



The method of water supply to the turbines at Gayle Mill is certainly unusual and may even be unique. It consists of two separate parts, the Dam or Pond, and the Weir and Race system. Unlike any other system, the pond has no direct feed to the race and it was the weir and race that provided the primary supply directly from Gayle Beck.



Water System Layout

When the mill was operational, at times of normal flow, the water coming down Gayle Beck was taken straight off into the race by a shallow weir underneath Gayle bridge and was sufficient to drive the main Thomson Double-Vortex turbine and the woodworking equipment. The dam was used only as a back-up or emergency reservoir. When the direct flow in the beck was insufficient to run the turbines, the dam could be filled gradually overnight and the water then released back into the beck in the morning to be collected again at the race, thus enabling operation of the mill when otherwise impossible.

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Gayle Mill had been beckoning me for some three or four years, ever since Nigel and Angela Smith recorded their visit in the HMG Newsletter, and it's subsequent appearance on the BBC's Restoration programme, where there was hope for an award of funding. In June this year I toured over the mill, restored not as a result of successful awarding in the television programme because it wasn't, but from other benefactors who had been impressed and realising the importance of the building itself, as well as in social and industrial history terms, when it was featured on our screens.

The building dates back to the eighteenth century when it was built as a cotton mill by two brothers, Thomas and Oswald Routh, following the architecture of Richard Arkwright. It occupies the site of a former cornmill making good use of Gayle Beck.

The waterwheel is thought to have measured 22ft diameter by 4ft wide and this powered machinery producing bobbins of spun thread to be sold on for weaving. The Routh brothers had already established themselves in the hosiery trade, not only making stockings, but woollen caps and large woollen smocks called Guernsey Frocks, so capital was invested in this exciting new enterprise. Villagers, already in the Routh's employ as hand knitters, became mill workers instead. Thirty years of cotton spinning was followed by flax then wool spinning until 1878 when the waterwheel was replaced by a Thompson double-vortex turbine and the industry changed from spinning to sawing. The turbine driven Victorian woodworking machinery was operated continuously (apart from WWII when it was requisitioned as a billet) until 1988.

Now once again turbine driven and restored to its last used state as a sawmill, complete with belt driven saws with vicious looking teeth, woodturning machines and bandsaws, the active Friends of Gayle Mill run programmes of art workshops and other events ensuring that the mill provides an educational and practical resource; it is also in business providing timber services and traditionally crafted products made from local, sustainably grown wood just as it once provided a huge variety of items for the Gayle villagers befitting every occasion in life, from cradle to coffin.

Mike Thomson, Vice Chairman of the Gayle Mill Trust, guided us visitors through the building with highly illuminating and fascinating tales along with lots of information about the watercourse, the changes of industry and ownership through to decline and restoration . He and his wife Janet are just two of several volunteers eagerly guiding and demonstrating this unique Grade II* listed mill.

For further information see <u>www.gaylemill.org.uk</u> or telephone: 01969 667320.