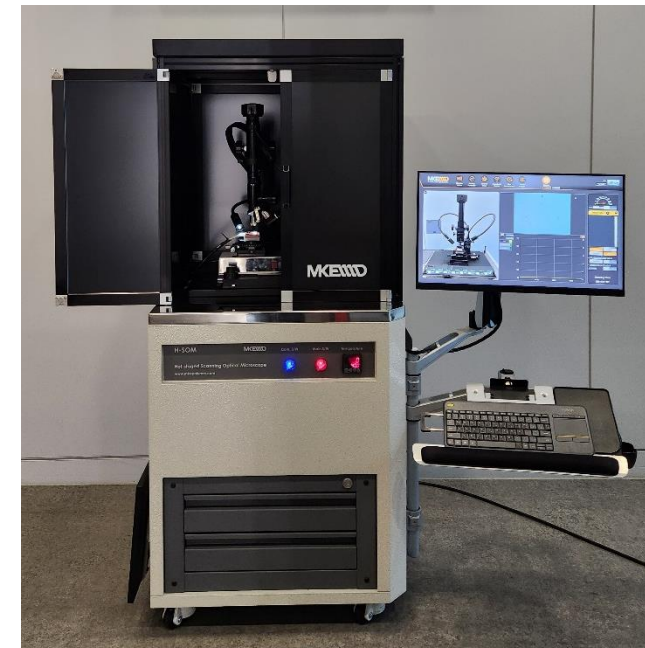
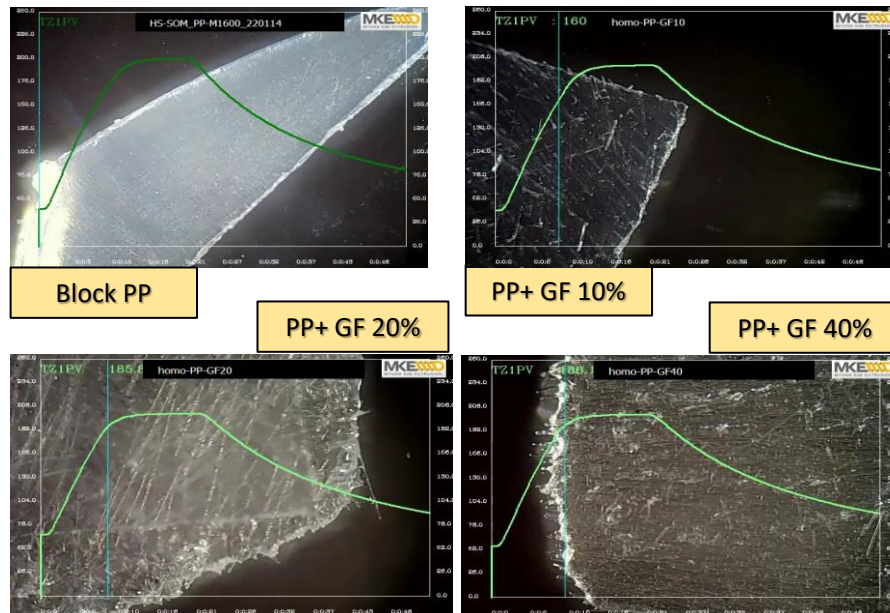


RheoStation® H-SOM® (Hot-staged Scanning Optical Microscope)

MKES

DSC 대응으로 Tm 측정이 가능, Film gel detection 등 QC 용도

- Observation with temperature variation
- Morphology analysis (compound, film, etc.)
- Maximum temperature ~320 deg C
- No temperature overshoot
- QR-code Tagging system (시료별 QR code 부착, Data 관리)
- Scan area : 5 x 5 mm



Total System including Microscope

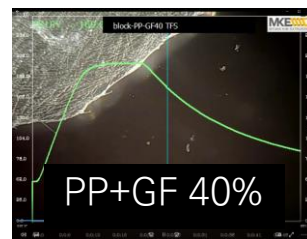
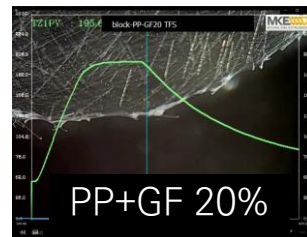
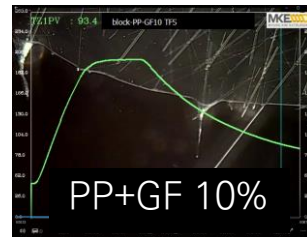
RheoStation® H-SOM®

(제품 특징 및 적용 분야)



