

## **Forging trends in Asia**

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As president of the Japan Forging Association I am honoured to receive this chance to greet you on behalf of the Asian group at this 17th International Forging Congress in Cologne, a city with a long and illustrious history. Before getting into the present state of the forging industry in Asia, I'd like to express my gratitude to all those of Euroforge who have done so much to prepare for this Congress.

My thanks also go to the Confederation of Chinese Metalforming Industry, the Association of Indian Forging Industry, and the Korea Forging Industry Cooperative for providing me with reference materials for my report. In view of the governmental relationship between Asia and Europe, the Asia-Europe Meeting of ASEM, a landmark gathering of the heads of twenty-five European and Asian countries and the European Commission took place in 1996. It symbolized the advent of a new age in which relations between Asia and Europe, based on dialogue and cooperation, would be enhanced towards the 21st century. I sincerely expect this 17th International Forging Congress to go on record as a great success for not merely promoting technological exchange but also realizing close and cordial human rapport.

Taking a look at Asia, a major change is affecting its economic environment, specifically China's accession to WTO at the end of last year, which has brought about a trio of significant aspects: First, China's status will improve to where it plays a vital role in global economics. Second, it forms the start of enhancing international reliance on Chinese economy and business practices. Thirdly, it has set the conditions for developing the foundation for China's further contribution to economic ties with other Asian countries, including Japan, and their sharing common values.

There is no doubt that China's accession to WTO has already helped it evolve into a great international trading power, which in turn will contribute to the expansion of the world's economy and have a significant impact on the economy of Asia. China is going all out to transform itself into a "manufacturing giant" and the emergence of local Chinese enterprises and the growth of industrial integration in the nation's coastal areas have started to repaint the industrial map of Asia. In particular those members of the Association of Southeast Asian Nations (ASEAN) geographically close to China and in their present stage of development will find themselves directly influenced.

Against this background, Asian countries are faced with the critical issue of how to avoid industrial hollowing and secure an advantage in view of their location. That the emergence of Chinese industry is promoting a structural reform among ASEAN countries and their economic unification under the pressure of competition characterizes the current state of affairs in Asia.

So much for Asia as a whole. Next, I'll narrow it to Japan, its present status and the issues we face. As strategic international mergers, capital and business tie-ups rapidly progress in the automotive industry, one of the principal forging industry clients, the economic environment surrounding our industry is undergoing drastic changes. Moreover, the ongoing recession and a growing number of production bases being relocated abroad, has put Japan's forging industry in difficult straits.

Nevertheless, the role of the forging industry as the driving force in Japan's future economic development remains as important as before. Fortunately, Japan's forging industry is supported by high-quality material suppliers, superb machine tool technology, and many other assets. Still, we must further reinforce our capacity for technological development while making best use of our strong points, such as high-precision net shape processing, automotive forging, die forging technology, and the like. At the same time we must focus on specialized areas aiming at greater manufacturing precision, as well as more complex and composite products. Higher productivity and improved competitiveness through finer choice and concentration of enterprise resources, like IT to enhance operational efficiency, and management reform, have emerged as a vital issue in Japan's forging industry.

In terms of forging product manufacture in Asia under the present economic environment according to country, China still ranks at the top, having produced 2.25 million tons in 2000 and 2.46 million in 2001, while slowing its pace of development during those years. Japan, having recorded a production of 2.43 million tons in 1990, fell to low as 1.90 million tons in 1998. From then until 2001 production has remained at the same level and rapid recovery is not foreseen. India, which produces 400,000's tons and Korea, which yearly produces 700,000's tons, face basically the same situation.

The demand for forging products is quite diverse – motor vehicles, construction machinery, railway equipment, shipbuilding...the needs are many. With respect to the ratio of automotive industry forged components compared with the number of vehicles produced in each country, Japan ranks first with 67%, followed by India with 49%, Korea with 41%, and China with 40%. These figures are expected to change, however, in line with the future trend of the automotive manufacturing in each country.

Next, I'll try to organize the problems facing each country in Asia. First, China, which refers to problems like cost and small quantity production, shortages of investment in human resources and lack of management, unreasonable expect forging prices from overseas user, low productivity, few high added-value forgings, raw material supply...there are many. However, as Mr. He Guang Yuan, President of Chinese Confederation of Metalforming Industry, mentioned during the 16th International Forging Congress held in China, I too foresee the future of the Chinese forging industry as very bright, particularly if coupled with the development of its automotive and heavy

industries, renovation of its small and inefficient forging works, and readjustment is made with specialized big commercial-based firms.

India cites over-capacity, limited access to export markets, inadequate investment to upgrade technology, adverse profitability, and the like as its current problems. But improved technology, devising strategy for integration, and end product specialization remain as issues for future resolve.

Then we have Korea. As with Japan, Koreans face such problems as weakening pricewise competitiveness, aftereffects of the economic crisis, difficulties in inheriting technology, and shifting of production plants abroad. But they also see a pressing need to reinforce R&D power, specialize in high value-added products, find a new role in innovative technologies, and make efficient application of CAE, CAD and CAM.

It is considered that the forging industries of other Asian countries have similar problems, but to surmount them, speed of reform must be accelerated. From various nations, including India, Korea and China, voices expressing hope for the establishment of Asiaforge have been heard. In my opinion, if Asiaforge can be realized, information exchange among the forging associations of Asia will be greatly enhanced, and this will lead to the further development of the forging industry as a whole.

Japan's Forging Industry has a history spanning more than a half-century. During those years, Japan's forging industry has supported the country's machine industry and made a valuable contribution to the development of our nation's economy. The trend of economic globalization is expected to intensify in the 21st century. While continuing our diverse efforts to build Japan's forging industry as a key support industry, the Japan Forging Association is committed to the development of the world's forging industry as a whole in competition with and in close cooperation with the forging associations of Asia and of the world.

From this viewpoint, the Japan Forging Association will be integrated with the Forging Technology Institute of Japan in June 2002. The objective of this is to unite member firms of both associations, strengthen the organization and its functions, and make them work more efficiently through comprehensive management of the forging industry and its related industries. The result will reinforce the support function for member firms and cope with contemporary trends, thereby contributing to exchange with forging industries of the world.

In conclusion, I sincerely hope for the continuing development and prosperity of the world's forging industry.