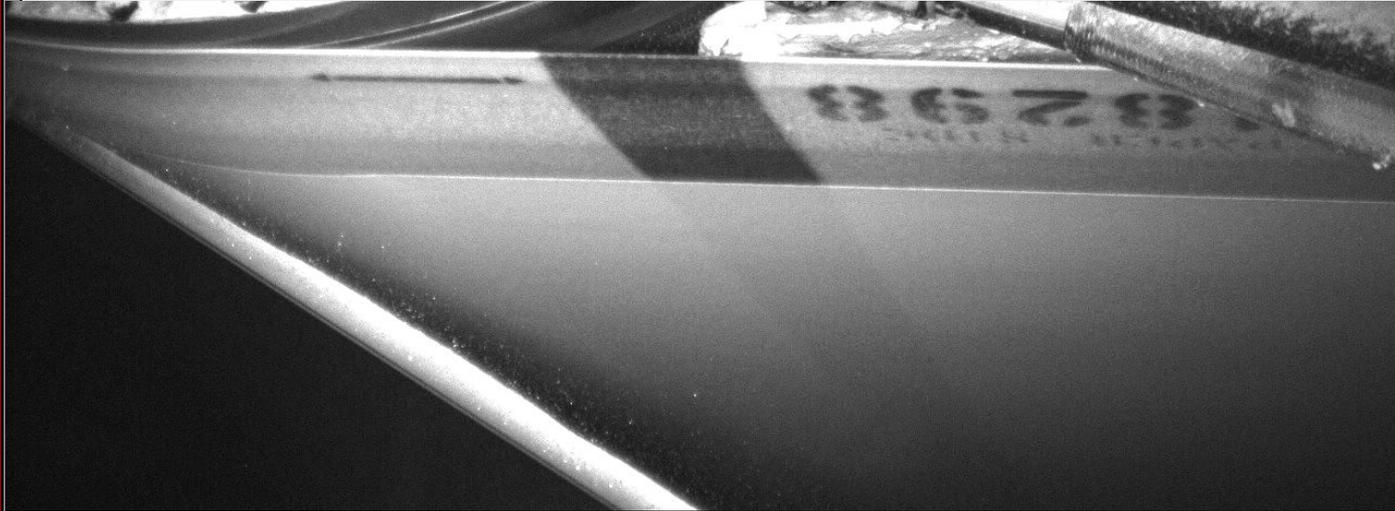
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# More Precise Event & Defect Detection

- Better image quality from Pinhole lens -

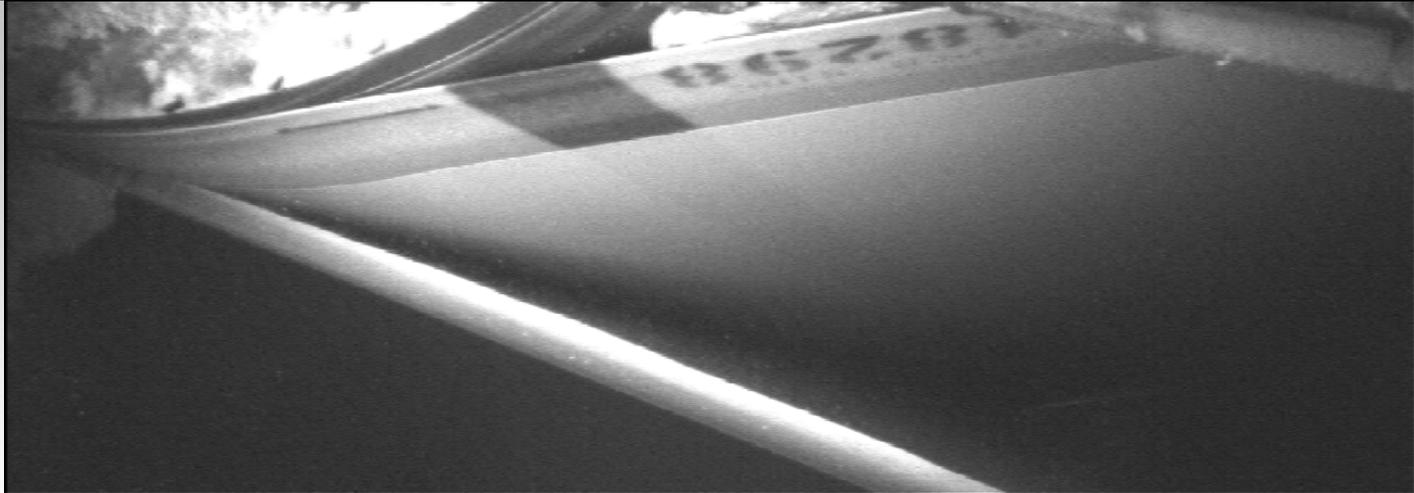


1700m/min

Full size 6 times 8-48mm zoom lens, F1.0

1280 x 480 pixels @ 60Hz, 1/15,000<sup>th</sup> sec shutter

EverClean™ small pinhole lens  
fixed 6mm, F2.0  
1280 x 480 pixels  
@ 60Hz, 1/10,000<sup>th</sup> second shutter



