Life Is On | Eurotherm by Schneider Electric

TRAINING SESSIONS
November 20, 2019
Crowne Plaza Istanbul Asia
Hotel & Convention Center
Istanbul, Turkey

SCR (THYRISTOR) CONTROLLED HEATING SYSTEMS

Eurotherm by Schneider Electric

INTRODUCTION

During the next decades applying energy to the melting process will switch from fossil fuel firing towards electrical heating processes also known as electrical furnace boosting. In order to comply to the Paris treaty on climate control it is in fact unavoidable to move away from fossil fuels for glass manufacturing and need to be replace by flexible and efficient high-power controlled power supplies. There are several methods of controlling electrical power and the most flexible and energy efficient systems are based on SCR (silicon-controlled rectifiers) controllers, also known as thyristor control. In this training session we will explain the foundations of SCR control and its design considerations. It will cover the interaction of power control, transformer designs, different furnace boosting layouts and the glass melting processes. Considering that the glass industry fundamentally need to change its glass manufacturing methods during the upcoming 3 decades, which is in fact only two furnace life times, we highly recommend to follow our two hour training course to get a good feeling of what modern power supply systems are capable of doing and what need to be considered during their design stage.

AGENDA

15:15 – 17:00	• Ohm's law to understand current, voltage and power • Joules heating foundations • Electrical heat transfer of boosting electrodes • Boosting electrode limitations • What is an SCR? • Phase angle power control explained – pro's and con's • Burst firing power control explained – pro's and con's • The impact of current and induction • Methods to improve efficiency and to avoid harmonics • The two transformer concept • Cathodic electrode protection • Rap-up and questions • Questions/ Answers

PRICING

Free of charge.

LANGUAGE

Training will be given in English language.

PRICING

Free of charge.

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ŞİŞECAM INTERNATIONAL GLASS CONFERENCE
combined with
34th Şişecam Glass Symposium
Glass in the Sustainable Future:
ACHIEVING WHAT IS POSSIBLE...

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PRICING

René Meuleman
Business Leader Global Glass

René studied electrical engineering and has been with the Schneider Electric group for 11 years.

He started his career in the paper industry as a technical assistant, before switching to the glass industry as an employee of Vereenigde Glasfabrieken (United Glass Works, NL). During his early years, he built his broad knowledge and experience in design and development of electronic quality equipment for container glass manufacturing and was involved in the implementation of their first generation PLC and DCS systems, as well as electronic timing systems for IS-machines. René holds now the position of business leader global glass at Eurotherm by Schneider-Electric.

René produced several model based predictive control (MPC) projects, as well as being involved in object oriented engineering method developments. He became responsible for process control inside the BSN group and finally was responsible for the European plant process control and forming electronics inside the Owens-Illinois group.

Today René is Eurotherm by Schneider Electric's global glass business technical manager, focusing on process and power control solutions, energy management and MPC for end-users, OEM's and solution providers.

His motto is: "If you wait, all that happens is that you get older". Be conservative during the campaign but be extremely innovative during builds and re-builds.

CONTACT

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