

- A 24 Greenway Plaza, 18th floor, Suite 1800-I, Houston, TX 77046 950 S Coast Dr, #178, Costa Mesa, CA 92626
- P (+1) 872 314 4226
- **E** teamafc@afcecoplastics.com
- **W** afcecoplastics.com





BETTER SOLUTION WITH AFC

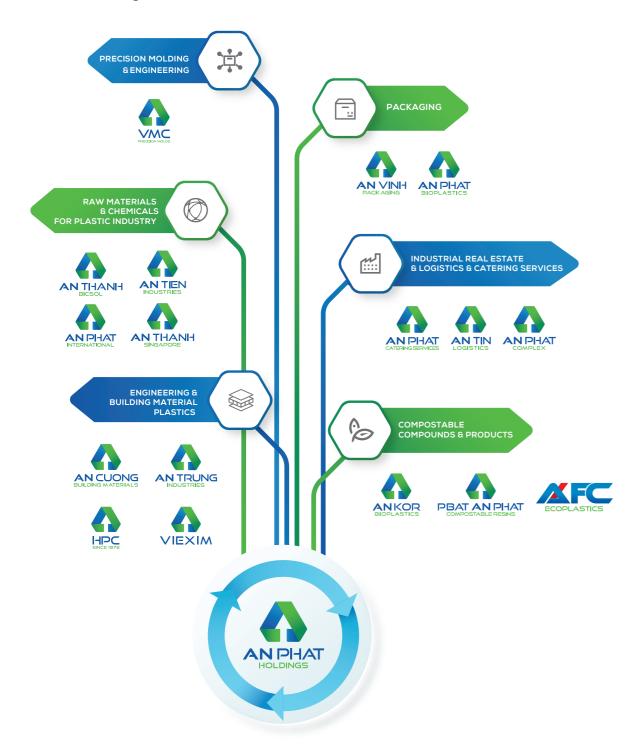


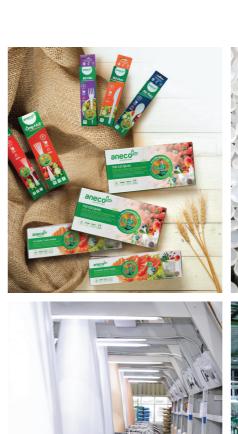
AN PHAT HOLDINGS INTRODUCTION

Founded in 2002, having spent more than two decades of building and development with relentless efforts, An Phat Holdings has successfully grown from a small factory named Anh Hai Duy to a leading corporation in Southeast Asia in high-tech and environmentally friendly plastic. We have gradually affirmed our position in the market and achieved outstanding business achievements.

Up to now, An Phat Holdings has become a multi-sector business with 18 subsidiaries operating in the various fields: compostable compounds and products, packaging, engineering plastics and building material plastics, precision engineering and molding, raw materials and chemicals for plastic industry, industrial real estate, logistics and catering services.

An Phat Holdings' products have been presented in 70 countries and territories such as the United States, Japan, Europe, Korea, Singapore, the United Arab Emirates, Taiwan, Philippines, etc.























BIN LINER/ GARBAGE BAG/ KITCHEN BAG



T-SHIRT BAG ON ROLL

Thickness:

HDPE 6-40 mic LDPE 22-40 mic MDPE 12-35 mic Recycled LDPE 14-65 mic Compostable 11-40 mic

Width: 150-850 mm Length: 320-1700 mm Printed color: 1-4 Packing: Retail & Bulk



STAR SEALED FLAT BAG ON ROLL STAR SEALED T-SHIRT BAG ON ROLL

Thickness:

HDPE 12–50 mic LDPE 20–70 mic MDPE 16–50 mic Recycled LDPE 14–70 mic Compostable 11–40 mic

Width: 180-850 mm Length: 300-1700 mm Printed color: 1-4 Packing: Retail & Bulk



FLAT BAG ON LOOSE

Thickness:

HDPE 10-35 mic LDPE 22-50 mic MDPE 15-35 mic Recycled LDPE 15-95 mic Compostable 12-40 mic

