

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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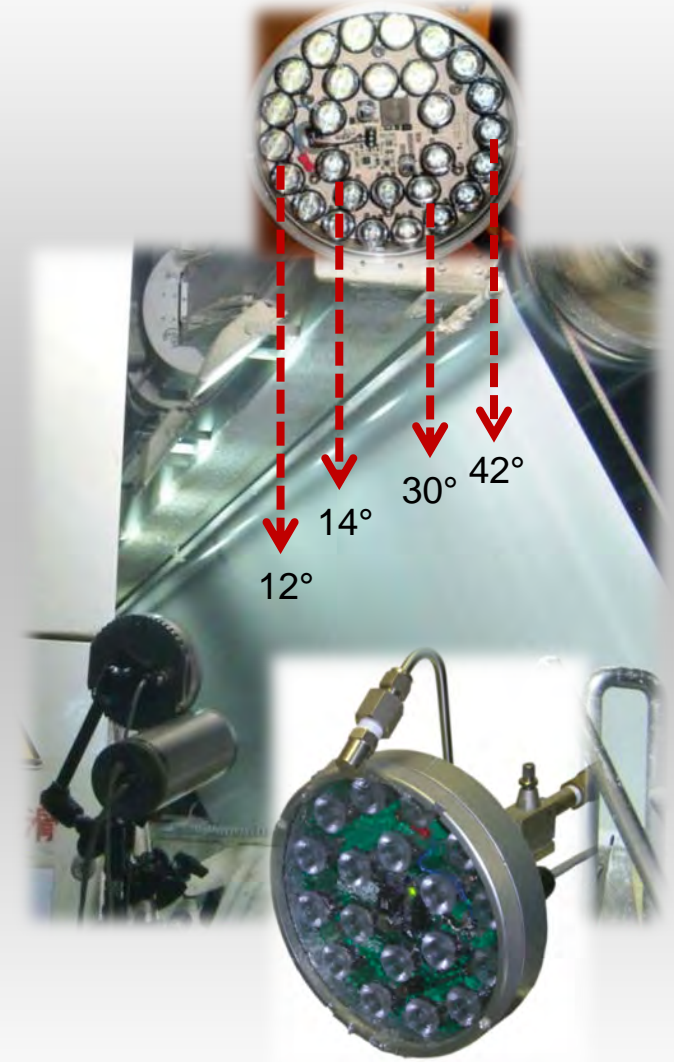
WEBVISION[®]
DIGITAL

+ WebINSPECTOR[®] = TotalVision

Automated Event Capturing & Web Inspection Systems

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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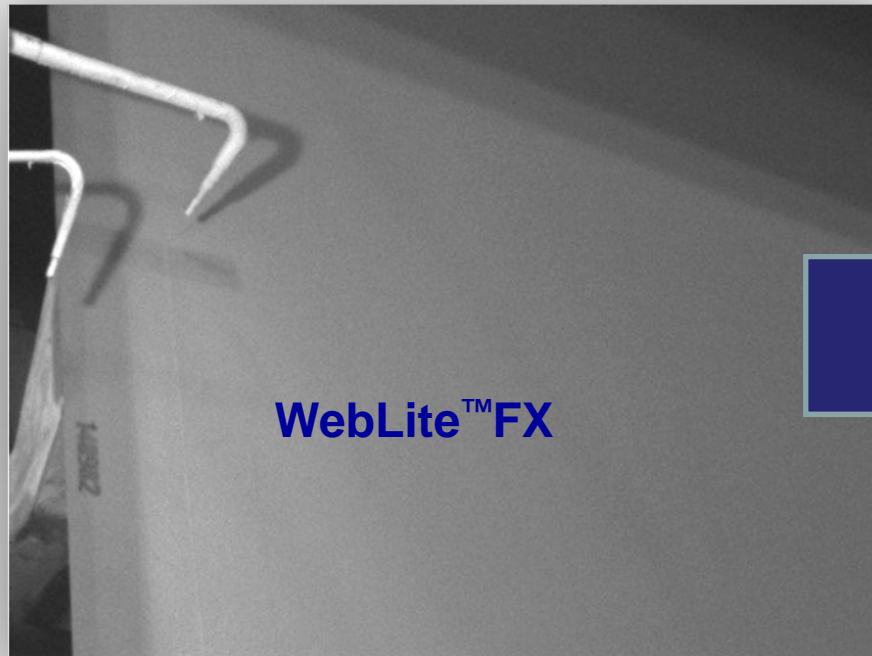
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Automated Event Capturing & Web Inspection Systems

