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# Overview of the links between material properties and film extrusion process

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## Presentation Title:

# Overview of the links between material properties and film extrusion process

## Abstract

Ensuring a good product requires specifically a combination of selected parameters covering materials, processes & controls / testing. This presentation will show how these concerted activities lead to deliver a good film matching the application needs in Biotechnology applications

**Material properties:** Bags are formed out of a plastic film by different sealing technologies, using heat, ultrasonic sound or electric fields. Key critical parameters vary from sealability, mechanical & barrier properties, leachables & extractables, surface specification, melt flow properties, gel count, transparency ...

**Process + Machine:** Extrusion or lamination processes have some technical limitations and machines most relevant topics would be width of film, thickness, polymers + film layers, mechanical properties, and of course environmental conditions.

**Monitoring and Controls:** In the film industry continuous inline measurement of the thickness is a standard. Beside those in-line controls, off-line laboratory, process data collection and sampling library provide the backbone of process control.

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