



SPIRE-09-2017

ECCO

Full Title: Energy Efficient Coil Coating Process

Aim:

ECCO proposes a novel solution for the curing oven operation, which can not only drastically increase the compactness and energetic efficiency of the system, but leads to an increased production flexibility due to a fuel-flexible, modular and potentially energetically self-sustainable process.

Concept:

The main idea is to heat the metal strip by IR-radiation and operate the curing oven well above the Upper Explosive Limit (UEL), thus, performing the drying and curing process in an atmosphere mainly consisting of the solvent vapours, which are used as fuel in IR radiant porous burners. This solution leads to a size/ production capacity ratio reduction of 70% and a reduction of investment and operating costs of at least 40% each.

Start date:

01/10/2017

End date:

30/09/2021