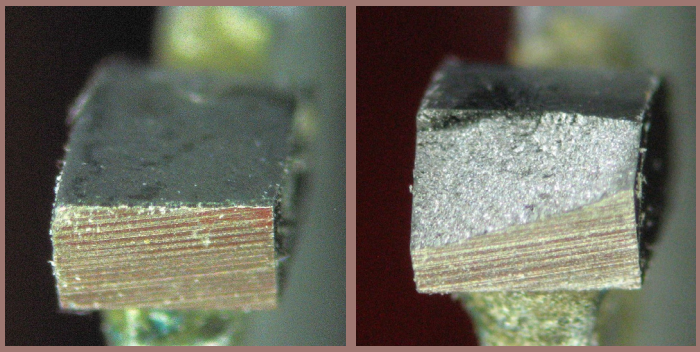
APPLICATION NOTE INDUSTRY



INSPECTION OF SAW BLADES

ILLUMINATING ALL CUTTING EDGE SURFACES
AVOIDING REFLECTIONS

Using traditional objective mounted ringlights to inspect saw blade cutting teeth is not easy because surfaces angled away from the objective are not illuminated properly.
With the L.E.S.S. Darkfield lighting system, all surfaces around the cutting edge are well illuminated, without any distracting reflections.

FEATURES OF L.E.S.S. LIGHTING SYSTEMS

- Darkfield illumination, the light hit the sample at low angle
- Easy working distance adjustment
- Darkfield illumination in "Brightfield Mode" thanks to variable Darkfield height
- Uniform and diffuse illumination with neutral
- white light (5400 °K)
- Avoidance of reflections on metallic surfaces
- Free view and easy access to the specimen

SWISS MADE

APPLICATION

Fig.1 shows a cutting tooth of a carbide tipped saw blade.

On **Fig.2** the damaged edge of a broken cutting tooth is clearly visible.

Both images are taken using the L.E.S.S. Darkfield lighting system. To achieve an optimal and diffuse illumination, free of any reflections, the light head was positioned about 2 cm above the cutting tooth.

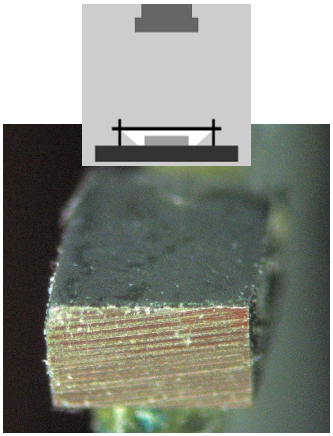


Fig.1

Cutting tooth lit by LESS Darkfield

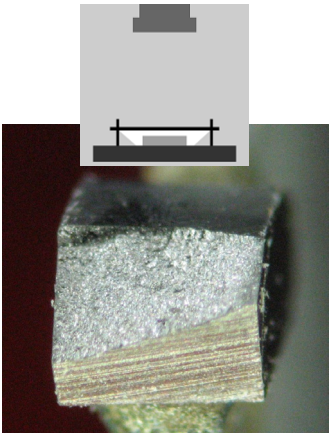


Fig.2

Broken cutting tooth lit by LESS Darkfield

RISK CLASS 0
EN 62471 : 2006

EYE-SAFE
CLASS 1 LASER PRODUCT
ICE 60825-1 2014-05

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RoHS2 COMPLIANT

L.E.S.S. SA
Av. de Longemalle 13
CH-1020 Renens, Switzerland
Tel : +41 21 552 07 10

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