

MKE Polymer Ltd. Hardware Platform

Capillary Rheometer (2025 upgrade)
캐필러리 레오미터 (Model : DMC Capillary)

(주)엠케이이폴리머



DMC Capillary Rheometer

(캐필러리 레오미터 : 모세관 방식 고분자 전단점도 측정)

MKEMD

(DMC Capillary Rheometer)

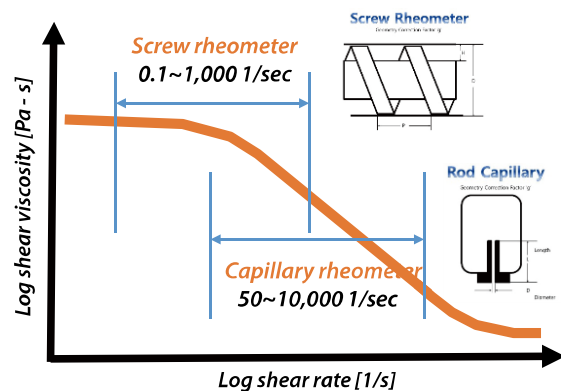
ASTM D3832 / ISO 11443

모세관방식 전단점도 측정 장비

- Shear Viscosity Function
- Cross-WLF/Arrhenius model fitting
- Extrudate swell
- Melt Strength
- Density meter



(Viscosity Measurement Range)



Capillary Rheometer의 종류

구동 방식

압력 측정 방식

모터 구동(MD)
유압식 구동(HY)
압출기 구동(EX)

로드셀 방식(LC)
압력계 방식(PT)

당사 권장모델 : MD-PT

(모터 구동 / 압력계 방식)

외산 로드셀 방식 대비 탁월한 성능/ 합리적 가격/
신속한 AS
(고객 요청 시 모든 사양에 대한 맞춤 제작 가능)

i-RheoStation®

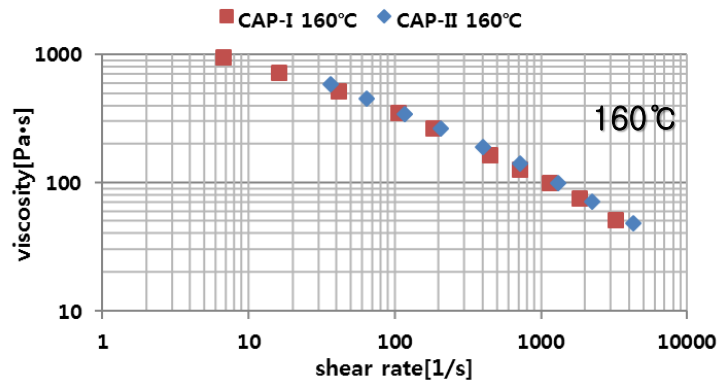
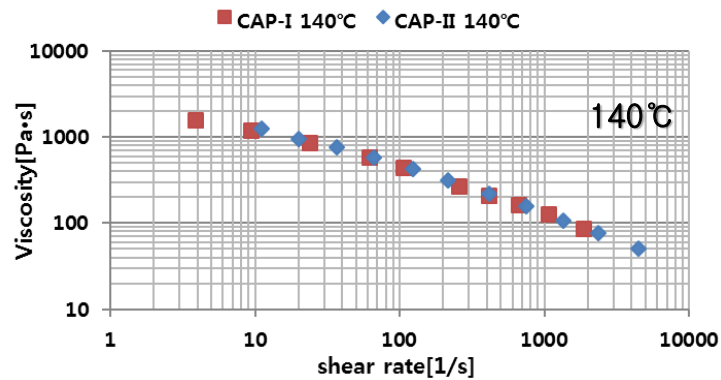


DMC Capillary Rheometer Sample Data

(DMC Capillary MD-PT vs. Goettfert Rheograph 20)

CAP-I : DMC Capillary (모터구동, 압력계 type)

