ABB scientists win prize for direct-drive breakthrough

This year’s Marcus Wallenberg Prize — a major international technology award — will be presented to three engineers at ABB in Finland, Jouni Ilkäheimo, Vesa Kajander and Bengt Wenn, for their work on direct drive systems for paper machines.

The Marcus Wallenberg Prize, which includes an award of SEK 2 million (US$262,000), will be presented by King Carl Gustaf of Sweden at a ceremony on 28 September 2009 in Stockholm. The prize seeks to recognise, encourage and stimulate groundbreaking scientific achievements within the fields of importance to forestry and forest industries. It is awarded to individuals or small groups, and each year up to 500 organisations around the world are invited to nominate candidates.

The Direct Drive System (DDS) is based on permanent magnet synchronous motor technology. It provides improved torque characteristics, very precise speed control and high efficiency without the need for gearboxes, pulse encoders or auxiliary components. It also delivers better runnability and availability while reducing overall lifecycle costs. DDS cuts electricity and oil consumption, reduces noise levels and provides enhanced safety. If applied to all larger paper machines (width over five metres), DDS could reduce energy consumption by more than 1,200 GWh worldwide — equivalent to the output of two entire coal-fired power plants.

Jan Hill wins Arne Asplund Mechanical Pulping Award

The Arne Asplund Mechanical Pulping Award 2009 was this year been presented to Jan Hill at the International Mechanical Pulping Conference in Sundsvall, Sweden.

The Arne Asplund Mechanical Pulping Award Foundation, responsible for the award, was established in 1985 to commemorate Dr Asplund’s contribution to the pulp and paper industry worldwide. The award consists of a gold medal and an honorarium of SEK 25,000 (US$3,250).

Hill, who has been technical manager at Norske Skog since 2001, graduated from the Royal Institute of Technology (Stockholm) in 1969 with a masters in Engineering Physics. He started his career at the Swedish Pulp and Paper Research Institute (STFI) as Section Manager, Physics. After nine years, he moved to SCA Control System for a position as Executive Vice President and Technical Director. In 1985, he started to work as consultant in his own company.

Specialising in mechanical pulping during his whole professional career, Hill was a pioneer in the early development of the first online mechanical pulp quality control systems, which were based on optical measurements of fibre dimensions in pulp flows (PPO). He used fundamental fibre and pulp properties from these kinds of online equipments to develop control systems for both groundwood and TMP processes. The basic principles for mechanical pulp quality control that were used then are still valid in today’s online control systems.

The process simulators of Hill’s own design are key educational aids for visualizing and optimizing TMP processes. His efforts have been of utmost importance in the development of mechanical pulping, both with respect to research and implementation. The award was made possible through a donation from the Sands Defibrator Company, currently part of Metsa Corporation, to the foundation in 1985.

New general manager for Honeywell Process Solutions

Edwin van den Maagdenberg has been appointed vice president and general manager for Honeywell Process Solutions in Europe, the Middle East and Africa (EMEA). Van den Maagdenberg was formerly regional general manager for Process Solutions in Northern Europe. He replaces Norm Gildseth, who was promoted to president of Process Solutions.

“Edwin brings a track record of business growth, organizational acumen and deep regional knowledge to this strategic role,” said Gildseth. “He will be working closely with key customers in established and emerging areas across EMEA to deliver solutions that can improve safety, reliability and efficiency for improved business performance.”

Van den Maagdenberg joined Honeywell Process Solutions in 1998 as a sales support engineer and has since held leadership positions in sales, project operations and general management. Van den Maagdenberg also worked for Yorck Systems as sales manager for Middle East and Africa from 1996-1998.

“I look forward to working closely with our customers to help them through these challenging economic times,” said Van den Maagdenberg. “EMEA is a significant and strategic geography for our business and I am proud to be working alongside skilled and talented experts that are making a positive difference to our customers every day.”