

Chemical Laboratory



SIMULTANEOUS DSC/TGA-UNIT

with controlling unit, calculator, printer and cooling system:

- Melting temperature Tm
- Melting enthalpy DH
- Recrystallization temperature Trec
- Crystallinity K
- Oxidation temperature Tox
- Amount of copolymer
- Mass loss ML
- Thermal stability

IR-SPECTROMETER

with calculator, printer and equipment for sample preparation (pressing tool, vacuum pump, heating plates, KRS-5 plates etc.) :

- Identification of substances

MIR-UNIT

(Multiple Internal Reflection) for polymers, catalysator residues, inorganic additives and fillers :

- Thermal degradation of polymers
- Examination of surfaces like coex layers and coatings

THERMAL STABILITY

temperature up to 1000°C :

- Muffle furnace
- Ash content
- Catalysator residues
- Content of inorganic fillers and additives

VACUUM DRYING CABINET

with vacuum pump, T up to 200°C :

- Determination of content of volatiles

LABORATORY BALANCE

accuracy 0.1 mg :

- Weighing-in of samples for DSC, TG, volatiles, ash etc.



Film Testing Lab



Tensile testing machine

- Tensile strength, elongation and E-modulus
- Sealing strength
- Minimum sealing temperature
- Tear propagation resistance
- Pinhole resistance
- Bending stiffness

Roughness tester (simple mobile instrument)

for determination of the surface roughness for PP-film

Thickness gauge (mechanical & electronical)

for measuring the film thickness of castfilm and endfilm

Glossmeter (with 20°, 45°, 60° and 85° angle)

Hazemeter for determination of haze, transmittance and clarity

Electrode for measuring the dielectric constant and the loss factor of film

Heat sealing machine for sealing of coexfilms sealing tests with different parameters

Friction tester for determination of coefficient of friction

Tensiometer for controlling of testing inks

Polarization microscope

- Optical examinations on film and resin in transmitted / incident light with polarization or interference contrast

Surface roughness tester with topography recording

- Determination of the surface roughness for PET-film

Humidity tester for determination of humidity on PP, PA, PS & PET pellets

Laboratory balance

- Measuring small amounts of substances, such as MFR
- Determination of film density
- Determination of the area weight of film

Digital burettes

- Production of testing inks for the determination of corona treatment

Sliding microtome

- Cutting microtome cuts on castfilm for co-extrusion layer determinations

Heating oven for shrinkage tests

Resistivity measuring instrument for measuring the volume resistance

Dielectric strength tester for measuring the dielectric strength

Metallizer

- Metallizing of film samples for measuring the electrical properties

Colour measuring instrument for determination of opacity of white film

Melt flow tester for determination of MFR and MVR

