Sherborne Mill - Update

Reports by Harry Clarke

Pictures by Keith Andrews taken on 17 December 2018



21 November 2018: The wheel was commissioned yesterday and operated at full crack overnight generating Checking it this power. morning though it seems to have shifted along on its axle by about 12cm despite the taper locks that should lock it to the keyway. We have therefore dropped the level down again.

30 November 2018: Well the wheel remains silent as I write whilst we think carefully of the next move. Apparently, the first wheel the firm built was fitted with a taper lock on both side securing the wheel to the axle but this created issues with the wheel when expanding and contracting. The second only had one taper lock and this proved perfect, the wheel could flex slightly yet remained in a fixed position on the shaft. Ours followed the same principle and the results are obvious. My own thoughts on this is that everything was greased so well that the taper lock didn't actually bite. This was compounded by the fact that the launder wasn't levelled up perfectly and therefore delivered marginally too much water to one side.

11 December 2018: The engineers yesterday moved the wheel back along the axle (fortunately it was well greased) and then locked it securely into place. We set it going yesterday evening and it has been running without fault since, generating power.

6 February 2019: All still working. We are still in testing and dumping water – rather than running it all over the wheel – at times of peak flows (like the melting of the snow in the warm rain on Monday) so I don't have a good idea of true peak output (this is because we haven't finished building up the leat walls to full height to allow sending all the water over the wheel).



Nonetheless max continuous output noted so far is 2.26kW and total generated power thus far since commissioning on 10 December is 1.7MWh.

Editor: The standing wave in the launder is intriguing. I thought perhaps it is created by the wheel rather than the wind, but John Christmas suggests it is due to the lip in the launder.