

# Log Saw Blades *International Knife and Saw*

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Made in America



Tissue Converting Industries



**EXO Technology™** is a patented metal finishing technology that deposits a high performance metal surface on a variety of metal substrates. EXO Technology™ is damage and temperature tolerant, offering both hard lubricious properties which offer significant advantages to many blade applications.

## **EXO Technology™ delivers:**

- Increased surface hardness
- Excellent thermal management
- Low coefficient of friction
- Highly lubricious

## **Compared to Teflon coatings:**

- Will not wear or peel off from blade
- Has excellent adhesion to the blade
- Does not distort the blade run out
- Increases blade stiffness
- Does not load up or clog the grinding wheels in use
- Lower coefficient of friction

*The coating leaves a gun metal gray appearance to the blade surface. The coating is .0003" to .0005", and has a hardness range of HRC 65 to HRC 80.*

Log Saw Blades made from  
Quality D-2 Material  
Run-out of .006" on 24" blade  
Run-out of .010" on 32" and 34" blade  
Run-out of .014 on 39" blade

Available from stock:  
1000 MM / 39"  
870 MM / 34.25"  
810 MM / 32"  
711 MM / 28"  
610 MM / 24"

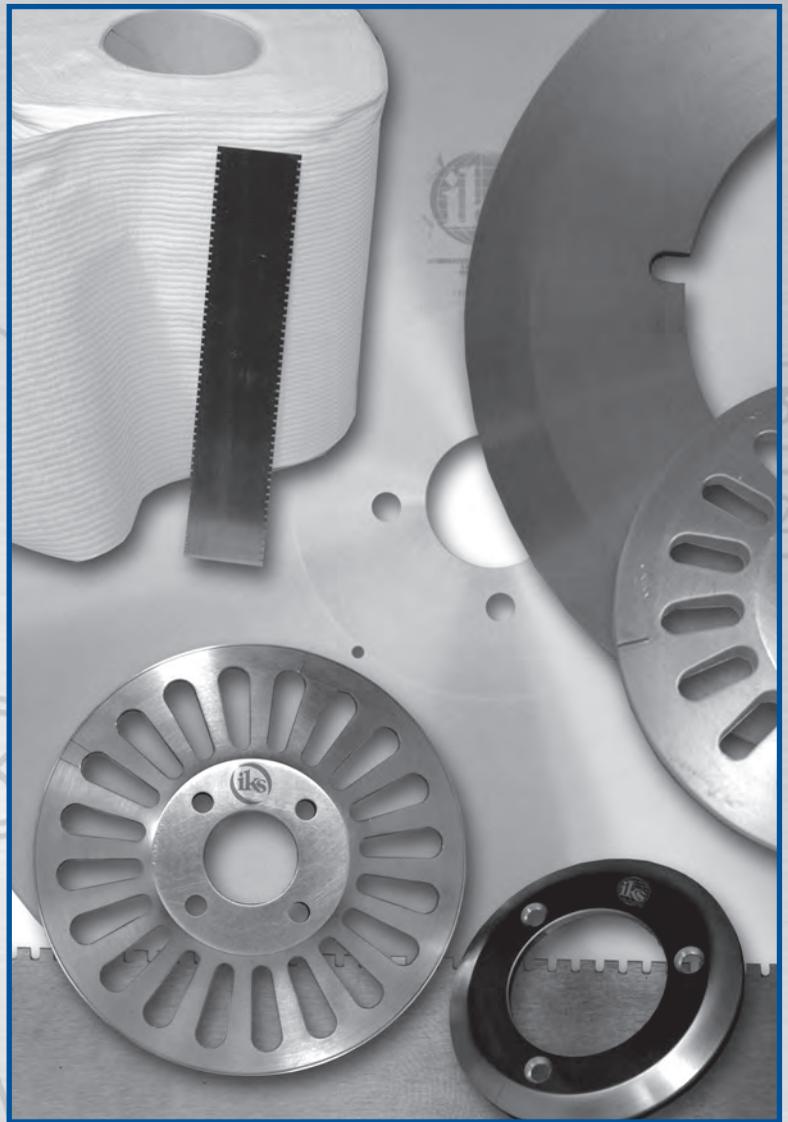


Thermal management has been the major focus at the testing sites. Normal operating temperatures of the blade is 80°F to 95°F, but occasionally blades reach 104°F in certain operations. When this high heat occurrence takes place, blades will start to wobble (stretch on the rim) and eventually hit the clamps, crashing the blade. Or, during the grinding process the blade would scallop.

In two applications the trials were taken to extreme heat limits. We shut off the lubrication with extremely dense rolls and allowed the heat to generate. Temperatures reached up to the 120°F to 128°F range. We found no distortion in the blade in both static and dynamic positions. No loss of blade tension or run out. The grinding operation and cut quality remained satisfactory.

In another trial, blade temperature went above 160°F on the rim and still no distortion of the blade occurred. We have found with both 32" and 24" saws, the blade is stiffer and remains so at high temperatures. This results in the ability to maintain cut quality and longer blade life, by not allowing the blade to stretch out of proportion as heat is generated. There is no stretching of the rim to cause significant blade scalloping that is induced from heat.

Additionally, new abrasive and lubricant technology has recently been developed to work in conjunction with the EXO Technology™ coating to enhance the overall performance of our blades. Our new Copper Bond grinding wheel and the new HDC-35 lubricant is trial tested and in inventory for immediate shipment.



#### **Quantifiable Test Data:**

- Increased the amount of cuts per blade up to 25%
- Reduced excessive down time in the mill by not having to clean blades.
- Grinding wheels did not load up as compared to blade with Teflon coating.
- Improved cut quality on a wide variety of products.
- With saws using our lube system we could reduce lubrication usage **up to 50%**.
- The blades became extremely smooth with excellent lubricity as a result of the coating.
- No measurable wear loss of coating on blade.
- Core crushing was reduced on JRT and 1000 count products.
- Some test sites reported they were able to shut off the lubricant and still maintain quality cuts.
- The blade did not distort after reaching high temperatures during operation.

#### **International Knife and Saw**

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