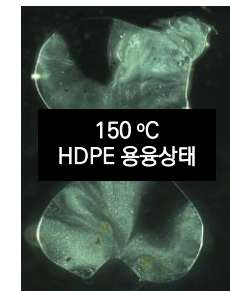
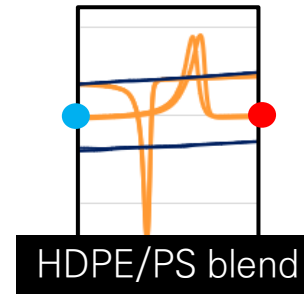
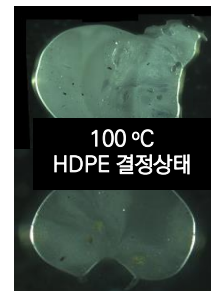
Application Area

- Polymer blend morphology
- Plastic compound - filler dispersion, additive dispersion
- Polymer Crystallinity, recrystallization study
- Fiber observation
- Powder morphology
- Film gel detection & analysis



Special Feature

- Graph-video overlay 기능을 통한 직관적 현상 파악
- 실시간 온도 표시
- 자체 소프트웨어를 이용한 쉬운 video making (*i-RheoStation®*)
- 40 step의 온도 프로그래밍을 이용한 세밀 조정
- Manual X-Y stage
- Light type: reflection, stereo, UV
- 측정 데이터의 Database 관리
- Fast electric heating and Fast air cooling
- Sample 별 QR code 생성
- Option: Add-on polarizer, High temperature "Heating Plate", Motorized X-Y moving plate



H-SOM (Hot-staged Scanning Optical Microscope) - PET

실험 동영상 참고

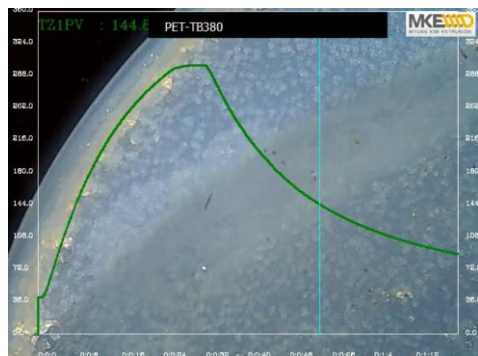
<https://youtu.be/occHquoDXYU?feature=shared>

“Moment of Polymer Melting”

0:12

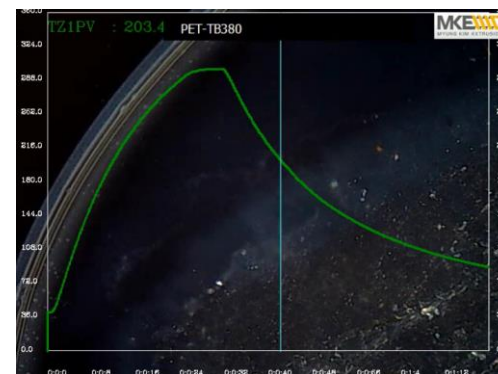
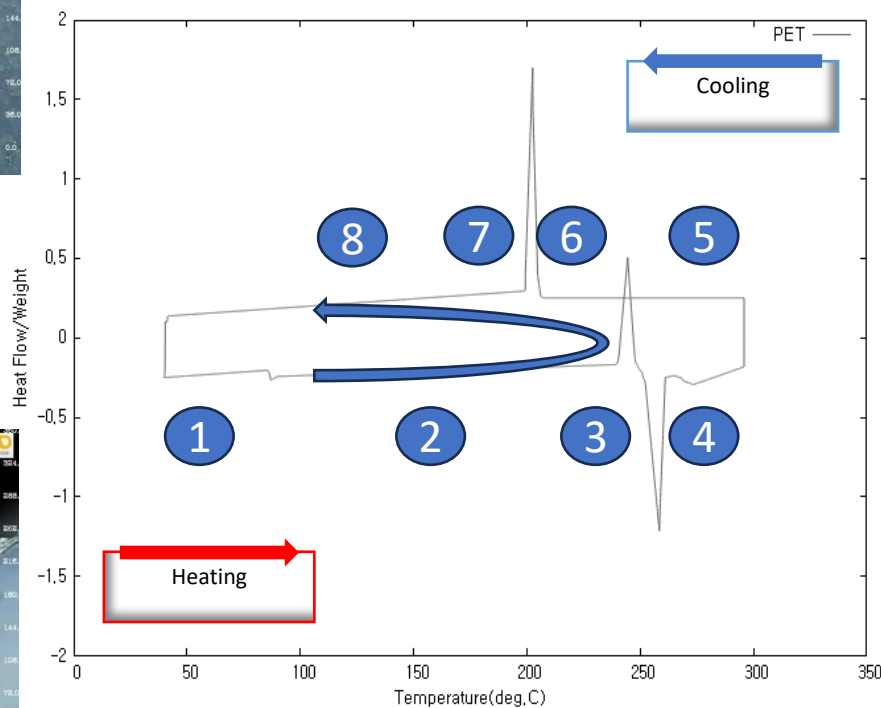
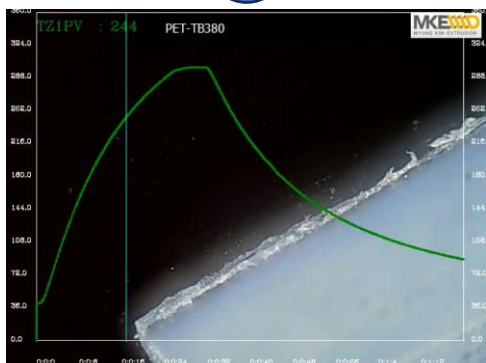
“Moment of Crystallization”

