

POLARITEK

MEASUREMENT SYSTEMS THAT
IMPROVE YOUR BOTTOM LINE

Bringing New Technology to an Established Technique
Non-Destructive – Fast – Quantitative – Accurate – Reliable

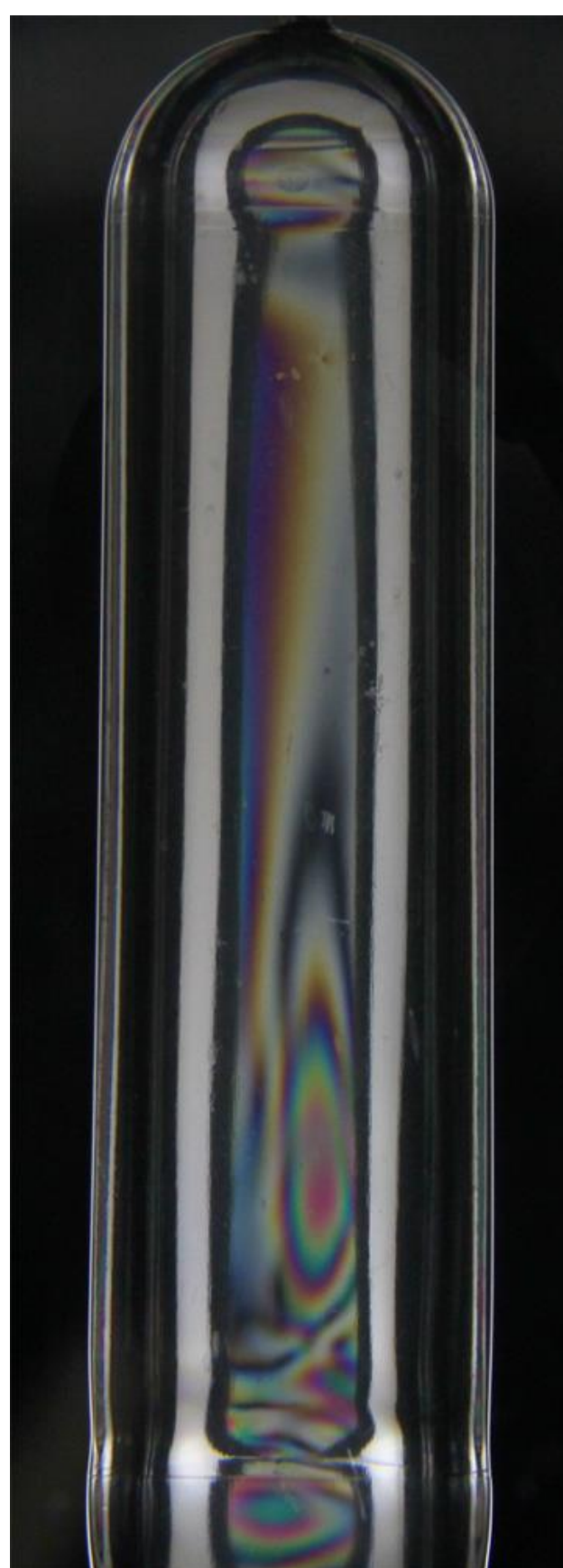
Established Crossed Polarizers



- Crossed Polarizers or “strain viewers” have been used to observe the stresses inside of plastic and glass parts for decades
- Dark isoclinic fringes obscure stress pattern
- Manually interpreted
- Qualitative
- Highly subjective
- Requires experience
- Easy to misinterpret results

Example image of injection molded PET preform with crossed polarizers; note the dark bands

