



Application Notes

Moisture in Green Wood

Monitoring the moisture content of the green wood prior to entry to the Dryer can greatly improve the efficiency of both MDF and Particleboard production processes in terms of reduced energy costs, increased production capacity, lower scrap and more consistent product.

Green Wood

Green wood is the term used to describe wood that comes from recently felled trees. As it has not aged, moisture content is high; 70-75% in chips that come from fresh logs and generally in the range of 30-60% if the wood has been sitting in storage. In MDF production green wood chips from the Chipper are routed to storage bins where they reside until entering the Refiner. Knowledge of the moisture of the incoming chips enables informed decisions regarding the Blender additive mix and Control of the Dryer. In Particleboard production the raw material is frequently a blend of recycled material and virgin wood. Once again, it is important to know the moisture content of the mix prior to entry to the Dryer in order to optimize dryer efficiency

Measurement Location and Installation

Measurement can be made either through a viewing window in the side of a storage bin, or on a conveyor / weigh belt pre dryer. When installed over a viewing window, the gauge must be positioned at a 15° angle to the window to eliminate specular reflectance off the surface of the glass window. In either location, the gauge is mounted approximately 200cm from the product.

Measurement Performance

Measurement Location	% Wet Weight	% Dry Weight	Typical Accuracy
Green Chips	30-75%	43-300%	1-3%