



Dan receiving his well deserved memento

Corporate Best Practice Sharing with Chartered Semiconductor Manufacturing

This is another talk in our series on Corporate Best Practice Sharing. What is unique about this talk is that it was done by a person from the electronic wafer fab industry. The speaker was Dan Steele, Senior Director for Quality and Reliability Assurance, Corporate EHSS and Risk Management. He is an SLP member.

In this talk, Dan gave an overall view of Loss Control and Risk Management in the wafer fab industry. **'Risk Management is built into everything we do'** is the gist of the risk management philosophy at Chartered Semiconductor Manufacturing (CSM).

management commitment is demonstrated by the President and CEO of CSM who personally helms the EHS Program Management Committee. Senior management meets every 6 months to address key issues in regulatory compliance, customer-specific requirements in product quality, environment and corporate social responsibilities. Programs for business continuity planning, emergency response and other security threats are also in place to prevent disruption to any part of the business.

Risk Management Philosophy

Risk Management is built into everything we do.

"Risk management is inherent in our business. Thus, how we manage our risk is critical to our business growth strategy and protecting our reputation as a reliable supplier so as to enhance shareholder value. We also have a responsibility to ensure a safe workplace for our employees."

- Chartered Management



CSM was founded in 1987 in Singapore and is currently the third largest wafer fab manufacturer in the world. It operates 6 fab plants in Woodlands and Tampines, employing about 6000 employees. There are over 100 different chemicals being used at the plants, including toxics, solvents and other highly hazardous substances.

Risk Management (RM) is at the core of their management practices and this is supported by a strong EHS management system. These include 7 programs to assess risk for process equipment, new equipment installations, chemical exposure, electrical systems, live work (permit-to-work system), EHS aspects and impacts and new chemicals (selection/evaluation/control). There is also an in-house online risk assessment tool for use by the 'aspect owners'.

The output of the above RM work translates into physical controls that are put in place to protect manufacturing facilities and utilities under various scenarios that may disrupt plant operations. Strong

Emergency Response Training



All Chartered fab plants are certified to ISO/TS16949, ISO14001, OHSAS18001 and for being ODS-free for all process chemicals. CSM has received a number of awards for Occupational Health Best Practices and ACCA Environmental Reporting. They have also received recognition from major customers including Sony, Ricoh and Sanyo. Dan was proud to say that **'We have not had a claim above or below the insurance deductible in 9 years'!**

Chartered's EHSS and Risk Management system complies with the elements of an OSHA Process Safety Management program, as are applicable to the wafer fab industry. Dan Steele ended the talk with these words of wisdom, **'Of course there is NO END. We are continuously improving!'**

On that note, our Hon Secretary thanked the speaker and presented him with a token from SLP. Further discussion among the speaker, members and guests continued during dinner following the talk.

By Lam Kit Wing