

## **RHUL BeadPull System Status Update**

G Boorman 21-01-2014

The Beadpull system at RHUL can be re-commissioned for testing the RFQ later this year. The Beadpull system was described at the FETS meeting in June 2012 (presentation attached).

The system was originally built for testing BPM cavities, hence the short length, but with the ability to be extended. To test the RFQ, the system can be extended to 4-5m, using a 'block-and-tackle' multiplier, one end of which is attached to the carriage and the other to the top of the post. This will enable the bead to be moved over longer distances.

The software will be upgraded to run on LabVIEW 2012. Before the Beadpull system is started, the software calculates a 'move table' which determines the position of each of the five movers for every location of the bead during a mapping scan. This can allow for compensation of the catenary effect of the thread.

The schedule for testing the RFQ, using the portable RHUL Beadpull system, will be determined later.