Width: 180-900 mm Length: 300-1700 mm Printed color: 1-4 Packing: Retail & Bulk

FLAT BAG ON ROLL C-FOLDED FLAT BAG ON ROLL

Thickness:

HDPE 6-30 mic LDPE 22-40 mic MDPE 12-35 mic

Recycled LDPE 14–95 mic Compostable 11–40 mic

Width: 150-850 mm Length: 300-1700 mm Printed color: 1-4 Packing: Retail & Bulk





FLEX EMBOSSED DRAWSTRING BAG

Thickness:

HDPE 10-35 mic LDPE 22-35 mic MDPE 14-40 mic Recycled LDPE 15-35 mic Compostable 15-40 mic

Width: 400-1150 mm Length: 450-1400 mm Printed color: 2 Packing: Retail & Bulk



STAR SEALED WAVE TOP BAG ON ROLL

Thickness:

HDPE 12-50 mic LDPE 20-70 mic MDPE 16-50 mic Recycled LDPE 14-70 mic Compostable 11-40 mic

Width: 180-850 mm Length: 300-1700 mm Printed color: 1-4 Packing: Retail & Bulk

SHOPPING BAG/ FASHION BAG



Product:

T-shirt bag Block T-shirt bag T-shirt knot bag Die cut bag

Thickness:

HDPE 6-30 mic LDPE 20-50 mic MDPE 12-35 mic

Recycled LDPE 14-95 mic

Compostable 14-30 mic

*Dimensions and thickness can be customized

04

AGRICULTURE FILM





MULCHING FILM

Width Min 700mm - Max 2500mm
Length 400m or Customized
Thickness Min 30 mic - Max 150 mic
Color Black-Grey, Customized
Capacity 300 (tons/month)



STRETCH FILM





PALLET WRAP

Width: 400 - 980mm
Length: Customized
Gauge: 9-35 mic
Material: LLDPE

Film Color: Clear

Card board core: Customized
Case Pack: Customized

FOOD WRAP

• Container load: Palletized/ Floor load

• Certificate: ISO, SGS

• MOQ (tons): 3

• Payment: TT/LC

• Lead time: 3 days for 20ft, 5 days for a 40ft

• C/O form: A, B, Al, AJ, AK, EAV, E, D, etc
*Dimension, thickness can be customized

FLEXIBLE PACKAGING FILM









Material: OPP/CPP/PET/PE/PP/NY/ALU/MetPET Product:

- HDPE, PP Bottom Seal, Side-sealing bag
- Three side seal, Four side seal
- Stand-up pouches

*Dimensions, thickness and printed can be customized

FOOD BAG



PRODUCT

- Food bag on roll
- Block header (Wicket Bag)
- Slide ziplock bag
- Zipper bag
- Bread bag

SPECIFICATIONS

• Thickness:

HDPE 8-40 mic LDPE 20-150 mic MDPE 8-40 mic

Compostable 14 – 30 mic

• Width: 160-650 mm

• Length: 200-1500 mm

• Printed: customized

 \circ

FOOD SERVICE PRODUCT: STRAW, CUTLERY, GLOVE

STRAW

- Material: PP, Compostable
- Packing: Retail box, PE bag
- Size:
- Diameter: 4.2 6 mm, min thickness: 170 mic
- Diameter: 6 8 mm. min thickness: 180 mic
- Diameter: 8-12 mm, min thickness: 190 mic



KNIFE, SPOON, FORK

- Color: White, Grey, Transparent, ...
- Material: PP, PLA, CPLA, PHA, PS, ...
- Size: 6 inch & 6.7 inch
- Packing: Retail & Bulk





GLOVE

• Size:

M: 260x270mm/ L: 260x290mm XL: 265x290mm

- Color: Transparent / Green
- Material: PE, PLA, PHA
- Packing: Retail & Bulk



INJECTION MOLDING PRODUCT CONTAINER, CUP, TRAY





































FOOD CONTAINER & LID

- Color: Transparent; Black; WhiteMaterials: PP, PET, Compostable
- or Customized
- Dimension: Customized







CUP & LID

- Color: Transparent
- Materials: PP, PET, Compostable or Customized
- Dimension: Customized









- Color: Transparent; Black; WhiteMaterials: PP, PET, Compostable or Customized
- Dimension: Customized







TRASH BIN









33 Gallon

3 Gallon

- For residential, commercial, and institutional uses
- Strong and long lasting
- Size for every purpose: 3 gallon, 13 gallon, 33 gallon
- Material: PP, Recycle material, ...