More Precise Event & Defect Detection

- brighter image & 4 times increase in shutter speed -



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



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

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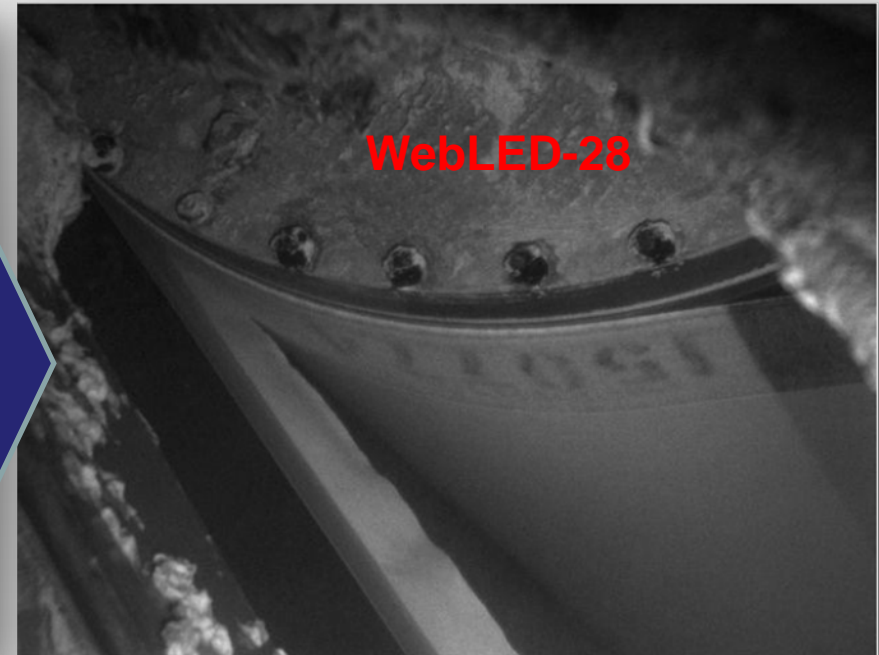
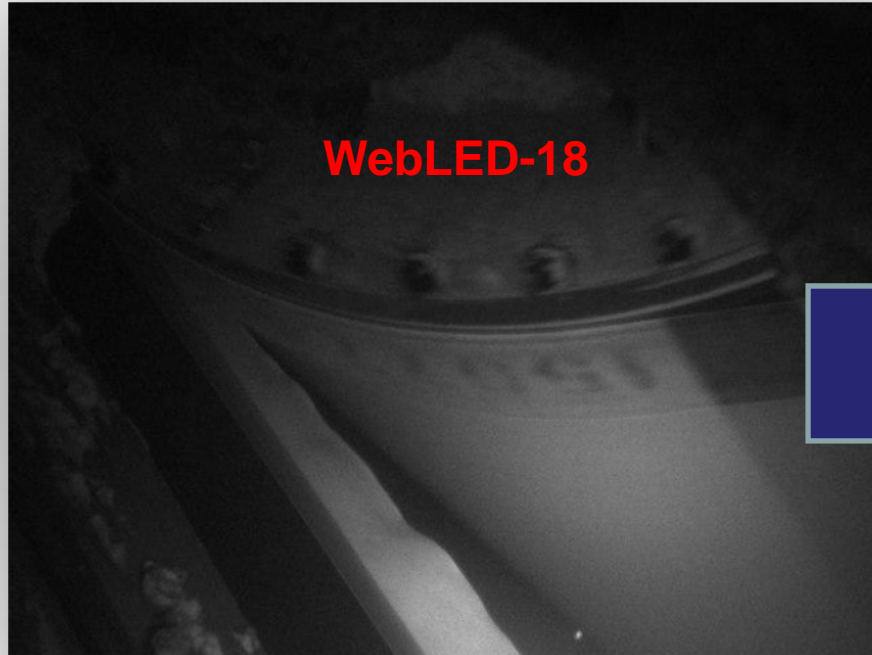
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Automated Event Capturing & Web Inspection Systems

