

# “R&D is our top priority”



Dr Y Inaba, CEO & President, Fanuc Corporation, shares his views on the market situation in Japan vis-à-vis global economy and gives an insight into Fanuc's R&D philosophy and the strategies to sustain the growth momentum, in an interview with EM. Excerpts from the interview...

■ **How is the market situation in Japan currently vis-à-vis global economy? What are your expectations for this year and the next year?**

Japan's domestic economy has been boosted by demand for reconstruction following last year's Tsunami. But the one-off reconstruction demand is expected to peak by September. The European financial situation has led to the Yen being considered a 'safe haven' currency. With this, Japanese manufacturers have straight away become uncompetitive in pricing while our European competitors appear 'cheaper'.

These challenges have really hurt Japan's economy.

The global economy until last year was very much on the track to recovery. However, the momentum has definitely weakened. This year again we face a clear downward risk in the economy. Not only is the financial situation in Europe a concern, but also the slowdown in China is a major dampening factor. Since the Lehman shock of late 2008 to date, Fanuc Group has been under stringent cost cut. Fanuc will keep a close watch on the market trend in China and the financial situation in Europe and

carefully assess the changes in demand. Of course, as always, Fanuc will continue to strive to enhance the intelligence and ultra-precision of our products to improve competitiveness while not losing sight of our basics of high reliability.

■ **What are the strategies developed by your company to sustain the growth momentum in this uncertain economic environment?**

Yes, these are difficult times for the industry, but these difficult times have a way of separating men from the boys. As long as one can deliver

superior value he can continue to grow. Our focus continues to be on delivering value through product innovation and service. For example, after the Tsunami hit in March 2011 we were faced with the difficulty of obtaining parts required for manufacturing. It was particularly hard to source a type of microcomputer that is used in CNCs. Our laboratories took this challenge and lead the effort to replace this part with an alternative. We called in the entire strength of development engineers and worked round the clock. As a result, within two months we could

complete the design changes which otherwise would have taken a year. This enabled us to overcome the negative impact on the production of CNCs and meet our customers' expectations seamlessly even in the face of unprecedented disaster.

We continued to develop new, wide ranging intelligent functions, for example the Learning Robot. Through acceleration sensors, this Robot "learns" the vibration at the time of operation and suppresses it, thus speeding up operations. The resultant productivity helps customers achieve the same with fewer robots.

Fanuc has long focussed on striking a balance both geographically as well as by product group. Hence our revenues are reasonably well spread out across geographies. We also focus on de-risking by ensuring balance between revenues from our CNC, robot and robomachine groups.

■ **As one of the leading manufacturers of factory automation and robots, what is your strategy for automating your factories?**

It is one of Fanuc's basic policies to incorporate broad robotisation into all our manufacturing activities. We have installed intelligent robots to enhance the efficiency of machining and assembly processes, promoting the increased technical and financial benefits of advanced automation at our own factories. By making the most of our long experience in using our latest advanced products at our own production facilities, Fanuc has been able to practically demonstrate that automation and robotisation bring high efficiency and cost reductions to manufacturing and production processes. The improved

product quality, lower costs and shorter delivery times allow us to continue manufacturing in Japan, which is one of the top three most costly nations in the world.

Fanuc robot cells are composed of intelligent robots, multiple machine tools and an automated warehouse. With each cell we realise 720 hours of continuous unmanned operation per month, including nights and weekends, by enabling robots to set workpieces to the fixtures, and also doing deburring and washing jobs which have hitherto been traditionally manual. The cell brings about competitive edge against low



*"We have installed intelligent robots to enhance the efficiency of machining and assembly processes at our own factories"*

*Dr Y Inaba*

labour costs overseas through unmanned operation.

Our factories are a living testimony to the value of optimal automation which allows efficient manufacturing and reliable quality at competitive cost.

■ **Is the trend of pairing machine tools with robots picking up globally and in India, as expected?**

As automotive manufacturers expand and build new factories particularly in India and China, Fanuc is capitalising on its large market share in this sector and focussing on automotive and related parts manufacturers. Further, to develop new markets in addition to the traditional automotive market, Fanuc has been promoting robotisation of machining factories operated

by non-automotive industries with our intelligent robots in close coordination with machine tool builders. Sales to these general industries have increased significantly to a level comparable to that of the automotive industry.

The use of robot cells for loading/unloading from machine tools has caught up now. As manufacturers across the world struggle to meet higher production targets, they are faced with a diminishing pool of machine operators. In India we note a sharp increase in the demand for material handling robots, even in SME segment. In the developed countries also it is common to have

improvements at the production process, a weak initial design is difficult and costly to overcome. This is why Fanuc has always placed R&D as our top priority and as the foundation of our management practice.

At our labs, engineers always design and develop products with a view to keep costs at a minimum. Fanuc conducts a thorough research of the market to set competitive prices and meet targeted costs. The development engineer remains engaged as the production manager at the earlier stage of production and assumes responsibility to ensure the new product meets the cost and quality targets established in the R&D phase. Fanuc labs also retain and learn from after-sales service data to enhance the reliability of our next generation products. This process of continuous R&D, accurate and practical feedback, and unrelenting improvement is how Fanuc develops, produces, maintains and services high-quality, low-cost products and retains valued customers year after year.

This is how we ensure Fanuc products always offer the lowest total cost of ownership to our customers.

■ **Any new product launches particularly of interest to India?**

Of particular interest to India is our new, cost performance ArcMate Oi-A welding robot. Noting the high demand for automating welding particularly in India's 2-wheeler industry, we developed this cost performance robot with enhanced features. We have also launched the cost performance servo motors for machine tool industry in India, the BiF series. ■

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