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# More Precise Event & Defect Detection

- Industry leading LED light -



**WebLED 18  
(65W) pulsed to  
camera image  
speed (50Hz)**

Camera type: Sony Block PAL Colour  
Camera 50 Images/sec 1/1500 second  
shutter @ F2.0

*Note: Camera shutter speed or lens  
opening not changed during comparison*

**Result:** WebLED significantly brighter  
= better image quality, higher shutter  
speed, better depth of field & no cooling  
air needed



**Competitive LED image**

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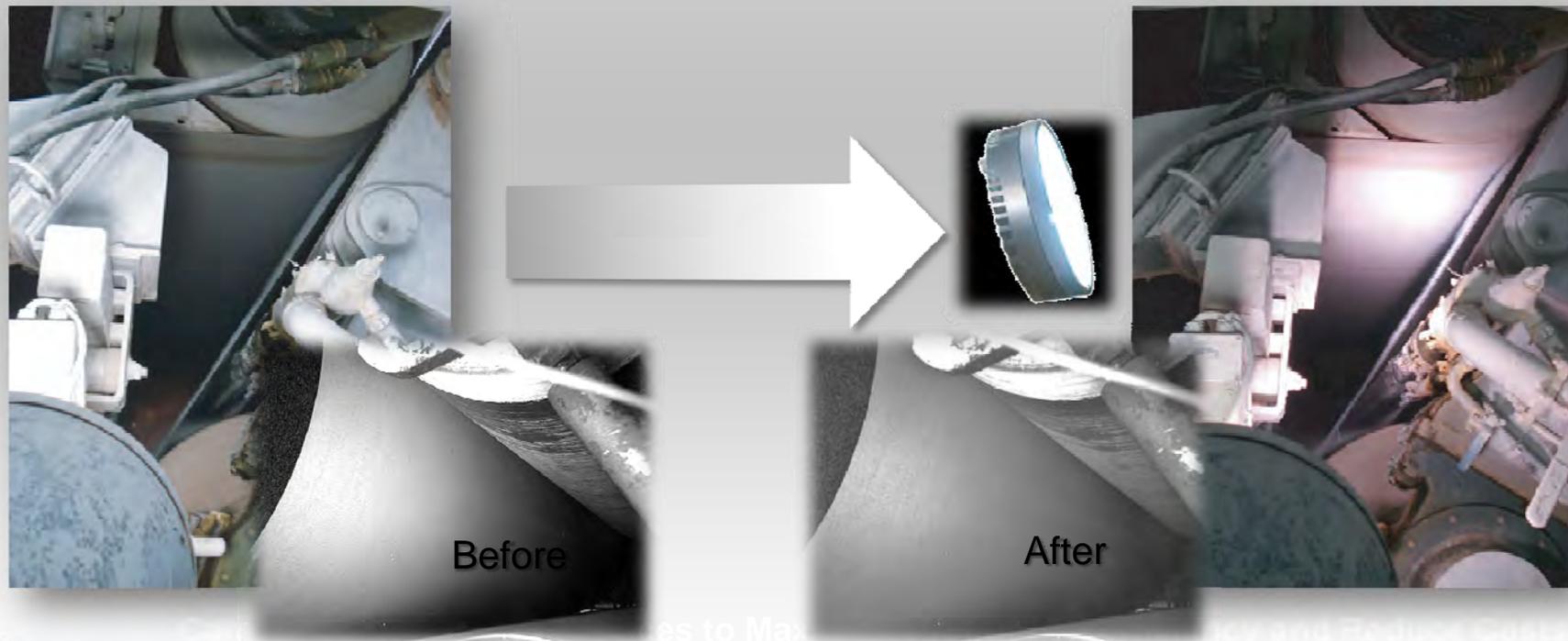


**WebVision** + **WebInspector** = TotalVision

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## The Results are Clear



Before

After

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