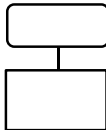
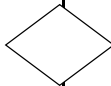
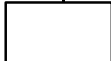
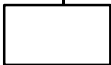
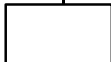
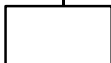
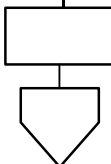

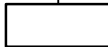



Product Name		PROCESS FLOW CHART			
Black Masterbatch					
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action
1		Start Raw Material Received	Scales	• Code No., Quantity • Weighting ± 1 % / Container	Return Supplier / Record Incoming Material (WH-F-002)
2		Incoming Inspection	Two Roll Mill Spectrophotometer	• Mixing RM Temperature 120-300 °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 250 kg./ Batch • Amp Meter 0-80 Amp. • Speed 450 - 1750 rpm..	
5		Feeder	Gravimetric Feeder	• Max Load 80%	
6		Extrusion	Buss Kneader	• 500 - 1,200 kg./ Hrs • Temperature 160-300 °C	Rerun Process
7		Cooling & Pelletizing	Underwater Pelletizer	• Speed 500-3600 rpm.	Rerun Process

Product Name		PROCESS FLOW CHART			
Black Masterbatch					
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action
8	 	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)	<ul style="list-style-type: none">• 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)
9	 	Packing End	Scales	<ul style="list-style-type: none">• Weighting/ Identify Tag & Lable	Standard Packaging Operation