Entrepreneurial ID «venture leaders» 2011

Name: Nils A. Reinke
Contact: *nils.reinke@winterthurinstruments.ch, + 41 79 253 71 49*
Project/ Company name: *Winterthur Instruments GmbH*
Short description: Industrial Coat Testing
Web site: http://www.winterthurinstruments.ch
Industry*: Coating Industry*

The Start-up	
Save resources, reduce environmental footprint & 100% quality control for coaters	
Status *: Company created on January 13th*	Company / team size: *3*

Opportunity & Solution
The coating industry processes over 100 billion USD coating material annually. We enable them to save money and to take ecological responsibility as well as to protect itself against liability claims. Our measurement system CoatMaster allows in-line process control that can be implemented into existing production lines. The CoatMaster comprises reliability and ease of use (including safe, fast, noncontact and nondestructive operation). Our measurement system is based on an award winning and a (worldwide) patent pending gentle heating of the coating by a light flash and an ultra-fast detection of the surface temperature. The measured signals are analyzed by innovative algorithms that were developed in several research. Our measurement system is ready for connection to state-of-the-art automation control.

Market Opportunity / Target customers:
We target customers in the coating industry, including wet paint and powder coaters. Prospective customers range from producers of laminates (e.g. Kronospan, Pinus, Pinufin...), architectural elements (e.g. Erne, Rhomberg, CreaBeton...), backing ovens (e.g. V-ZUG, Bosch, Siemens...) and many more...

Competing Technologies
Competing technologies suffer from drawbacks, which hinder their penetration into the market. Technologies based on radioactive beta-radiation, x-rays and laser-beams can be applied in restricted areas only. Electromagnetic and ultrasonic testing methods operate in contact mode and therefore the in-line application is difficult and cost-intensive. Non-contact ultrasonic testing methods fail with solid-coatings and non-planar objects.

Financing:
We have raised funds with an equivalent value of 60kCHF (40kCHF won prices and 20kCHF private capital). We plan to raise additional 100kCHF from family and friends. There is a need for another 150kCHF we want to raise by sales, foundations and investors.

Growth objectives:
Within the next five years we want to grow our company to 20 Mio. USD Business and employ more than 20 people.

US objectives:
We would like to get in personal contact with prospective distribution partners for our CoatMaster system. We already are in contact with a company, which is distributing systems for coating tests based on ultra-sonic. This company is interested in broadening their product portfolio with the CoatMaster and could become a key-player for a penetration of the US-Market.
Secondly, I want to establish technological partnerships to research institutes located in the Boston Area. The MIT hosts a materials group, which is very interesting for the further development and as prospective customers of the CoatMaster. Boston is the resident city of important suppliers for infrared technology we want to get in contact with. Thirdly, I want to present our business case and get feedback for improving both my pitching skills and our business plan from the other VentureLeaders attendees and coaches.

Description:
Our company develops and produces measurement systems. We sell directly to end-users and integrate devices into their existing production lines. We also sell measurement systems to production line manufactures, which act as distribution partners. Our portfolio includes three types of measurement systems. CoatMaster ONE for single layer coatings, CoatMaster POLY for multilayer coatings and CoatMaster THERMAL for ceramic coatings. We have been performing several field tests at customer sites with operational prototypes since Q2/10 and ship the measurement systems to customers and distribution partners starting from Q2/11. With the CoatMaster product line we first target the lacquering, the powder and the thermal spray market. In the first three years we focus geographically on Switzerland, Germany and Austria. Subsequently, we will expand our focus to Eastern Europe, Asia and USA. Additional revenue is expected from service contracts with customers and distribution partners, calibration services and instruction of personnel.

Personnel testing email coatings using the CoatMaster.

The team

Dr. Nils A. Reinke has a 10 years working background in applied optics, is author of more than 40 scientific publications and has filled 6 patents. He received his diploma and PhD degree with honours and the “Universitätspreis Augsburg” for his dissertation. He is member of the Elite network of Bavaria - Alumni. Since 2007 he is lecturer at ZHAW and head of the optoelectronic research laboratory group comprising an interdisciplinary team (2 senior physicists, 2 mechatronics and 1 electrical engineer as well as several students at PhD, master & bachelor level). His parents have been self-employed since more than 30 years. Nils has a naturally itch to be self-employed holding this pattern in mind. To him self-employment includes strategically development of a company at his own responsibility. After gathering experience in applied research and development he lets his dream come true.
At Winterthur Instruments Nils heads the technology development, production, implementation and product safety. Together with his colleague Andor Bariska (CEO @ Winterthur Instruments) he founded Winterthur Instruments, transferred all rights for commercialisation from the Zürich University, survived a period of countless test-runs with several prototypes and brought the CoatMaster system to industry.