Minutes of the 3rd Meeting of the Development Council for Machine Tools Industry (DCMTI) held on March 28, 2011 in the conference room no. 172 'Kaustubham' Udyog Bhawan, New Delhi

The **3rd** meeting of the Development council for Machine Tools Industry (DCMTI) was held on March 28, 2011 in the conference room no. 172 'Kaustubham' Udyog Bhawan, New Delhi under the Chairmanship of Shri Harbhajan Singh, Joint Secretary, Department of Heavy Industry and Member Secretary, DCMTI. The list of DCMTI members and special invitees who attended the meeting is at Annexure-I.

2. Welcoming the members of Development Council of Machine Tool Industry (DCMTI) and other special invitees, Chairman briefly explained the present status of 'scheme of enhancement of competitiveness in the capital goods sector', machine tool is one of the sub-sectors of capital goods sector, which was considered by Expenditure Finance Committee, Ministry of Finance and the Department was advised to re-submit the well prepared documents for meeting the requirements of 12th Five Year Plan. For preparation of the required document, the Department has decided to undertake study the sub-sectors of capital goods sector by the consultant. In this connection, the 'draft scope of work' for the study has already been circulated to all stake holders for obtaining their inputs / view-points. Earlier 'vision document' of capital goods sector was prepared by CII and subsequently vetted by IL&FS. He further mentioned that the Department is also planning to bring out a 'Concept Paper' for machine tool industry in consultation with Director CMTI. Regarding import of used equipment he informed the members that the regulation in the import of used machines has been discussed in the meeting of COS recently and minutes awaited. The technology road-map of machine tool industry has also been discussed in the office of the PSA and gave few suggestions in this direction. The Council noted that machine tool industry is going to register high rate of growth during the current financial year as against the last year which is a good sign for the industry while level of import and export of machine tools have more or less the same as last year.

3. Thereafter, Director CMTI was requested to present the Concept Paper on the machine tool industry. The theme of the subject was 'National Action Plan for Sustained Growth and Development of the Indian Machine Tool Industry' which includes the following major issues:

a. Present weak machine tool sector needs to be addressed through effective policy interventions as technology gaps exist practically in all areas such as products, technologies, components/subsystems. Targeted national level interventions are required to ensure generation and/or availability of 'specific enabler technologies and suppliers'.
b. Ways & means to instill multidisciplinary content into product/process innovations to be explored in the field of better materials, high functionality drives, high fidelity

measurement systems and metrology aids, higher speeds, sophisticated multi-axis computer numerical contouring control, digital signal processing, embedded electronics and sensor-integrated innovative adaptive controls for targeted functional characteristics, single set-up machining & 'in-situ' verification/inspection of targeted-results, integration of automation, computer integrated and networked behavior control of machine tools in production systems.

c. For inclusive national strategy for sustained and overall development need institutional technology support infrastructure (i) by establishment of eight metal working 'Centres for Product Development (CDPs)' for electronics & CNC, drives & controls, high fidelity measurement technologies, robotics/automation, tooling technologies, material technologies, tribology and simulation technologies with mandate to develop through research products, processes, subsystems & configured solutions through initial Government funding, (ii) dedicated testing facilities for meeting quality & standards norms and (iii) incubate technologies/products developed with industrial aspirants through PPP mode.
d. Industrial technology support infrastructure requires establishment of three dedicated self-contained, self-supportive, all-inclusive cluster/commune Machine Tools Parks (MTPs).Each park consists of Tier 1, 2 or 3 major machine tool manufacturers, Tier 2– at least 8 stand alone industries (medium scale) specialised in subsystems / special process like (i) spindles, (ii) tools, toolings, tools changers (iii) auxiliary systems like chip conveyors, coolant systems, lubricating systems, guideways protection devices (iv) electrical assemblies, harnesses (v) electronics, CNC systems, drives, controls, aggregates (vi) foundry (vii) weldments & structures (viii) measurement devices, systems, scales, etc. and Tier 3 – small units basically component manufacturers as suppliers to T1 & also to T2
e. Common Facility Centres (CFC) includes calibration & inspection facilities, tool room facilities, design centres, training facilities, bulk material procurement facilitation, market support facility, etc. to be set up.
f. PSUs to concentrate on developing and deploying 'niche', high-tech and distinguishable products, total manufacturing solutions with advanced technologies. It has linkages with National R & D laboratories and academia to develop Indian products
g. Facilitate a possible 'co-creation-predominant tie up' between PSUs such as HMT/HEC and major user sectors like BHEL/Railways/Defence etc. Necessary policy interventions required to be adopted between end-users and solution providers by bringing together as value addition partners in a strategic and business tie up which meets the national goals of generating technology acumen and strategic manufacturing advantage.
h. Common Facility Centres in machine tool parks should adopt or have an in-campus ITI for skill development. The courses offered will have training syllabus devised by Industry. 'Job ready engineers' who could be available to manufacturers to man their 'in-house' R & D and they would be linked to R & D institutions and Academia.
i. Product development centers to be encouraged to offer 'job ready engineers' programmes, wherein the curriculum would be specifically having multidisciplinary content with definitive exposure to 'real-life processes and problem solving scenarios'.
j. Professionals and professors would join hands in designing the curriculum, mentoring and work on 'dedicated projects of industrial application relevance'. A well designed exposure to laboratory investigation methods, analytical topics,

drawing and design practices, practical nuances in CAD, CAM, CAE, testing protocols, marketing, etc., would help in generating 'system oriented engineers' who would be very effective, autonomous human resource for innovative product developments.