*Dimension, design, printing can be customized

PLASTIC CONTAINERS

PLASTIC CONTAINER MODEL A9 Outside dimention: $19 \times 12.1 \times 7$ " Inside dimention: 16.5 x 10.6 x 6.8"

- Large hopper front for easy picking
- Nest & provide positive lock stacking





PLASTIC CONTAINER MODEL B5

Green Red Yellow

Outside dimention: 23.6 x 15.3 x 11.8" Inside dimention: 21 x 13.6 x 11.8"

- Reinforced flat bottom for smooth conveyor travel
- Stackable



PLASTIC CONTAINER MODEL C1

Outside dimention: 24 x 9.4 x 15.4" Inside dimention: 22.8 x 15.3 x 15"

- Straight walls allow for efficient space usage
- Mesh versions allow visibility, air ventilation & drainage



COLLAPSIBLE PLASTIC BOX

Outside dimention: 25.9 x 17.6 x 13.1" **Inside dimention:** 23.9 x 16.1 x 12.5"

- Folded when not in use, saving quite a large area.
- High stability in transit



PRODUCT ADVANTAGES





COLOR VARIETY



APPLICATION

Industrial production businesses, stores, factories, supermarkets, and households

COMPOSTABLE COMPOUNDS & RESIN











Compostable materials' certificates.





BG1000 (PBAT)

- A pure Polybutylene adipate-co-terephthalate (PBAT). It can be broken down by microorganisms into CO2, H2O, and high-quality organic fertilizers within 180 days under composting conditions without generating any poisonous gas. It is the main raw material for biodegradable plastic films which can help reducing white pollution.
- With properties similar to polyethylene (PE), BG1000 can be widely applied to the manufacturing of shopping bags, food packages, mulch films,garbage bags, etc.
- Certificate: DIN Certco EN13432 & BPI ASTM D6400.



PHYSICAL/ MECHANICAL PROPERTIES				
ITEM	CONDITIONS	METHOD	UNIT	VALUE
Density	25°C	ASTM D792	g/ml	1.25
MFI	190°C/2.16kg	ASTM 1238	g/10min	2-5
Melt Temperature	-	ASTM 3418	°C	125
Tensile Strength (MD/TD)	25°C	ASTM D638	kgf/cm²	> 400/500
Elongation (MD/TD)	25°C	ASTM D638	%	> 500/600
Tear Strength (MD)	25°C	ASTM D1004	kgf/cm	400/1600

^{*} Thickness 30µm

BG5000J (PBS)

- A pure Polybutylene succinate (PBS).
- With high MI, and properties similar to polypropylene (PP), BG5000J is used for injection molding, coating.
- Certificate: DIN Certco EN13432 & BPI ASTM D6400.



PHYSICAL/ MECHANICAL PROPERTIES				
ITEM	CONDITIONS	METHOD	UNIT	VALUE
Density	-	ASTM D792	-	1.3
MFI	190°C/2.16kg	ASTM D1238	g/10min	15~25
Melt Temperature	-	ASTM 3418	oC	115~118
Tensile Strength	-	ASTM D638	Мра	>370
Elongation	-	ASTM D638	%	>10
HDT	-	JIS K7207	oC	92

BG5000M (PBS)

- A pure Polybutylene succinate (PBS).
- Properties similar to polypropylene (PP) low MI, BG5000M can replace PP for extrusion.
- Certificate: Certificate: DIN Certco EN13432 & BPI ASTM D6400.



PHYSICAL/ MECHANICAL PROPERTIES					
ITEM	CONDITIONS	METHOD	UNIT	VALUE	
Density	-	ASTM D792	-	1.25~1.27	
MFI	190°C/2.16kg	ASTM D1238	g/10min	2~5	
Melt Temperature	-	ASTM 3418	°С	115~118	
Tensile Strength	-	ASTM D638	kgf/cm²	>370	
Elongation	-	ASTM D638	%	>100	
HDT	-	JIS K7207	°C	93	



BG4400

- A kind of compound based on blend of Poly lactic Acid (PLA) and Biodegradable additives for making single-use tableware, rigid packaging, injection molding.
- Usable on conventional plastics manufacturing machines.
- Suitable for food contact.
- Certificate: DIN Certco EN13432 & BPI ASTM D6400.