More Precise Event & Defect Detection

- 20 times increase in shutter speed -



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

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

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Automated Event Capturing & Web Inspection Systems

More Precise Event & Defect Detection

- Existing lighting upgrade benefit –



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

WebLED-28 – new 330W LED light – shutter 1/5,000th 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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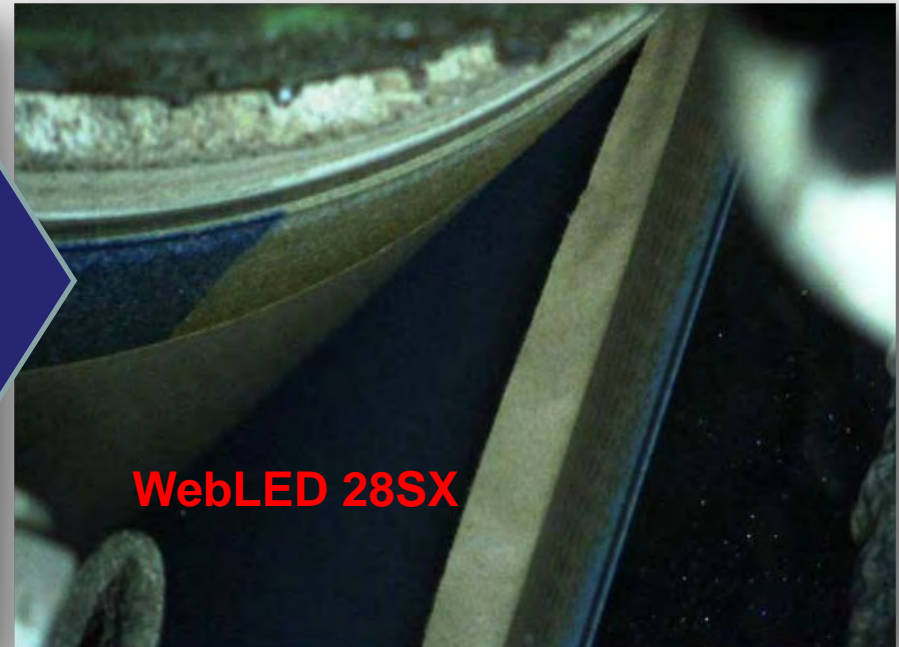
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Automated Event Capturing & Web Inspection Systems

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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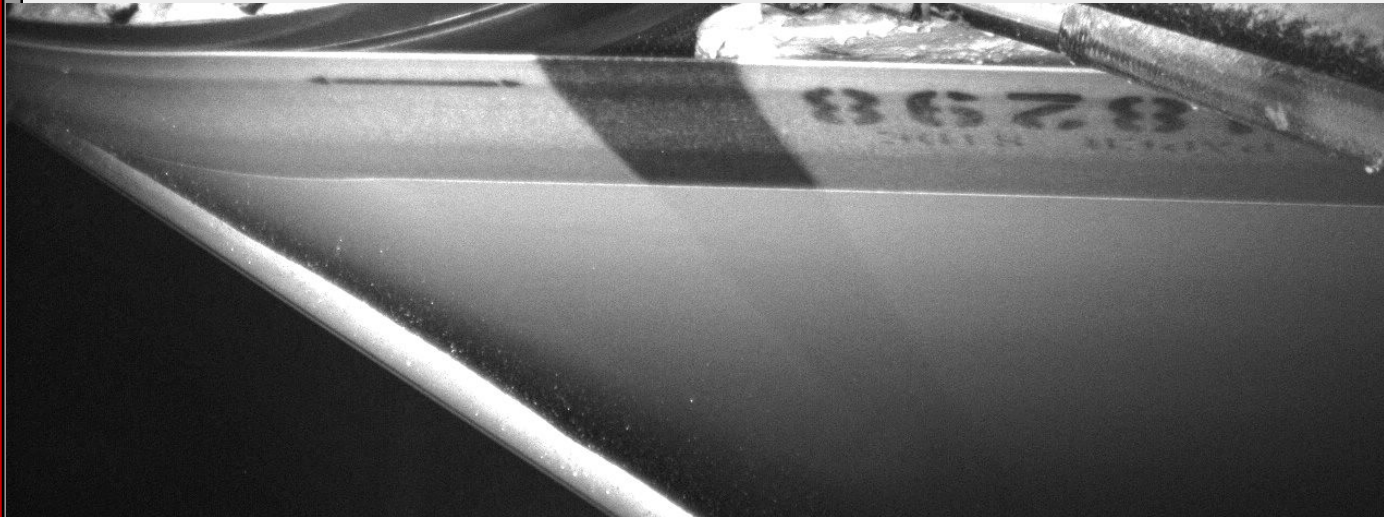
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Automated Event Capturing & Web Inspection Systems

