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**SPEECH BY MR LEO YIP  
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AT THE OFFICIAL OPENING OF CENTRE FOR DIGITAL AND  
PRECISION ENGINEERING @ NANYANG POLYTECHNIC  
ON 5 JANUARY 2010 AT 10AM**

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Distinguished Guests,

Good morning.

**Introduction**

1. I am happy to join all of you this morning for the opening of the Centre for Digital & Precision Engineering. I congratulate Nanyang Polytechnic for establishing this

specialist centre with strong endorsement and support from industry partners.

2. This Centre hosts state-of-the-art equipment to build up new competence areas such as Advanced Machining Technologies, Nanometrology and Digital Manufacturing Applications. These areas will be key to develop the Precision Engineering industry of the future. This Centre will provide critical training and development of talent for the industry. It has made a very good start by successfully establishing strong industry partnerships and technical collaboration with industry leaders. I encourage the Centre to continue to leverage on such platforms to develop deep capabilities in advanced Precision Engineering technologies.

## **Precision Engineering - the backbone of manufacturing**

3. Manufacturing is a key pillar of Singapore's economy and contributed some 20% of our GDP in 2008. The government is committed to keep the manufacturing sector's contribution to our GDP at between 20-25%. In the years to come, Singapore will undertake even more knowledge-based and innovation-driven manufacturing activities.

4. Precision Engineering forms the backbone of manufacturing. It is a key enabler for manufacturing industries such as Electronics, Medtech, Aerospace, Oil & Gas equipment and Cleantech. Precision Engineering contributed more than S\$22 billion in manufacturing output and S\$6.7 billion in value-added in 2008. It employs around 100,000 people, which forms a quarter of our manufacturing workforce. The transformation of our Precision Engineering cluster over the years from primarily

serving low-mix high-volume electronics companies to more diverse industries such as aerospace and medtech today, has given us a competitive edge to support the growth of the manufacturing industries of the future.

### **Positioning Precision Engineering for future growth**

5. With increasing global competition, the Singapore Precision Engineering industry needs to better differentiate itself by acquiring diverse and cross-disciplinary capabilities. Deepening capabilities to build technology leadership is essential to respond to the changing global industry landscape. This way, Singapore would be able to compete on the basis of value creation in new areas such as the processing of advanced materials like composites and super alloys, and scalable manufacturing capabilities for large format products as well as micro- and nano-fabrication.

6. One way to deepen capability is through strategic industry collaboration. EDB and SPRING Singapore are working to develop strategic partnerships between suppliers in complex precision machining, advanced surface treatment and electromechanical assembly and industry leaders, or Queen Bees. These Queen Bees serve as technology and demand drivers to deepen and diversify our supplier base. In turn technologically advanced and more competitive suppliers here can become an enabler to attract other Queen Bees and create a virtuous growth cycle for a sustainable Precision Engineering industry that is able to continuously respond to new market demand.

7. Talent will be key to the deepening of industry capability. Companies are increasingly making business decisions on the basis of talent availability. In order for Singapore to be a home for business and innovation, we must grow and sustain a critical pool of technical and engineering talent. Skilled engineers and technologists

who are able to hatch and realize new ideas, that can create new products and markets, are much sought after. Towards this end, EDB has been working closely with other government agencies such as SPRING Singapore, the Workforce Development Agency and training partners such as Nanyang Polytechnic, to build up a holistic and strong manpower base for the manufacturing industry.

### **Precision Engineering Manpower Initiative**

8. The S\$76 million Precision Engineering Manpower Initiative was announced in 2007 by Mr Lim Swee Say, Minister in the Prime Minister's Office, to develop the Precision Engineering workforce of the future. A key part of this initiative is the Digital and Precision Engineering Diploma conducted at Nanyang Polytechnic. This programme, which already has two student intakes, aims to develop technologists with skills for a wide spectrum of the manufacturing value chain. The Centre for Digital and

Precision Engineering will play an important role to provide practical skills-based training to some 230 students enrolled in this programme today and will train a cumulative total of 600 by 2012.

9. Apart from this Digital and Precision Engineering programme, some 80 students are also being trained at the Institute of Technical Education for the Technical Engineer Diploma in Machine Technology. Also under the Precision Engineering Manpower Initiative is the National Precision Engineering Specialist Programme for in-employment training which has received strong support from 70 companies who have sponsored 220 employees. It is encouraging that 60% of these trainees are from small and medium-sized enterprises (SMEs). I congratulate these companies for investing in upgrading their manpower capabilities.

10. The Precision Engineering Industry of the future here in Singapore will have a strong base of new equipment-building capabilities, especially in semiconductor and solar equipment, refurbishment and assembly. We will also have a strong and diverse precision modules and components sector, which manufactures critical parts such as engine blades for the aerospace sector and components for medtech implantables like heart pacers.

11. The growth of Asia will anchor more complex manufacturing activities here, priming the Precision Engineering sector for further growth. With a strong R&D infrastructure, quality manpower and supplier development programmes, Singapore aspires to become a centre of Precision Engineering excellence in Asia, with strong capabilities found in leading Precision Engineering economies like Germany, Japan and Switzerland. I am confident that the students being trained under our

manpower initiatives will bolster the talent base to drive this growth.

## **Conclusion**

12. In conclusion, let me commend Nanyang Polytechnic and the industry partners who have come together to grow and deepen our talent pool. This initiative will enhance our competitiveness and play a key role to build a strong Precision Engineering industry for the future, here in Singapore.

13. Thank you.