+ Deep Qualicision AI

Deep Qualicision Extrusion— AI rated extrusion process data

Source: Shutterstock

An AI model created with Deep Qualicision learns, evaluates and suggests extrusion parameters for maximum efficiency

+ AI model trained on labeled correlating hot and cold data-points with recipe data
+ Increased numbers of treads in specification lead to on point lot sizes
+ Live prediction of cold data-points to react and adjust immediately
+ Start parameter suggestion based on former runs eliminates ‘blind flight’
+ Elevate your extrusion processes to a new efficiency level with neural networks

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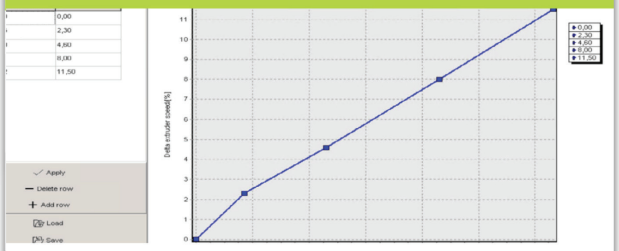
Forecasting bookable material right after first dimension measurements is not fortune telling anymore.

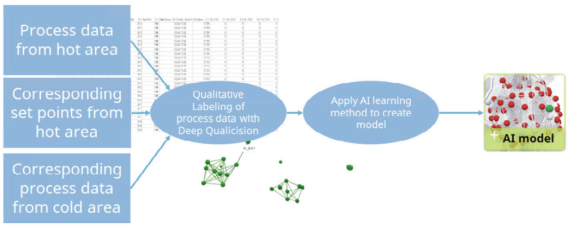
Due to shrinkage of extruded material hot and cold dimension quality setpoints are different. Based on correlated hot and cold area measurements Deep Qualicision predicts bookability right after first scale and profilometer instances. Extruding on point lot sizes without over or under production eliminates blocked storage capacities and time consuming post-treatment. Through qualitative labeling of correlated process data an AI model is trained recipe or even compound specific. Collecting enough data the model is ready to operate quickly after training. Supplied by now live hot area process data the AI model delivers precise predictions regarding final quality criteria and gives valueable transparancy over the "specification matching" treads within the line.

Single measure per product type



Line control is done based on characteristic curves and due to this the controller reaction is specific for the extrusion line. Characteristic curves are obtained by a single measure per product type.

Training process for Setpoint matching



With Qualitative labeling correlated process and setpoint data is used to train an AI model created with the Deep Qualicision Technology Stack. Applying the model improves extruding from start to finish.

Automated setpoint adaptation to match cold area requirements.

The Deep Qualicision Technology Stack not only reveals models to create tranparancy but also to improve extrusion from the beginning. Using same training methods with additional setpoint data a second AI module suggests more suitable hot area setpoints to meet the cold area quality goals right from the start.

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