





- •What type of barrel? Bourbon, Wine, Brandy etc
- Fresh wetted barrels
- Rejuvenation of Barrels
- Eliminating infection
- Reduce oxygen uptake during filling / emptying



#### The importance of using a freshly emptied barrel 200 L

**Bourbon Barrel Volume** 

 $2 \text{ m}^2$ 

Inner surface area

0.4 cm

Stave saturation depth Spirit hold-up volume

6 litres

Atmosphere

4 mm

Model of stave.

2 cm

# Barrel Filling at our Kentucky



# Barrel Filling Nozzle



What happens in the barrel The barrel gives; Previous spirit, Wood & vanillin flavours, Colour, haze and alcohol. Oxygen reactions Infection if done incorrectly! The barrel takes away; Charred wood (charcoal) adsorbs flavours Volatiles lost through wood How long in barrel?

# Filling, Storage & Disgorging

# Filling

- CO<sub>2</sub> purge
- Filling lance
- Avoid oxygen pick-up
- Brim fill
- Bung or Airlock

### Storage

- Cold or cool
- Avoid sunlight
- 2 weeks to 2 years
- No / Minimal sampling

## Disgorging

- CO<sub>2</sub> blanketing avoid oxygen pick-up
- Coarse filter to remove char
- Fine filter optional