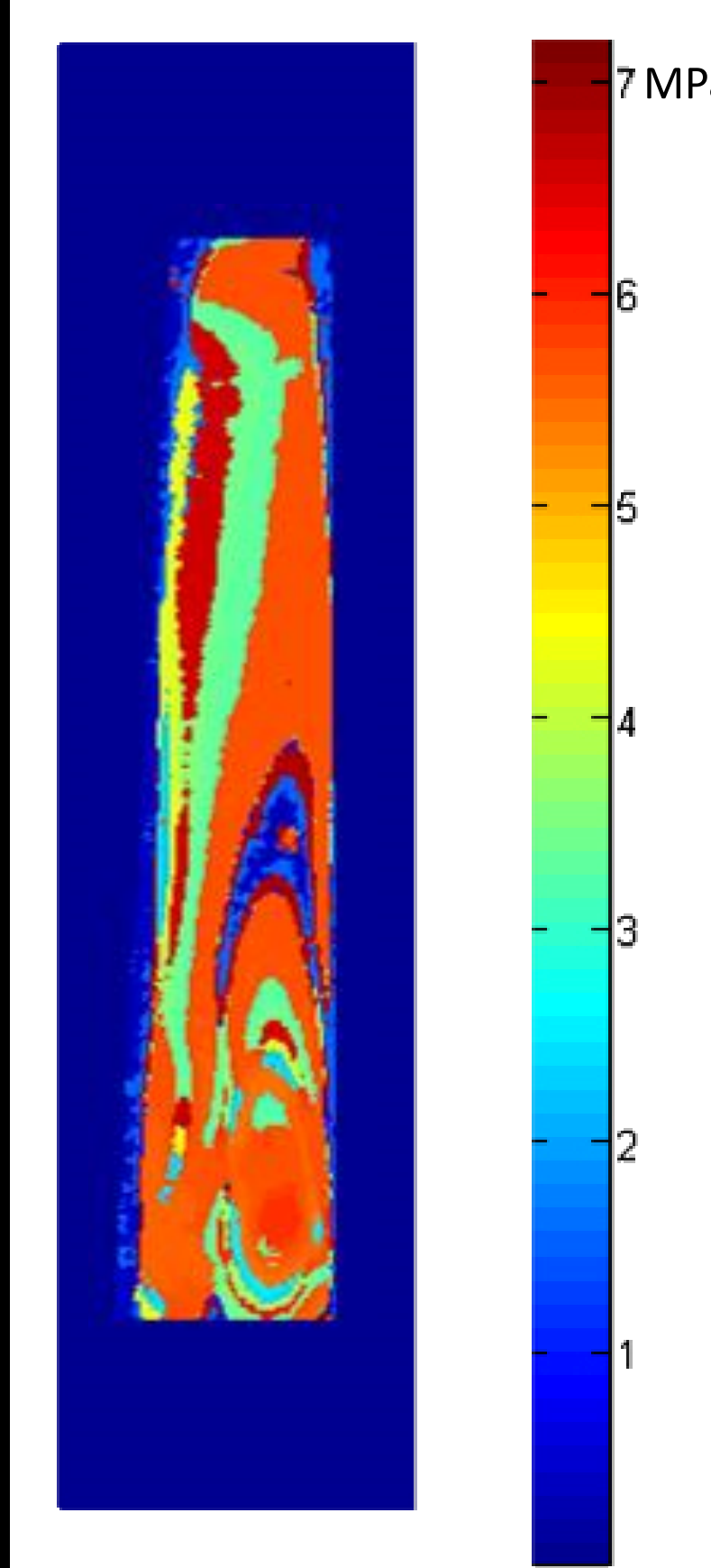
Polaritek Technique



- Polaritek brings together new technology, recent research findings and industry experience
- Polaritek’s polariscopes presents unobscured images
- Ambiguous black regions are removed
- Colorful fringes represent internal stresses
- Number of fringes and their geometry indicate type of stress (axial/bi-axial/hoop)

Example image of injection molded PET preform with Polaritek Polariscopes; note the bands

Polaritek Stress Map



- Images are captured with an industrial digital camera
- Powerful software package computes stress map using proprietary look-up tables and algorithms
- Digitized stress map presented to the user
- Quantitative results
- Easy to interpret
- Reliable and repeatable

Example Polaritek stress map of injection molded PET preform