

Title: Industrial Roll to Roll Fabrication of PV and LOW-E Thin Films

The different demands on high vacuum roll to roll thin film deposition tools are discussed by two examples: photovoltaic films and low emissivity films. The substrates as well as the processes and layers are different. While polyimide and stainless steel is widely used in the field of CIGS, PET substrates are used in organic photovoltaic and for low emissivity coatings. Two basic demands on machines, the drum/ free span concepts for temperature control and gas Separation concepts are discussed in more detail. The requirements and results will be presented.