k. IITs, CSIR labs, CMTI and other institutions to develop and offer Post Graduate education avenues to industrial professionals, students, faculty by creating opportunities for such candidates to upgrade their educational credentials, work on 'real-life' projects which work towards definitive deliverables' through directed R & D
l. There is a 'lack of capacity' to service the current level of demands for machine tools in the immediate context as the manufacturing contribution to the GDP is poised to increase. Enabling interventions are required to address this vital issue.
m. Encouraging formation of consortia of industries involving PSUs and Private Industries and end users to evolve cost effective product solutions through resource-build up and resource-sharing strategies with appropriate business models needs to be explored.
n. A high level national committee of stakeholders could deliberate on this important issue of policy intervention and evolve effective guide-lines for formation of consortia of suppliers and end-users and funding mechanisms to seed effective PPP initiatives in the manufacturing domain for machine tools.
o. Green manufacturing concepts and their integration at the factory level, machine tool level and machining process level and cluster/commune level manufacturing would become a strategic imperative.

4. Chairman thanked Director CMTI for making comprehensive presentation on machine tool sector and invited the comments from the members. The members present in the meeting have also appreciated the efforts made by Director CMTI for preparing such detailed paper.

5. The representative of Planning Commission has reaffirmed that Commission have been supportive of DHI's scheme for enhancement in the capital goods scheme that includes R&D, MTPs and CFCs. He felt that there is a need to strengthening this sector.

5. The representative of NMCC requested that an appropriate action plan required to be submitted early by DHI and come out with the guidelines for procurement of machine tools with increased local content by PSUs and the Government Departments like Defence, Railways, etc.

6. The representative of DGOF made presentation by touching upon the methodology adopted for benchmarking during procurement of imported equipment vis-a-vis indigenous equipment for their wide range of requirements of machine tools. He made a mention that the total machine tool requirements are of the order of Rs.6,783 crore alone required by different units of Ordinance factory for which manufacturers may think over to supply. He mentioned that he was not able to get the complete list of machine tool manufacturers with product specifications because IMTMA maintains the record of their member- manufactures only.

7. Chairman desired that a separate meeting with DGOF and machine tool manufacturers including HMT & HEC is required to be held at the earliest for detailed discussions to meet the requirements of DGOF.

8. The representative of Ministry of External Affairs has pointed out that he did not get the complete details from the machine tool manufactures on technology denial issues. He explained that issues are quite complex and time consuming as well as varies from countries to countries. The issue involve foreign security versus policy issue concerning to licensing /documents linkages etc. He also felt that sometimes issues limited to manufacturers' level and not necessarily at the country' level. It was mentioned by the members that import of even large size machine tools are denied by Japan. He further requested that more details are required to be submitted by manufacturers to enable MEA to go fast in this direction.

As there were no other issues left, the meeting ended with the vote of thanks to the Chair.

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List of Participants

1. Shri Harbhajan Singh, Joint Secretary DHI& Member Secretary, DCMTI - in the Chair
2. Shri B R Satyan, Director, CMTI
3. Shri Vindhyachal Singh, CAO, LOFMOW, Indian Railways
4. Shri H K Kala, CME LOFMOW, Indian Railways
5. Shri T T S Kripa Venkatesan, Dy DG, Ordnance Factory Board
6. Shri Arya Sandeep, Director (D&ISA), MEA
7. Shri Sudhir Kumar, Dy Adv. (Engg), Planning Commission
8. Shri Niranjan Naik, Industrial Adviser, O/o DC (MSME)
9. Ms. R Dharini, Dy Chief, NMCC
10. Shri Sushil Lakra, Industrial Adviser, DHI
11. Shri N L Goswami, SrDO, DHI
12. Shri R K Jaiswal, DO
13. Shri P Babbin, Joint Director, CMTI
14. Ms. Chandni Kokroo, EO, CII
15. Shri Sushil Kumar, Adviser, Society of Indian Automobile Manufacturers
16. Ms. Subhag Naqvi, Dy. Exec., Director, ACMA
17. Shri N.K. Dhand, Past President, IMTMA& CMD, Micromatic Grinding Tech. Ltd.
18. Shri G.K. Pillai, CMD, HEC, Ranchi
19. Shri Ranjan Sahi, Executive Director, BHEL
20. Shri S.G. Sridhar, Director, HMT Ltd
21. Shri R D Madan, ISGEC IMTMA
22. Shri Achal Nath,AMC IMTMA
23. Shri V. Anbu, Executive Director, IMTMA
24. Ms. Nehika Mathur, ACMA
25. Shri P.K. Verma , GM, BHEL
26. Shri P J Mohohanram, IMTMA

27. Shri A S Pundle, IMTMA
28. Shri N.K. Singh, Chief Technical Officer, HEC
29. Shri Srinjoy Das, IMTMA