

## **GLEASON CONTINUOUS MEDIUM MIXER**

**WILLIAM H. BODNARUK, JR.**

*Jon's Nursery, Inc.  
1955 Lakeshore Dr.  
Eustis, Florida 32726*

The growing medium is the foundation for high quality container-plant production. The mix must be uniform and consistent if one's goal is to produce plant material that keeps customers coming back for more. Many inputs go into producing a good plant, but few are more important than the growing medium. For this reason a mixer becomes an integral piece of equipment in the nursery.

To do the job, a mixer must produce a medium that is uniform, with little particle breakdown, on a consistent basis and in the volume required. We, at Jon's Nursery, realized we outgrew the "old batch mixer" when our daily needs exceeded about 30 cu. yd. per day. Several continuous mixing systems are on the market and, after much study, the Gleason equipment was purchased on the strength of the tumble drum method of mixing.

Jon's Nursery mix consists of pine bark, Canadian peat, and sand at approximately 4:2:1 by volume, amended with Osmocote NPK fertilizer at 15 lbs./yd.<sup>3</sup>. Micromax micronutrients at 1.5 lbs./yd.<sup>3</sup>, and dolomite lime at 8 lbs./yd.<sup>3</sup>. Components are dispensed from individual Gleason bulk bins onto a central conveyor belt. The mix is carried under two fertilizer hoppers, one dispensing Osmocote, the other a blend of dolomite, micronutrients, and vermiculite. The belt dumps the pile of raw components into the mouth of a continuous drum mixer where the mix is gently tumbled and wetted. The mix is discharged onto an outfeed conveyor and deposited on a slab where a front-end loader delivers it to the potting stations. This machine is set up to deliver 40 yd.<sup>3</sup>/hr.

Calibration of the machine is necessary to maintain the day in-day out consistency of the mix. Fertilizer dispensers are calibrated daily, and sometimes more frequently, when the dolomite supply is irregular. Soil component hoppers are checked for delivery weekly, but very little adjustment is required. Proper working of the automatic shutoff microswitches, located on all material-dispensing hoppers, are checked several times per day.

Our customers need healthy, well colored, vigorous landscape stock when they need it. Our goal is to provide a consistent supply of top quality stock to our customers. The growing mix is the cornerstone of quality, and a good mixer, well-maintained, insures that our plants are off to a good start.