More Precise Event & Defect Detection

- Better image quality from Pinhole lens -

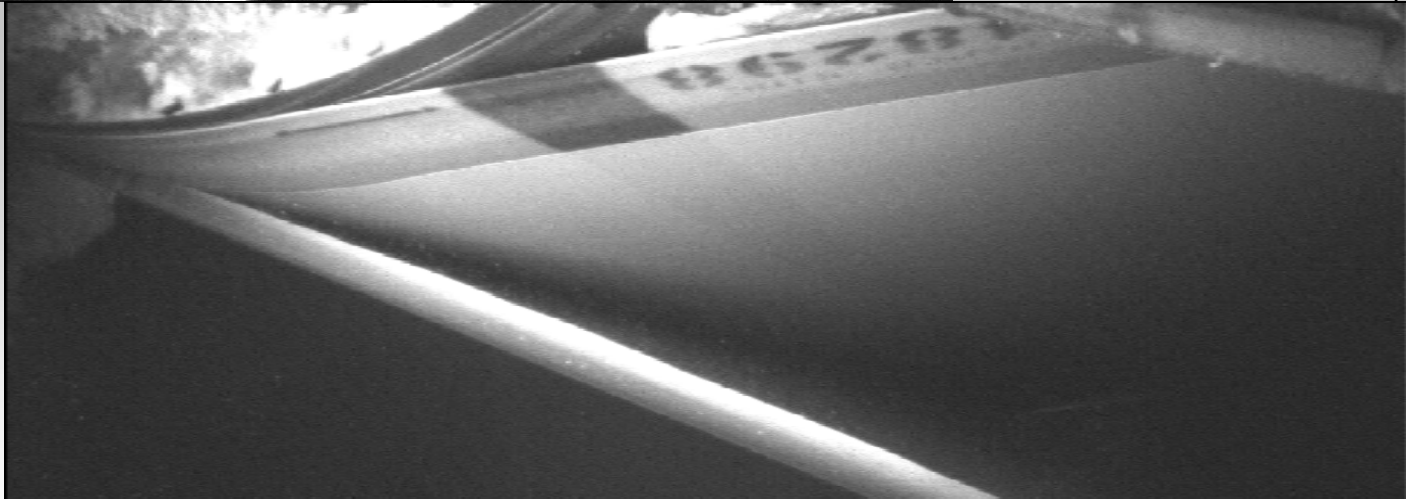


1700m/min

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

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

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



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More Precise Event & Defect Detection

