



# Hoop Driving Machines

## for Wooden Barrels

**Schoolhill Hoopdrivers are fast and reliable machines for tightening hoops on wooden barrels.**

**These machines meet the high production demands of Whisky and Rum industries worldwide, and are yet sensitive enough to make sure that new wood barrels for the wine industry, can be carefully processed without damaging the wood.**

Schoolhill manufacture 2 different models and both are heavy duty, high speed machines capable of hardening around 500 barrels per day.

A Universal Machine model SH747E will handle all sizes of barrels from 190 to 550ltr capacity. This includes casks such as 190ltr American Bourbon Barrels, Hogsheads and large Butts and Puncheons up to around 550ltr.

A smaller Hogshead Machine is available for Bourbon Barrels, Dump Hogsheads, and Wine Barrels up to 300ltr.

These machines have built up an excellent reputation for reliability and long life over many years, and this is due to the high quality heavy duty hydraulic cylinders, which provide the driving force for the various machine functions. These are all designed specifically for their application, and manufactured in house at Schoolhill in Scotland. Millions of cycles are achieved with little or no maintenance. Over 30 years experience in this field ensures superb quality and reliability unmatched by other machine manufacturers.

Machines are fitted with Type II Powered Turning Gear which clamps casks, lifts them up, and rotates them 180° to allow the hoops on the other end to be tightened. Clamps with Nylon pads are available for wine barrels where it is important that the wood is not marked. This greatly improves production and reduces manual labour. Machine safety is also enhanced by this new Powered Turning Gear as it is now not necessary for operators to reach under the press Arms to manually rotate barrels as was required on earlier models.





## SIMPLE OPERATION

Machines are fitted with Electronic Joystick Controls with proportional valves for finger tip sensitivity and progressive speed control of up / down and arms in / out motions. Turning gear is operated by electric push buttons to clamp and rotate barrels.



### 10 PUSH ARMS

Operated by 1 central ram, the wide variation in hoop size is achieved by a hardened ball and socket arrangement which attaches all the arms to a connecting plate on the ram. Arms are spring tensioned to take up any out of roundness on the barrel circumference. Ensuring that the blades stay close to the barrel surface, eliminates jumping over hoops, and this is achieved with adjustable blade approach angles which can be set to suit your barrel shape, and hoop iron thickness.

Twin press rams and 4 corner post guides hold the presshead rigidly, ensuring that hoops are pressed straight and square.

We recommend that machines are operated for in / out from the front operation, as this is much easier for operators. A cask ejection system is provided which sits at the rear of the machine, and ejects barrels to the front. It is possible to operate machines on a thro flow basis. However this has been proven to bring no production benefits and is not ergonomically friendly in the highly safety concious environment of today's production Cooperages.

An automatic Hoop Setting Device is available as an option for Wine barrel operations, which allows hoops to

be driven to 4 different predetermined heights.

A flat circular steel plate, fixed underneath the presshead, is used to press both end hoops at the same time, and ensures they are not pushed below the end of the cask. It is also possible to have insert rings fitted to this plate so that end hoops may be left above the cask end.

### *Machine Specifications*

#### **Model SH747E - Universal Hoop Driving Machine**

Suitable for all sizes of barrel from 190ltr Bourbon casks up to large Butts and Puncheons. Barrels of the following dimensions can be processed.

End Dia: 20.0" (508mm) min to 34.0" (864mm) max  
Bulge Dia: 22.0" (559mm) min to 40.0" (1016mm) max  
Height: 32.0" (813mm) min to 52.0" (1320mm) max

#### **Model SH1895 - Hogshhead Hoop Driving Machine**

Suitable for barrels from 190ltr Bourbon, Dump Hogshheads, and Wine barrels up to 300ltr. Barrels of the following dimensions can be processed.

End Dia: 20.0" (508mm) min to 25.0" (635mm) max  
Bulge Dia: 22.0" (559mm) min to 31.0" (788mm) max  
Height: 32.0" (813mm) min to 41.0" (1042mm) max

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