0:45



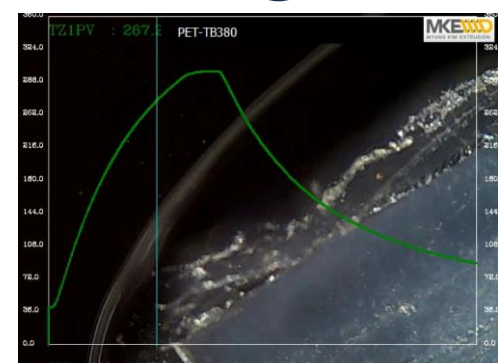
8

3



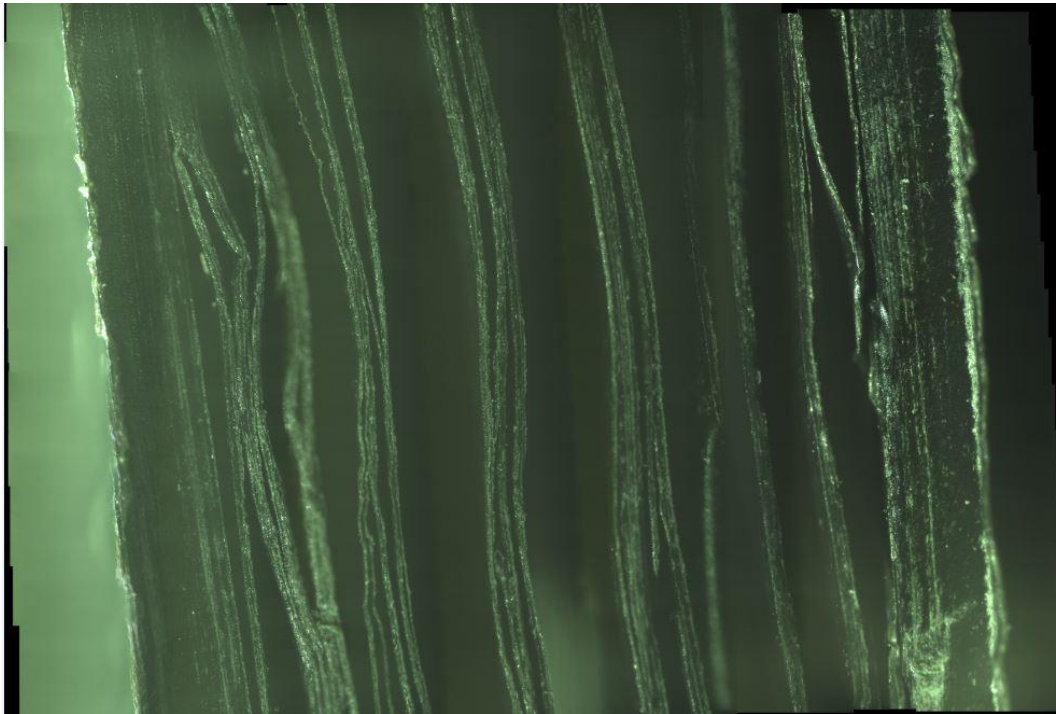
6

4



Multi-scale Image Analysis Using H-SOM

Sample tiling image (Hyperier® Nanocomposite)



- 사용장비 : H-SOM
(Hot-staged Scanning Optical Microscope)
- 배율 : 100X
- 촬영 이미지 개수 : $10 \times 6 = 60$