# CASE STUDY: HART LUMBER

**Industry:** 

**Wood Processing** 

### **Application:**

Softwood pine studs and dimensional planed and finished lumber

### **Equipment:**

24 Series Circ-U-Flow hammer mill

Our Schutte Hammermill grinder addition solved our burner fuel prep and emissions problems. We are planning to install another Schutte Hammermill mill for a different application.

Tom Hart,Owner, Hart Lumber





YOUR SIZE REDUCTION SOLUTION

## Fuel Efficiency Improved, Emissions Eliminated with Closed Loop Air System

#### THE CHALLENGE:

At Hart Lumber, In Jasper, Texas a lumber drying kiln is heated by an EBS scroll burner fueled by a metered flow of softwood pine planer shavings.

Shavings  $\geq \frac{1}{2}$ " introduced to the scroll burner as fuel resulted in poor efficiencies, higher unburned ash content and carryover into the kiln. In addition, with the sawmill being located next to a busy highway, wood dust emissions were a concern.

### THE SOLUTION:

A Schutte Hammermill Model 24-15-301B Circ-U-Flow hammermill was installed as a turn-key system which included an integrated vacuum discharge to a cyclone.

The 24 Series is a high speed, medium production hammermill that features nearly full-circle screen coverage of the 24" diameter rotor.

### THE RESULT:

The results were three-fold: The hammermill produced a consistent 6-mesh product, which improved the efficiency of the burner and reduced ash content.

Secondly, the system did not terminate to an open cyclone discharge. Discharge air from the cyclone was recycled back to a bin discharge/hammermill inlet chute area, providing a "closed loop" and therefore eliminating any emissions.

Lastly, the system operated without significant temperature rise, eliminating the risk of igniting the material prior to the scroll burner.

With complete control over the wood supply and uniformity of the end product, the plant realized a very quick payback on their investment.

