



Rabobank Group

Water-free dyeing machine wins Herman Wijffels Innovation award

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The 'CO2 dyeing machine' entered by DyeCoo Textile Systems has been selected from 553 entries as the winner of the 2009 edition of the eighth annual Herman Wijffels Innovation Award. This CO2 dyeing machine dyes textiles completely water-free using pure dyes. The EUR 50,000 grand prize was presented by the award's namesake Herman Wijffels and Rabobank Executive Board Chairman Piet Moerland today at the 'Friends of Science' event organised in The Hague by the Innovation Platform.

The textile industry is one of the largest consumers of water. The award-winning invention is a machine that dyes textiles using CO2 and pure dyes rather than chemicals and water. Current dyeing machines use 50 to 100 litres of water for every one kilo of textiles, with some 28 billion kilos of textiles being dyed annually. Textiles are placed into the 'CO2 dyeing machine' dry and are subsequently dyed using CO2 under high pressure of 300 bar. The textiles are then also dry when they are removed from the machine. The required CO2 is sourced from emissions of other industrial processes and is recycled at a rate of 95 percent. The jury heralds DyeCoo's invention as a solution to a global problem. 'It does not unnecessarily pollute drinking water and uses CO2 smartly.'

Dyeing with CO2

Winner Reiner Mommaal of DyeCoo Textile Systems located in Weesp, the Netherlands explains that the idea for water-free dyeing is not new: 'The principle of dyeing with CO2 was invented in Germany twenty-five years ago. Developing a well-functioning machine, however, turned out to be too expensive.' DyeCoo Textile Systems' parent company Feyecon began tackling this issue ten years ago in partnership with the Delft University of Technology and Stork. This ultimately resulted in DyeCoo, which literally means dyeing with CO2. 'The benefits are huge,' says Mommaal. 'There is no water consumption, no use of chemicals, no drying and it is twice as fast. This also makes it attractive in terms of energy. It is consequently not surprising that people from around the world have shown interest in this new machine. The Herman Wijffels Innovation Award is a fantastic recognition for us and a tremendous boost for our name awareness. We are going to use the money to establish new patents.'

Sustainable innovation

Rabobank Executive Board Chairman Piet Moerland says it is no coincidence that the interest in the Herman Wijffels Innovation Award has increased by leaps and bounds in recent years. 'The number of entries has doubled in the past two years to more than 550 and the quality of the innovations has increased in tandem. I see this as proof that the Netherlands is rapidly moving towards sustainability and that is an excellent development.'

Other Wijffels Award winners

The total prize money of the Wijffels Award amounts to EUR 122,500. Three other cash prizes were awarded on top of the € 50,000 grand prize. The EUR 37,500 second prize was presented to the underground compactor from Sidcon Milieutechniek. The press reduces collected plastics waste by a factor of ten and this keeps the costs low and minimises the impact on the environment. The EUR 25,000 third prize went to the biological air scrubber for poultry farms entered by Klaas Wub of KunststoffWerktuigBouw BV. This air scrubber is a closed system and does not use chemicals and consumes much less water.

The EUR 10,000 incentive prize for entrepreneurs under the age of thirty went to Roy Klaren and Niels de Bont who will use the funds to further develop their fennel harvesting machine.

For more information:

An overview of all the nominated inventions and the jury reports are presented in the Herman Wijffels Innovation Award – 2009 Edition. A PDF of this publication and video clips of all the nominees can be downloaded at: www.rabobank.nl/innovatieprijs

Herman Wijffels Fund:

Herman Wijffels stepped down as Chairman of the Executive Board of Rabobank Nederland in 1999. In order to mark his retirement, the Herman Wijffels Fund was established with the mission of supporting initiatives that promote co-operative and socially responsible entrepreneurship. The Herman Wijffels Innovation Award is the realisation of this mission. It is an incentive award designed to enable sustainable innovations. In the eight years since its institution, the award has grown into one of the most prestigious innovation awards in the Netherlands.

The jury members

The jury consists of: Renée Bergkamp, Director-General of Enterprise & Innovation at the Dutch Ministry of Economic Affairs; Dr Aalt Dijkhuizen, Chairman of the Executive Board of Wageningen University and Research Centre; Merien ten Houten, Founder of Ilse Media Group; Jan Oosterwijk, Former Director/Owner of The Body Shop Benelux BV; Dr Annemieke Roobeek, Professor of Strategy and Transformation Management at the Nyenrode Business Universiteit; Bart Jan Krouwel, CSR Adviser; and Dr Martin Tielen, Member of the Supervisory Board of Rabobank Nederland. The jury is chaired by Piet Moerland, Chairman of the Executive Board of Rabobank Nederland.

Related information

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Rabobank Group has the highest credit rating, Triple A, awarded by international rating agencies including Standard & Poor's and Moody's. In terms of Tier I capital, the organisation is among the top largest financial institutions in the world. Total assets amount to EUR 607 billion and a net profit to EUR 2.3 billion of 2009.

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