

HEATEC BULLETIN

Product news from Heatec Inc., an Astec Company 5200 Wilson Road, Chattanooga, TN 37410 Phones 423-821-5200 800-235-5200 www.Heatec.com



Heatec heater dries lumber at Skeena Cellulose

A thermal fluid heater manufactured by Heatec, Inc of Chattanooga, Tennessee, USA provides heat for a new wood-drying kiln at Skeena Cellulose in Terrace, British Columbia, Canada. The new kiln was built by Salton Fabrication Ltd, a Canadian company. The heater was sold through a Canadian reseller of Heatec products, HTH HEATECH, INC of Calgary, Alberta.

The heater has an output of 25 million Btu/hour and heats heating coils in the kiln. It also heats a steam generator that injects steam into the kiln to precisely control the humidity and avoid drying the lumber too fast.

The Heatec vertical heater extends through roof of the building next to the kiln. It has two helical coils arranged so burner gasses make 3-passes over their surfaces before entering the exhaust stack. These coils heat Petrotherm transfer fluid to 500 degrees F as it circulates to heating coils in the kiln. The heating fluid also

circulates through the steam generator in the same building.

The burner of the heater is fired with natural gas. The 3-pass heater design is very energy efficient (estimated 85 % LHV) because it ensures that more heat from the burner is transferred to the helical coils, reducing the amount of heat that goes out the exhaust. The heater is in a vertical configuration, which allows it to fit in very limited floor space.

Fans in the kiln blow air over its heated coils, circulating heated air around the lumber to remove moisture. Temperatures of the drying air range from 190 degrees F at the beginning of the drying process to 200 degrees F at the end of the process. Drying times range from 65 to 100 hours per load.

Skeena Cellulose is in a remote area of northwest Canada renowned for timber, salmon and bears. Skeena processes logs from the area into high-grade finished lumber, for domestic and export markets. Skeena presently operates five kilns, including the new one provided by Salton. Their older kilns are heated by steam boilers.



Tom Dimitrov, Skeena maintenance superintendent, describes the drying process.



The Skeena facility in Terrace, British Columbia, Canada