- Industry leading LED light -

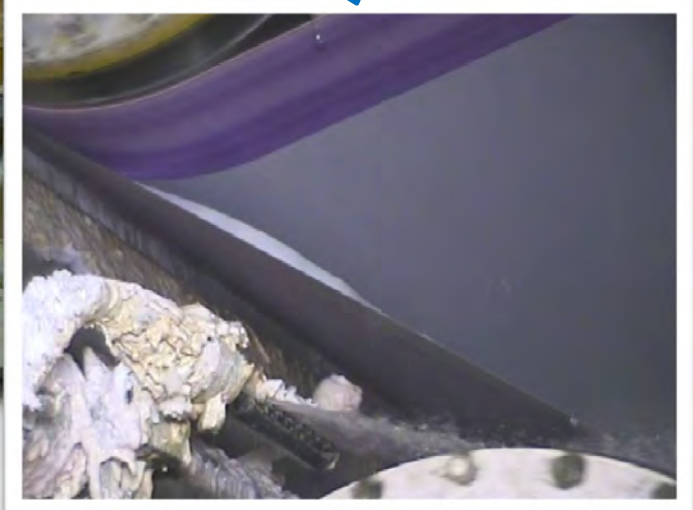


**WebLED 18
(65W) pulsed to
camera image
speed (50Hz)**

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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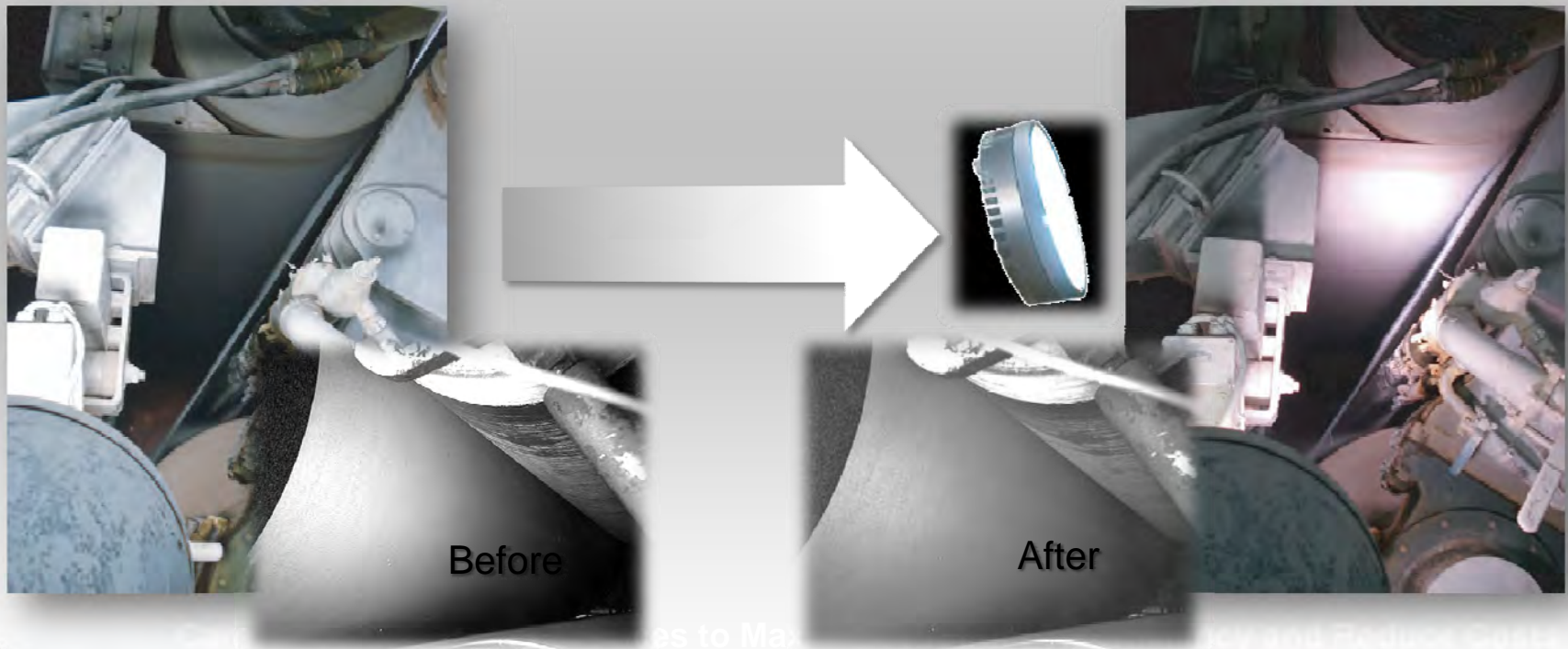
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The Results are Clear



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