

Application Story

CUT IT THIN TO WIN

Although it's true that a wood veneer is less expensive than the real thing, it's also a way to stretch the use and look of exotic and expensive wood. The veneering process has been around since the ancient Egyptians used it in the making of furniture.

To make a veneer board, a thin slice of wood (dried) usually thinner than a 1/8 of an inch is sliced from a log and then glued onto a core panel. These panels are typically a particle board, medium density fiber board or blemished wood. This gives the finish product the look of expensive wood but allows the woods user very good control over flatness because of the minimal amount of warping that can occur.

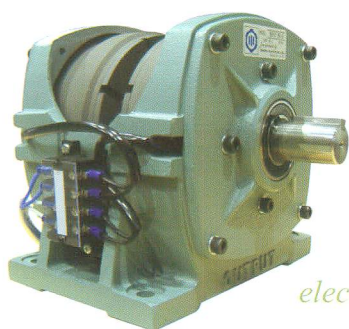
In the veneering process, not every piece of wood is usable. In places where a tree branch was, there are knots. Some logs may also have splits or cracks. These parts are not usable and need to be removed before the final veneering process. To do this, a sensor has to first detect the undesirable part on the piece. Once tagged a saw blade cuts just before and just after the undesirable part, removing it and thereby utilizing as much of the wood as possible.

To control the movements of the conveyor feeding the wood and the saw blade, an Ogura MSUH series

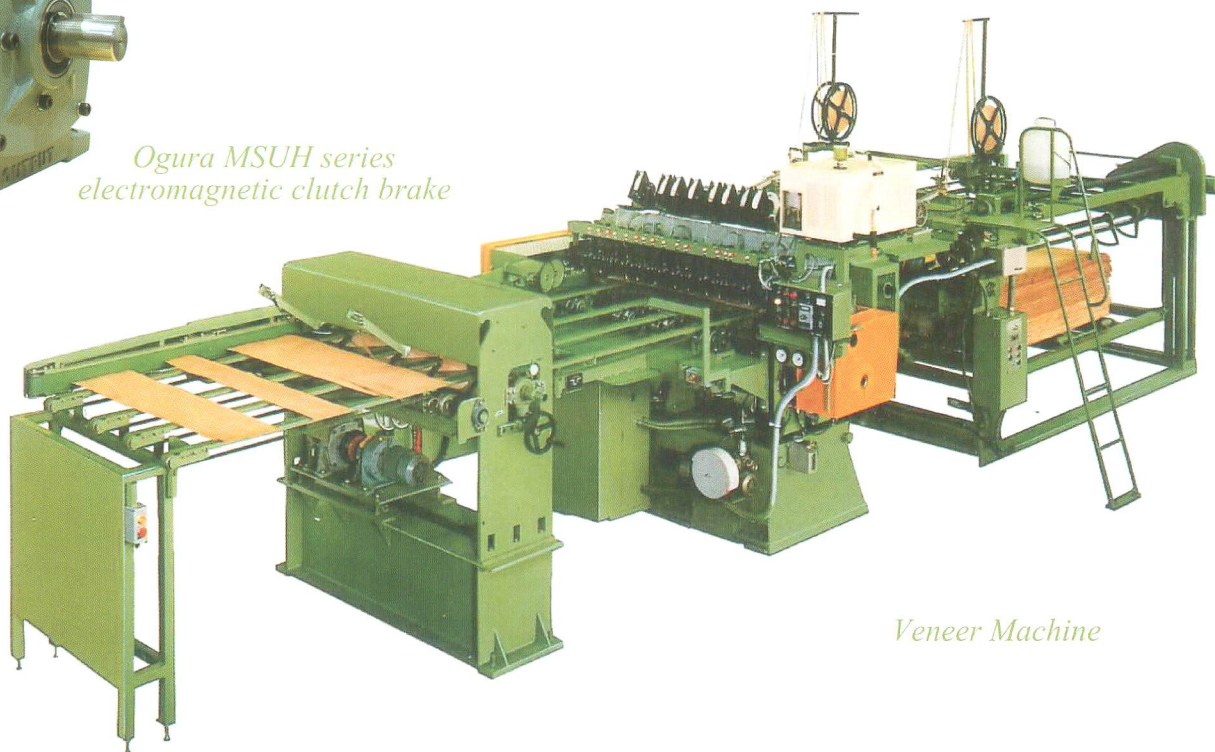
electromagnetic clutch/brake is used. The MSUH is a separate clutch and brake enclosed in a foot mounted housing. It has an input and an output shaft supported by double bearings to withstand heavy side loads. It is available in eight sizes from 10 lb ft. to 750 lb ft. Its fast response time is critical for this application because only the undesirable area should be removed, minimizing the waste of any usable wood. If the clutch response time is too long, it means usable wood can be cut out, which results in higher overhead cost.

The Ogura MSUH is different from many other single face friction type electromagnetic clutches because its friction surfaces on the clutch and brake are in slight contact with one another at all times. This elimination of the air gap makes response time very short which is critical in this and many other applications.

So it's a win all around. Veneer manufacturers are happy that the Ogura clutch brake helps them maintain tight quality control. Environmentalists are happy because veneer makers help to stretch out wood resources, and consumers are happy because veneer products give the look and feel of rich wood but not the high cost. To see how you could win with Ogura products, please contact your local Sales Representative. ●



*Ogura MSUH series
electromagnetic clutch brake*



Veneer Machine