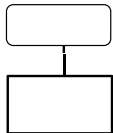
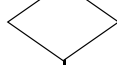
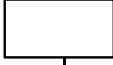
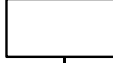
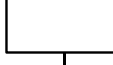

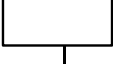
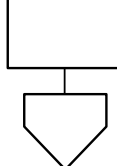

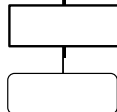


Product Name		PROCESS FLOW CHART			Prepared by	Checked by	Approved by
Black Filler Masterbatch					DO NOT COPY		
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action		
1		Start Raw Material Received	Scales	• Code No., Quantity • Weighting ± 1 % / Container	Return Supplier / Record Incoming Material (WH-F-002)		
2		Incoming Inspection	Two Roll Mill Spectrophotometer	• Mixing RM Temperature 150-300 °C • Delta E (Color Shade) 0.5-3.00	Report To Warehouse		
3		Material Preparation	Scales	• Weighting ± 0.5 g./ 7.5 kg. • Weighting ± 0.01 kg./ 60 kg.			
4		Mixing	High Speed Mixer	• Max 100 kg./ Batch • Amp Meter 20-40 Amp.			
5		Feeder	Gravimetric Feeder	• Max Load 80%			
6		Mixing	Kneader	• Max 750 rpm.			
7		Extrusion	Single Screw Extruder	• 1,300-2,700 kg./ Hrs. • Temperature 100-260 °C	Rerun Process		
8		Cooling & Pelletizing	Underwater Pelletizer	• Speed 250 - 4,500 rpm.	Rerun Process		

Product Name		PROCESS FLOW CHART			Prepared by	Checked by	Approved by
Black Filler Masterbatch					DO NOT COPY		
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action		
9		Final Inspection	Spectrophotometer Microscope Magnifier Karl Fischer Moisture Balance Bulk Density Tester Density Tester Furnance High Performance Liquid Chromatography (HPLC) Filter Test Film Blowing Differential Scanning Calorimeter (DSC)	• Delta E (Color Shade) • Dispersion • Homogeneity • Contamination • Moisture • Bulk Density • Density • Ash Content • Additive Content • Filter Value • Dispersion Index • Oxidation Induction Time (O.I.T)	Adjust/ Rerun/ Record QC-Report (LA-F-006)		
10		Packing End	Scales	• Weighting/ Identify Tag & Lable	Standard Packaging Operation		