



# OPTINANOPRO

## INLINE THICKNESS MONITORING AS KEY TO SUPPORT THE OPTIMAL PROCESSING OF COATINGS & FILMS



OptiNanoPro set up in the coating line of the packaging company Lajovic Tuba, d.o.o. (Ljubljana, Slovenia, member of Impact International Group) applying coating at up to 50m/min.

- Continuous contact-less non-destructive measurements of roll to roll process
- Real-time in situ analysis to immediately adjust coating application
- Compatible with transparent and non-transparent coatings, mono- and multi-layer plastics films
- Resolution down to micron range or below
- Versatile hardware: adjustable to film width and required measurement points across the web
- Customizable software



Software showing the variation of the monitored thickness values across a set of 4 optical probes vs. set tolerances along the web while the coating is applied



## OptiNanoPro: real time monitoring of thin film and coated films thickness across and along the web

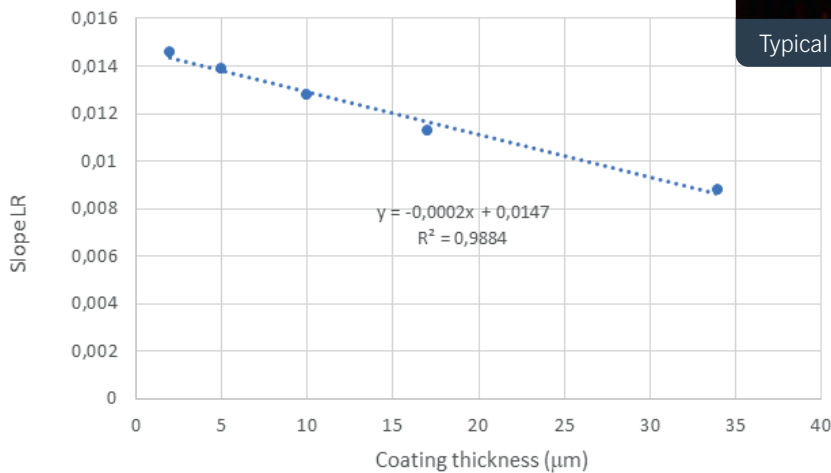
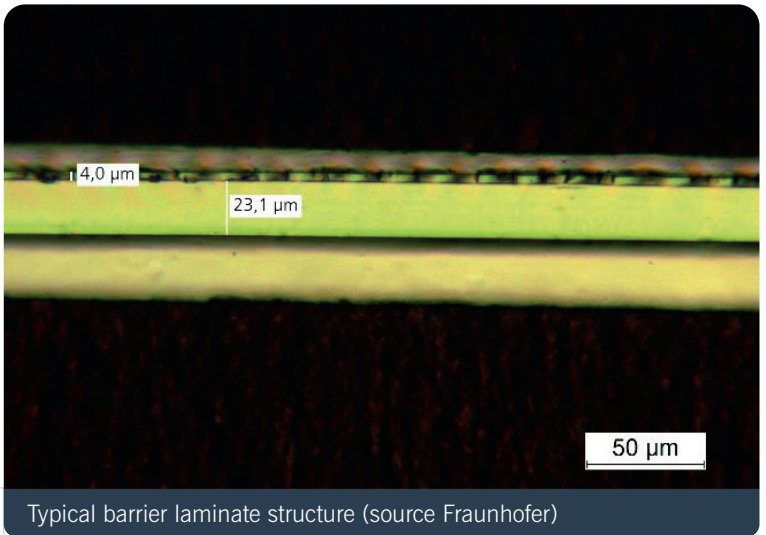
The performance of a coating is fully dependent on its thickness and the homogeneity of its application. This even more challenging in case of transparent and/or nano-enhanced materials which are deposited in the range of a few microns at high speed on flexible webs.

IRIS' OptiNanoPro monitoring system can be calibrated to measure the coating thickness and distribution as well as to detect defects in demanding roll to roll processes. It is compatible with different coating, lamination and surface treatment/engineering process requirements. It can be used on biopolymers, standard plastics, edible casings, etc.

### Application examples

#### Transparent biopolymer barrier coating in packaging

- Calibration against coating thickness and barrier performance
- Can help detecting defects (e.g. scratch or pinhole jeopardizing barrier properties)



Calibration curve

### Conclusion

OptiNanoPro monitoring systems portfolio can support any roll to roll process ramp up, optimization, reduce scrap and post-production quality control needs while ensuring constant product quality.



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[www.optinanopro.eu](http://www.optinanopro.eu)

PROCESSING AND CONTROL OF NOVEL NANOMATERIALS IN PACKAGING, AUTOMOTIVE AND SOLAR PANEL PROCESSING LINES



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