

# Saw blade cuts downtime

OFS increased efficiency, cut costs with new panel saw blade

By Kathleen McLaughlin, Senior Editor  
kmcLaughlin@wattnet.net

Constant blade changes and scrapped material were wasting time and money for office furniture manufacturer OFS in Huntingburg, Ind. After incorporating a better-performance blade, production and efficiency jumped at Plant 18's cut-to-length operation as the manufacturer is aggressively expanding its market share.

The cut-to-length operation supplies pieces of particleboard, MDF, plywood and thermally-fused melamine — building blocks of the manufacturer's furniture, wardrobes, end tables, desks and hutches. However, frequent blade changes at 10 minutes per changeover on its four Biesse Selco panel saws added up to an hour and 20 minutes of downtime per shift, which made it diffi-

cult to keep up with increased demand.

Blade changes also were frequent on Plant 18's Altendorf table saw, Biesse Selco computerized power saws, chop saws and Biesse Twin Pusher. The old blades had problems with carbide breakage, which increased the potential for machine damage.

"We cut particleboard and MDF 70 percent of the time, TFM 25 percent and plywood 5 percent," says Tony Eckert, plant manager for Plant 18, OFS. "TFM is difficult to cut on a panel saw; it's also hard on tooling and dulls blades very fast. We run two 10-hour shifts and with the old blades we changed them eight times during a shift."

"The old blades were cutting the material, but it wasn't efficient because they didn't stay sharp very long," says

Eckert. "When the blades become dull, TFM chips out and you have a wasted piece. We had to find a better performance blade."

## Finding a better performing blade

After trying several blade brands, Eckert was finally impressed with the blade on a new piece of equipment, a Biesse Twin Pusher. "That blade cut better and ran longer," says Eckert.

*continued*

## Plant Facts

**OFS**  
Huntingburg,  
Ind.

**Product:** Office  
furniture

**Plant size:**  
80,000 sq. ft.

**Employees:**  
2,000

[www.ofs.com](http://www.ofs.com)



After incorporating Freud I.C.E. coated blades, OFS now can run its panel saws at full-speed while maintaining cut quality.



## **FDM** SAW BLADE

"When we sent it out to be sharpened and replaced it with one of our old blades, the difference was huge; I wanted the new blade back! Unfortunately, it disappeared and I didn't know what company manufactured it."

Eckert was still trying to match the performance of the mystery blade, when Randy Bolin of Global Cutting Solutions, brought him Freud Silver I.C.E. coated blades for the plant's panel saws, chop saws and table saw. "My supplier promised they would perform exceptionally well," says Eckert.

"We first ran the Freud blade on the Twin Pusher for two 24-hour periods and it cut TFM the whole time flawlessly — I found my blade," says Eckert. "It was amazing; we went (to) one blade cutting for two days compared to 16 blade changes with our old brand."

The Freud blades have a proprietary industrial cooling element coating, which protects them from heat stresses that can cause a rapid loss of tension and poor cut quality. The I.C.E. coating also reduces the possibility for corrosion, resin or pitch build-up, which reduces drag on the motor.

When cutting particleboard, MDF and plywood the old blades lasted for one 24-hour period, comments Eckert. The Freud blades can cut those types of material for three days before they start to dull. "We really pushed the Freud blades to the limit to see what they could do and ran them on some saws for a week," he says. "Even after a week, they still cut well."

"We're now running at full-speed and cutting more material at a faster rate."

### **Increasing productivity**

Plant 18 switched to Freud blades in July 2007 and productivity increased. "We had to reduce saw speeds to 70 percent with the old blades to get a good quality cut," says Eckert. "We're now running at full speed and cutting more material at a faster rate."

Operators noticed how quiet the blades are compared to their predecessors. Relief cuts in the blade create less vibration and a strong tension ring keeps the blade real quiet, comments Eckert.

"We went from yelling to have a conversation at the point to where the cut line is to speaking at normal volumes to the operators," he says. "Our noise levels went from 110 decibels to 86 decibels."



OFS's cut-to-length operation cuts more than 550,000 square feet of material a month.

Saw belts also are breaking less now. "We don't have near the breakage because the blades are cutting the material easier, which draws less on the motor and the belts," says Eckert.

In addition to using Freud blades, the cut-to-length operation changed its carbide score blades to a diamond score blade. "We now use them on all the saws and when cutting regular material and these blades last much longer — six to nine months," says Eckert.

### **Noticeable results**

Eckert estimates switching to Freud silver I.C.E. coated blades has added 10 hours a week in production time normally lost to saw blade changeovers.

"In one week with the old blade we changed saw blades for standard material 24 times and 35 for TFM — a total of 59 blade changes," says Eckert. "At 10 minutes a changeover that equals 590 minutes of lost productivity we've gained."

Using the old blades, Plant 18 cut about 550,000 square feet in a month. "We've increased output quite a bit since adding the Freud blades and as the company grows we'll be able to keep up with demand," he says. ●

For more information contact  
WoodTech Enterprises, Inc.  
1-800-Tooling  
<https://www.woodtechtooling.com>