



**LB Foster**<sup>®</sup>

CUSTOMER

Bushmills

SECTOR

Food & beverage



**Bushmills**

New Barrel  
Fill Line



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

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The Old Bushmills Distillery in Bushmills, County Antrim, has been in continuous operation since it was rebuilt after a fire in 1885, although whisky has been distilled in the area since 1608.

The Bushmills brand portfolio includes five award-winning whiskies: Bushmills Original, Black Bush, Bushmills 10 Year Single Malt, Bushmills 16 Year Single Malt and Bushmills 21 Year Single Malt. Bushmills was acquired by Mexican tequila giant Jose Cuervo from Diageo in 2014. The distillery is a popular tourist attraction, with around 120,000 visitors per year.

Bushmills has planning consent to build a number of new maturation warehouses over the next decade on 62 acres of adjacent land as part of a €30 million expansion of its existing historic site on the outskirts of the village. This will effectively double its production capacity and allow it to expand into new global markets.

## Requirement

Whisky casks offer unique and important handling challenges and are a vital part of the production process. Filling barrels with whisky on a new barrel fill line at the Old Bushmill's Distillery required an ATEX rated, heavy duty barrel handling solution to enable the fast, safe and efficient recharging of casks.

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 (explosive) 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.

## Specification

- > 18.5m of 6" pitch chain conveyor with a maximum moving load 2600kg
- > 14m accumulating chain conveyors
- > Automatic cask lifting and weighing devices x 4
- > Cask turntables and lowerator x 2
- > Lowerators capable of putting empty American casks back into system to allow re-palletisation
- > Pneumatically operated cask kickers at end of infeed, outfeed, turntables and fill line conveyors
- > 100 American casks per hour throughput
- > System capable of processing hogsheads and sherry casks
- > 1.8m wide x 8m long operating platform
- > Step overs over conveyor system x 2
- > ATEX rated equipment

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.



IRISH WHISKEY



## Our Solution

L.B. Foster Automation & Materials Handling's design comprised 18.5 metres of 6" pitch chain conveyor as the main fill line conveyor, with a maximum moving load of 2600kg. In addition, a further 14 metres of accumulating chain conveyors were supplied as part of the overall conveyor solution.

Our innovative solution for Bushmills is a conveyor that can multitask. The system can process a variety of cask sizes, including American casks, as well as hogshead and sherry casks. Our design incorporates four automatic cask lifting and weighing devices.

These move casks into position for filling and weighing, before being lowered and transported to the line's outfeed section. Pneumatically operated cask kickers feature at the end of the infeed section.

The outfeed section includes two cask turntables that divert different barrel sizes. The system's capacity runs at up to 100 American casks per hour throughput. Integral to the solution is a lowerator capable of putting empty American casks back into system to allow re-palletisation.



## What they said

"The rigours of the distilling environment demands solutions that are protected against explosive atmospheres. L.B. Foster Automation & Materials Handling came up with a very clever solution comprising a robust barrel handling system with a number of smart add-ons. What also provided us with reassurance was the company's experience of installing ATEX rated conveyor solutions elsewhere within the industry, so we knew we were dealing with experts."

**Bushmills**