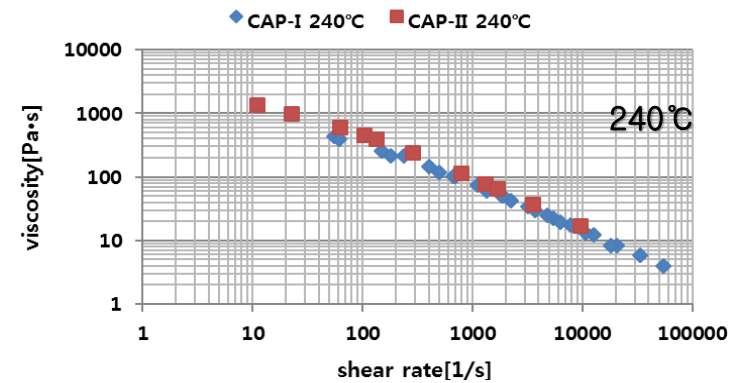
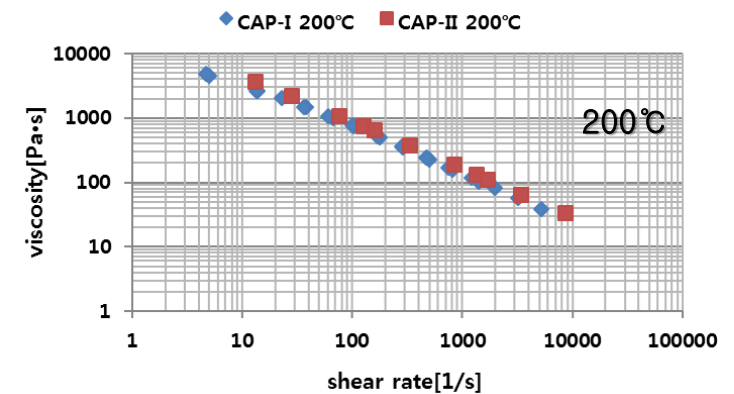
CAP-II : Goettfert Rheograph 20 (모터구동, 압력계 type)



LDPE MI 10g/10min



MKE



GPPS MFR 5.5

Digital Material Center

(Polymer Properties Measuring System for Digital Twin)

MKEVD

NEW

(DMC Capillary Rheometer)

ASTM D3832 / ISO 11443

모세관방식 전단점도 측정장비

- Shear Viscosity Function
- Cross-WLF/Arrhenius model fitting
- Extrudate swell
- Melt Strength
- Density meter

(DMC Thermal conductivity)

ASTM D5930

Transient Line Source Method

- Thermal conductivity of polymer melt and solid
- Temp. range: 30 ~ 350 °C

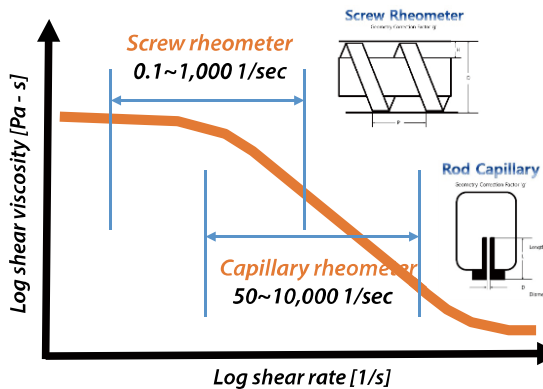
(DMC P-v-T)

Pressure-volume-Temperature

Tait equation fitting

- Temp. range: 30 ~ 350 °C
- Pressure: 2 MPa ~ 200 MPa

[Viscosity Measurement Range]



사출성형해석
MAPS-3D
AUTODESK
MOLDFLOW

Moldex3D
MOLDING INNOVATION

3D TIMON

Testing Service
Digital Twin 용
물성측정서비스 제공

Combined design for
Pressure mode
& Drive mode



감사합니다 !!!

(주)엠케이이폴리머



Best Solution for Laboratory 4.0 !!!

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