

CUSTOMER

William Grant & Sons

SECTOR

Food & Beverage

**Tullamore
D.E.W
Distillery –
Drain and Fill
Line**

LBFoster®



“Heavy barrel handling is a niche area in which we have demonstrated our capability and capacity.”

The Tullamore Distillery is an Irish whiskey distillery located in Tullamore, County Offaly, Ireland. It was built by William Grant & Sons at a cost of €35 million and officially opened in September 2014. It is the first new distillery constructed on a greenfield site in Ireland in over 100 years, and the first to operate in Tullamore since 1954.

William Grant & Sons has invested €25 million (US\$35m) in its Tullamore D.E.W distillery to aid the development of a new grain Irish whiskey production plant and bottling hall. The addition of the bottling hall makes the site one of the world's few 'grain-to-glass' whiskey operations.

Tullamore D.E.W is a triple distilled, triple blend Irish whiskey. It is among the world's largest selling brand of Irish whiskey, with sales of over one million cases per annum.

Requirement

Whiskey casks offer unique and important materials handling challenges and are a vital part of the whiskey production process. Draining and filling whiskey casks at the Tullamore D.E.W distillery demanded an exceptionally heavy duty specification, including the capability of handling double stacked pallets, as well as two different pallet sizes.

The system specification also required an ATEX rated solution. The ATEX Directive consists of two EU directives describing what equipment and working conditions are allowed in an environment with an explosive atmosphere. Brewers and distillers handle

flammable (explosible) materials so are subject to national law in Europe in the form of ATEX 1999/92/EC Directive or in the UK DSEAR 2002 Regulations. These ensure workplaces are safe from fire and explosion risk.

L.B. Foster Automation & Materials Handling is expert in the design, installation and commissioning of complex materials handling and automated manufacturing solutions for the luxury beverage markets. Our solutions conform with ATEX 2014/34/EU (previously 94/9/EC) for industries that supply equipment into hazardous areas.



Specification

- > 27m roller conveyor
- > 24m chain conveyor
- > Operator controlled bung removal machine
- > Automated cask boring machine
- > Automated pneumatic tilting conveyor
- > 132 casks per hour throughput.
- > Two different pallet sizes, maximum pallet mass of 2200 kg
- > Infeed and outfeed chain conveyors capable handling double stacked pallets th a maximum load of 5000 kg
- > Pneumatically operated 90 degree transfer conveyors, capable of transferring 2200 kg pallets x 4
- > 1.2m wide operator platform with x 3 control stations and x 1 HMI
- > ATEX rated equipment.



CASE STUDY

Grants: Drain and Fill Line

Our Solution

L.B. Foster Automation & Materials Handling's Tullamore Distillery Drain and Fill Line is capable of handling up to 132 whisky casks per hour and incorporates a special, automated pneumatic tilting conveyor. The conveyor tilts to a four degree angle, enabling disgorging of casks following the automated removal of the cask's bung.

L.B. Foster's automated conveyor solution combines a number of innovative, added value features with a traditional roller and chain conveyor. The Drain and Fill Line

incorporates infeed and outfeed chain conveyors capable of handling double stacked pallets with a maximum load of 5000 kg.

Integral to the line's specification is the capability to accommodate two different pallet sizes, with a maximum pallet mass of 2200 kg. Further innovations include an automated cask boring machine and four pneumatically operated, 90 degree transfer conveyors capable of transferring 2200 kg pallets.



What they said

"This is our flagship distillery and the first new distillery built on a greenfield site in Ireland in over 100 years. The Drain and Fill Line is at the heart of our production. With the help of L.B. Foster's team of expert engineers a number of innovations were designed into the final solution. These included the capability to handle some serious weight - up to 5000 kg. We are very pleased with the final outcome and it is on view to the thousands of visitors we get at the distillery each year."

William Grant & Sons

