

for July 15, 2007

Measure for Measure: Scales at the Distillery



Fairbanks barrel scale on stage at the Young Centre for the Performing Arts

Weighing was an extremely important function at the distillery, especially since the most accurate way to measure alcohol is by weight, not volume, which changes according to temperature. Some of the most distinctive, even beautiful, industrial artifacts found on-site are scales of various sizes, designs, and purposes: small office and laboratory scales, floor scales, portable barrel scales and platform scales, and gigantic railcar and “scale tanks.”

Accurate measurement served both corporate and government interests. The company confirmed delivery weights of raw materials, like grains, molasses and coal; measured ingredients, like flour, malt, and yeast, during the process of making alcohol; ensured quality control via testing in the lab; tracked stock during the process of aging; measured distilled water and alcohols during the blending process; and measured alcohols to be bottled, canned, trucked or delivered by railway to various destinations around the world.

At the same time, government excise officers closely monitored production yields for tax purposes, for example, measuring alcohol at various stages of

maturation to ascertain evaporation rates of aging alcohol, and to ensure that no taxable liquids went missing ... and untaxed.

Among the oldest and most beautiful scales on-site are the great platform-scale-tanks, manufactured by pioneering scale inventors and manufacturers, the Fairbanks Company of St. Johnsbury, Vermont. Beginning in the 1830s, the Fairbanks family led the way in weighing technology. As usual, Gooderham & Worts sought out experts in the field, and imported a variety of Fairbanks scales over time. Of particular note are three 1898 Fairbanks “scale tanks” in the loft of Building 61 that were on-view during Doors Open 2007 and used for blending alcohols.

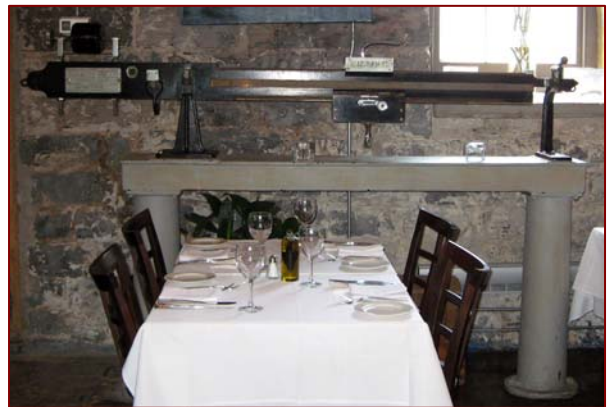


Scale tanks with capacity of 25, 210 litres

These classically elegant mechanisms feature giant copper tanks (probably made on site) that could weigh some 60,000 pounds of liquids. The tanks are set atop a platform over the patented balancing mechanism, and operated via a scale-beam supported on fluted cast-iron columns. These, in turn, are surmounted by a dark-wood crossbeam with “Fairbanks” stencilled in gold letters. Because these particular scales were used until the 1980s, they bear modern Weights & Measures Canada inspection stamps. Similar, if smaller, tank scales could once be found in the cannery, the denaturing room, various parts of the distillery, and the yeast loft.



1884 Weigh House east of Stone Distillery



1930s Fairbanks railcar scale in Tappo

Please send your comments or questions to Manager of Heritage Services, Sally Gibson, sg@thedistillerydistrict.com.