

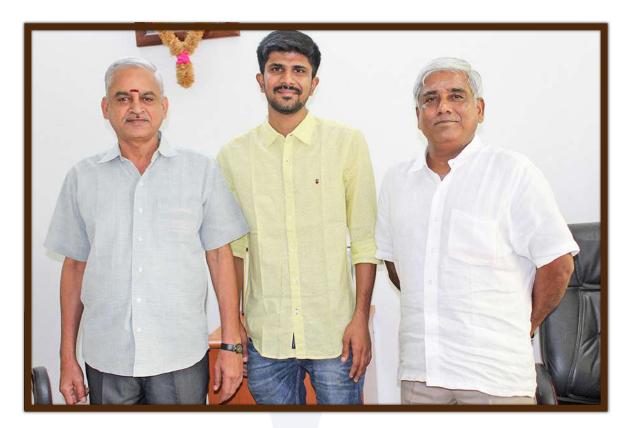
LMW'S LAP FORMER LH20 S SETS NEW BENCHMARK



Birin Spinning Mills Limited is a leading modern mill manufacturing cotton yarn and is strategically located in Avinashi from where both the textile hubs of Coimbatore and Tirupur can be easily accessed. The company, with a strong technology focus, has grown multi-fold over the years and has been catering to the needs of clients both in the domestic and key overseas markets such as Japan and Vietnam. Birin Spinning Mills started its operation in 2002 with 4,800 spindles and gradually increased its capacity to 16,800 spindles by 2019. Mr. Muthu Venkatesh came onboard during 2013 as Technical Director after completion of his engineering.

According to him, the success of their long standing dominance in the market is due to modernisation of machines and incorporation of the latest technology at their workplace. Birin Spinning Mills was producing 40's Ne combed compact hosiery with yarn production capacity of 8,400 kg per day. Once they targeted to increase the yarn productivity, the existing two lap formers became a bottleneck as they were producing only 9,550 kg per day against the requirement of 10,500 kg per day. Additionally, a considerable bandwidth of their available workforce was engaged in the maintenance of the old machinery as well.





Mr. D. Rangaswamy, Director, Mr. K. Avinashilingam, Director, and Mr. Muthu Venkatesh,

Technical Director, Birin Spinning Mills

The company therefore decided to replace the existing two lap formers with a single Lap Former LH20 S model after meticulously evaluating the benefits offered by it, which gave them an impressive output of 12,500 kg per day at 190 mpm with an increased efficiency rate of 72%. The lap former productivity has increased up to 30% after modernisation. The LH20 S possesses an in-built lap weight monitoring system along with a servo drive drafting system that enables it to automatically adjust the draft to maintain the defined lap weight. The unique concept of single-head drafting implemented by LMW helps in achieving best-in-class lap appearance and avoids associated maintenance problems. The machine operates at the fastest recorded doff time, resulting in increased machine efficiency of 72%, which is a benchmark in the industry.

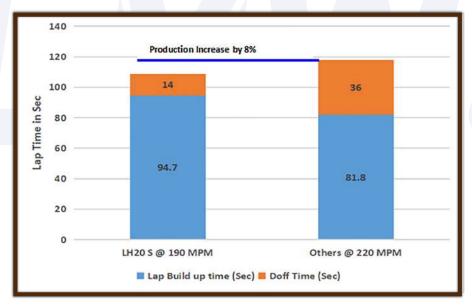
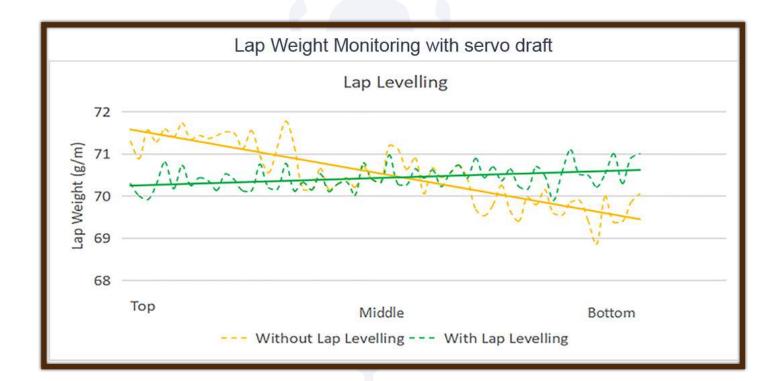


Figure 2: Graph showing increase in productivity with lesser lap build time

The following are the advantages of the lap weight monitoring system:

- Manual checking of lap weight is eliminated
- Consistent and lesser lap CV%
- Noil Consistency in comber
- Even exhaust of the laps in comber benefits soft waste saving of up to 0.5% that results in additional yarn production of approximately 16 tonnes per year
- Saving in soft waste process cost
- Lesser doff time for increased productivity.



With the unique design of calendering, lap built and lap change system the lap former LH20 S is able to achieve the fastest doff time, resulting in highest machine efficiency of up to 72%, which still remains as a benchmark in the industry.