



A LASERTUBE IN PLACE OF AN AUTOMATIC SAWING MACHINE

## *MNM Tools - IN*

*MNM Tools PVT LTD is an Indian company that works primarily for a single customer providing stainless steel tube with a diameter of 42 mm to 63 mm and length of 47 mm to 140 mm, used for car exhaust systems. Established by the current CEO and majority shareholder Mahin Tikekar, the business started in 2011 with the purchase of an ADIGE CM601 cutting system from a closed German company doing the same type of work. In 2019, the company bought a Lasertube LT5 system that allowed them to increase the production volumes creating a great leap in business growth. Today, MNM has 17 employees operating in a plant of approximately 700 sqm, not far from Pune, the famous hub of the Indian automotive industry.*





### A hard choice

In 2019, the old sawing machine CM601 was performing its job very well, but the need to increase the production volume led Mr. Tikekar to consider adding other machines into their production. The idea of a Lasertube system in particular had been tickling his imagination for some time, as he explains: “We have been talking with BLM GROUP for many years about the possibility of using a Lasertube system to do the work of the CM610, but the hesitation was the ability to amortize, in a reasonable time, an investment that cannot certainly be compared to that of the sawing machines”.

### The detail analysis

From a technical point of view the comparison was simple. A quality automatic sawing machine such as CM601 ensures speed and high volumes, but it has some limitations intrinsically linked to technology. The burr remaining on the cut requires a brushing machine and a washing system, systems that were present in Tikekar’s company. There is also the noise and blade wear, which is a cost in addition to the scrap which is not limited to the kilometers of waste each month on the length cuts of the initial and end part of the piece. The blade’s cutting thickness also uses about 2.5 mm of tube with each cut which needed be considered too. This may seem insignificant only before multiplying it by the hundreds of thousands of cuts made by the sawing machine. Tikekar explains: “Until recently, I received the material from the customer and we just made the cut, but now I also supply the material, which obviously is another business opportunity, and the numbers change as the 2.5 mm lost at each cut is now a direct cost for me”.

Laser cutting has no burrs – even though Tikekar reports that, at times, he has to remove oil inside the tubes – makes no noise, has no sharpening and blade replacement costs and definitely offers important savings on the cutting groove (about 0.5 mm). In some cases, this last point alone largely justifies the transition towards this technology.

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### **Bet on the new technology**

The desire to improve the production system by adding a Lasertube system conflicted with the need of an investment greater than the one necessary for the sawing machines: “Of course I knew that the BLM machines are the most expensive, but today, in India, Italian technology is greatly appreciated. Furthermore, I received good testimonials with more than one colleague telling me that the BLM GROUP Lasertube systems are the best in the world,” explains Tikekar who continued., “After all, my experience with BLM GROUP was positive and that’s why I relied on them. Although the CM601 was a second-hand system, they always supported me and this fact was important to convince me not to accept proposals from China and Taiwan, even if clearly more cost-effective. The support and help that I have had and continue to have were more important. Not to mention that India

financial institutions are willing to support entrepreneurs investing in laser technology”. “In short, I felt that the return on investment would be faster and guaranteed with a laser system instead of different sawing machines,” explains Mr. Tikekar. “The determining factor was certainly that I needed to triple production. My customer asked for it and therefore I was guaranteed a 70% machine utilization. If I had to start looking for customers starting from 25% utilization, I wouldn’t have trusted it.” In conclusion, when his main customer confirmed the increase of the production volumes, he bought the LT5 system that now is working at 100%. “Initially, it was about 200,000 parts per month, now production has quadrupled to 850,000 parts and in the maximum demand period I have produced over 1,000,000 parts per month.”

### **Success favors the bold**

With just one system Mr. Tikekar has solved all his production problems, but he confesses that before receiving the system he had a doubt: “I was really worried that at the end of training my operators, who knew only the sawing machine, could not make best use of an advanced laser system such as LT5, but the graphic interface of the system is extremely intuitive and they learned very quickly. Now they are able to operate the machine at its best and I am no longer afraid; on the contrary, I confirmed that the productivity promised by BLM GROUP was conservative and that my operators manage to produce much more and with a gas consumption lower than expected.”

Tikekar is aware that currently he is not taking advantage of the full potential of the laser tube system that can do more than just the straight cut, but currently the machine is working in a continuous cycle 7/7 and MNM, with the LT5 system, can afford to choose its jobs. “I’m convinced that the laser machine is advantageous when you work in the high-volume market and for this reason I’m not interested in markets with small numbers.”

The only problem at this point is that the machine cannot stop and MNM is already thinking about how to increase their capacity in the future. “By investing in the laser, growth has become faster and considering the payback, in a couple of years I’ll have to think about doubling the investment,” concludes Tikekar.

