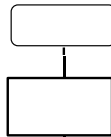

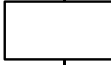
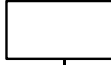
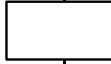

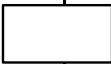
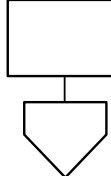

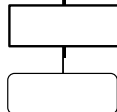


Product Name		PROCESS FLOW CHART			
Filler Masterbatch		ต้นฉบับ			
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action
1		Start  Raw Material Received	Scales	• Code No., Quantity  • Weighting ± 1 % / Container	Return Supplier / Record Incoming Material  (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 20-70 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			
Filler Masterbatch					
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