



MOTORBIKE

## ZHEJIANG CFMOTO POWER

### AUTOMATION LANDS IN CHINA

China is changing its image and production philosophy. Through a scheduled path, China wants to evolve from low cost production to a country of quality production. This process involves all sectors and many companies are facing the question of how to implement efficient organization and automation like the majority of the advanced industrial world is doing.

ZHEJIANG CFMOTO POWER CO. LTD. was established in 1989. Today it is one of the major road bike manufacturers and the major Chinese manufacturer of quad-bikes, or more precisely ATV (All-Terrain Vehicles): 4-wheel motorbikes suitable for all terrains and produced for recreational or sport purposes.

Production plants, extending over about 120,000 sqm, are in Hangzhou, in the Zhenjiang region, not far from Shanghai. The company employs approximately 1,300 people who design, develop and produce engines and boats in addition to motorcycles and ATVs.

Mr. Liu Jianlin is the Process Technology Manager of CFMOTO: “We are a private company with nearly 30-years’ experience in bike manufacturing. Three core principles lead our business: harmony, honesty and innovation.” We consider the last one undoubtedly the key factor in the development of this important industrial reality. Over 200 people working

in the R&D department and ownership of 110 patents support this commitment. Mr. Jianlin continues, “20% of production is intended for the domestic market, with 400 authorized distributors, whereas 80% is intended for the foreign market.” The distribution network of CFMOTO is present in 70 countries including the USA, Canada and Europe.

Overall production volumes are high, but the single production batches are limited and change rapidly, as Mr. Jianlin explains, “We have 98 different models of vehicles and 51 different models of engines, therefore it is necessary to produce several hundreds of various parts for each component. Quality must be guaranteed but all of the production changes do not make this an easy task.”

The biggest problems that production has to face, concern mainly accuracy of produced parts. An important renovation of production process efficiency is currently underway, and the improvement is focused on automation.

“When we buy machines, the crucial aspect is the level of automation. This aspect ensures accuracy of machining operations and process repeatability, in practice a higher quality. This is the main objective, even more important than production increase, which is still a key objective.”

These needs lead CFMOTO to buy tube machining systems from BLM GROUP and the goals have been met: “The decision to buy a tube bending machine ELECT40 and a Lasertube LT5 system was taken with the aim to improve process quality and productivity.”

ELECT40 is a multi-radius all-electric bending system. “With the ELECT40 productivity is three times higher than before and machining operations are performed with higher precision and repeatability,

exactly as we needed”, Liu explains. Previously, processing used hydraulic machines and accuracy and repeatability could not be duplicated. Torque control on vice closing, as result of the all-electric operation, also provides higher speed in the tooling calibration phase at passage from one machining process to the other.

“ Quality of bends obtained has greatly improved. Before it was adopted, about 10-15% of the production was rejected and now that percentage is reduced nearly to zero. ”  
Mr. Liu explains enthusiastically.

The Lasertube LT5 system for cutting of tubes with a diameter up to 120 mm was included in the production process of CFMOTO and offers new development opportunities. “LT5 is something totally new in our production process and has had a very strong impact right from the start”, Mr. Liu explains:

“Now we can make parts that we could not before. Projects which were once impossible due to manufacturing constraints are now feasible!”

Since 2014 CFMOTO has been an official supplier of the President of the People’s Republic of China, defined as a company that is expanding through the automation of the production process.

3x

Increase in productivity  
Compared to the previous process