PHYSICAL/ MECHANICAL PROPERTIES					
ITEM	CONDITIONS	METHOD	UNIT	VALUE	
Density	-	ASTM D792	g/ml	1.4	
MFI	190°C/2.16kg	ASTM D1238	g/10min	5~12	
HDT	-	ASTM D648	oC	100~120	
Tensile Yield Strength	-	ASTM D638	kgf/cm ²	300~400	
Tensile Elongation	-	ASTM D638	%	<20	

TF700

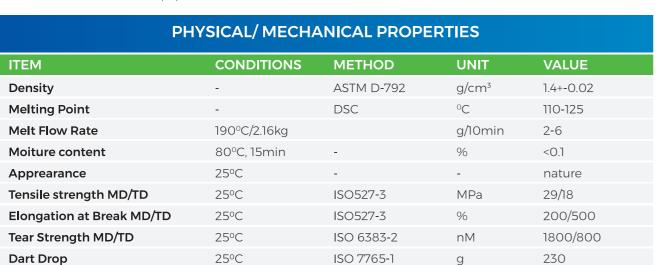
- Biodegradable & compostable compound based on PLA and biodegradable resins.
- Suitable for extrusion, thermoforming & injection molding.
- Application: Food trays, cups, bowls, straws, cutlery.
- Food-contact compliant (EU No. 10/2011, FDA 21 CFR).
- Certificate: DIN Certco EN13432 & BPI ASTM D6400.



PHYSICAL / MECHANICAL PROPERTIES					
ITEM	CONDITIONS	METHOD	UNIT	VALUE	
Density	-	ASTM D792	g/cm3	≤ 1.5	
Melting Point	190°C/ 2.16kg	ASTM D1238	g/10min	≤ 10	
Moisture content	80°C/15min	ASTM D6980	%	< 0.5	
Flexural strength	25°C	ASTM D790	MPa	≥ 26	
Notched Izod impact strength	25°C	ASTM D256	kJ/m2	28	

CTR02

- Modified Biodegradable compound based on a blend of PBAT, PLA (Polylactic acid) and appropriate additives. CTR02 allows its final plastic products to possess both biological (biodegradable and compostable) and physical (printable, weldable, adjustable transparency, increased tear strength and elongation) advantages at the same time.
- CTR02 has been widely applied to various sectors, such as shopping bags, garbage bags, food packages, garment bags, courier bags, etc.
- Certificate: DIN Certco EN13432 & BPI ASTM D6400.
- Usable on blown film equipment for LDPE.



^{*} Thickness 20µm



- A kind of compound based on blend of Polybutylene adipate-co-terephthalate (PBAT) & Polylactic Acid (PLA) and Calcium carbonate (CaCO3). This compound can reduce the product cost while still maintaining biodegradable and compostable properties.
- Application: Carrier bags, shopping bags.
- Certificate: BPI ASTM D6400.
- Usable on blown film equipment for LDPE.



PHYSICAL/ MECHANICAL PROPERTIES				
ITEM	CONDITIONS	METHOD	UNIT	VALUE
Density	-	ASTM D-792	g/cm3	1.45+-0.02
Melting Point	-	DSC	oC	115-125
Melt Flow Rate	190°C/2.16kg	ASTM 1238	g/10min	2-6
Moiture content	80°C, 15min	-	%	<0.2
Apprearance	25°C	-	-	White
Tensile strength MD/TD	25°C	ISO527-3	Мра	16/10
Elongation at Break MD/TD	25°C	ISO527-3	%	250/500
Tear Strength MD/TD	25°C	ISO 6383-2	mN	450/1800
Dart Drop	25°C	ISO 7765-1	g	120

^{*}Thickness 20µm

CTR02-M

- CTR02-M is a compound made from PBAT, PLA, and specific additives, designed to significantly improve tear strength and elongation of finished products. Its excellent mechanical properties make it well-suited for thin agricultural and horticultural films, such as mulch and cover films.
- Certificate: BPI ASTM D6400.
- Usable on blown film equipment for LDPE.



