



Laboratory Equipment and Tests

Area di competenza	Tipo di Test	Descrizione	Apparecchiature
Extrusion department	Extrusion	Samples and trials extrusion	1 Twin screw extruder 3 Single screw extruders
Moulding department	Injection molding	Injection molding of thermoplastic materials, to obtain ASTM bars and plaques and to check mouldability and heat stability	9 Injection molding machines
	Analytical	TGA : Thermogravimetric Analysis	1 TGA
	Analytical	DSC : Differential Scanning Calorimetry	2 DSC
	Analytical	FT-IR : Infra-Red Spectroscopy	1 FT-IR
	Analytical	UV-VIS : Determination of UV concentration	1 UV –VIS
	Physical	Ash content	3 Muffle furnaces
	Physical	Density	3 Analytic balances
	Physical	Moisture content	3 Thermobalances
	Mechanical	Impact and Charpy notched and unnotched impact resistance, at different temperatures	3 Impact test apparatus
	Mechanical	Tensile strength and flexural modulus	1 Dynamometer (Tyra)
	Mechanical	Ball hardness	1 Shore durometer
	Mechanical	Rockwell hardness	1 Rockwell durometer
	Flammability	UL94 Vertical flame test: V0, V1, V2 classification	3 Cabinets for flammability tests
	Flammability	UL 94 Horizontal burning test: HB classification	
	Flammability	5VB test	
	Flammability	Needle flame test	1 Hypodermic needle
	Flammability	Flame rate test – FMVSS302	1 FMV apparatus
	Flammability	Glow wire test	1 Glow wire apparatus
	Thermal	Vicat softening temperature	3 Vicat/ HDT
	Thermal	HDT – heat softening temperature	
	Thermal	Ball pressure test	1 Ball pressure equipment
	Rheological	MFI – indice di Fluidità	3 Melt index
	Rheological	Viscosità Poliammide	1 Viscosimetro
Colour check department	Colour evaluation	Colour measurement	4 Spectrophotometers
	Surface evaluation	Gloss measurement	1 Glossmeter