PHYSICAL/ MECHANICAL PROPERTIES					
ITEM	CONDITIONS	METHOD	UNIT	VALUE	
Density	-	ASTM D-792	g/cm³	1.4+-0.02	
Melting Point	-	DSC	oC	125-130	
Melt Flow Rate	190°C/2.16kg	ASTM 1238	g/10min	2-5	
Moiture content	80°C, 15min	-	%	<0.1	
Apprearance	25°C	-	-	Nature	
Tensile strength MD/TD	25°C	ISO527-3	Мра	28/17	
Elongation at Break MD/TD	25°C	ISO527-3	Мра	200/500	
Tear Strength MD/TD	25°C	ISO 6383-2	Nm	1700/800	
Dart Drop	25°C	ISO 7765-1	g	230	

^{*}Thickness 20µm

CTR04

- A kind of compound based on a blend of Polybutylene Adipate-co-Terephthalate (PBAT) and other biodegradable components. CTR04's compostability properties and its high content of renewable material allow optimal organic waste management and reduce the environmental impact significantly.
- It is mainly used for the production of thin shopping bags for the retail sector, trash liners.
- Certificate: TUV OK COMPOST HOME, BPI, CMA.
- Usable on blown film equipment for LDPE.



PHYSICAL/ MECHANICAL PROPERTIES					
ITEM	CONDITIONS	METHOD	UNIT	VALUE	
Density	-	ASTM D-792	g/cm³	1.3+-0.02	
Melting Point	-	DSC	°C	118-125	
Melt Flow Rate	190°C/2.16kg	ASTM 1238	g/10min	3-6	
Moiture content	80°C, 15min	-	%	<0.1	
Apprearance	25°C	-	-	Light yellow	
Tensile strength MD/TD	25°C	ISO527-3	Мра	18/11	
Elongation at Break MD/TD	25°C	ISO527-3	%	300/600	
Tear Strength MD/TD	25°C	ISO 6383-2	mN	350/1800	
Dart Drop	25°C	ISO 7765-1	g	170	

^{*}Thickness 15µm





40% TITANIUM DIOXIDE

ITEMS: PE-TI40	TEST METHOD	UNIT	RESULT	ABOUT RESULT ALLOWED
Carrier resin	ASH TESTER		PE	
TiO ₂ content	ASTM D1506	%	40.0	39.7 - 40.3
Density	ASTM D792	g/cm3	1.81	
Moisture content	ASTM D644	%	≤ 0.15	
Melting flow index (190°C/2,16 kg)	ASTM D1238	g/10mins	19.0	18.0 - 25.0
Particle size		mm	1.8	1.7 - 2.0
Appearance			White Oval	

50% TITANIUM DIOXIDE

ITEMS: PE-TI40	TEST METHOD	UNIT	RESULT	ABOUT RESULT ALLOWED
Carrier resin	ASH TESTER		PE	
TiO ₂ content	ASTM D1506	%	50.0	49.7 - 50.3
Density	ASTM D792	g/cm3	1.81	
Moisture content	ASTM D644	%	≤ 0.15	
Melting flow index (190°C/2,16 kg)	ASTM D1238	g/10mins	26.0	24.0 - 28.0
Particle size		mm	1.8	1.7 - 2.0
Appearance			White Oval	

60% TITANIUM DIOXIDE

ITEMS: PE-TI60	TEST METHOD	UNIT	RESULT	ABOUT RESULT ALLOWED
Carrier resin	ASH TESTER		PE	
TiO ₂ content	ASH TESTER	%	60	59.5~60.5
Density	ASTM D1506	g/cm3	1.81	1.80~1.83
Moisture content	IR	%	≤0.15	
Melting flow index (190°C/2,16 kg)	ASTM D1238	g/10mins	22	21 - 23
Particle size	Caliper	mm	2.2	1.9 - 2.4
Appearance			White Oval	

17

ANTI - UV MASTERBATCH

Introduction

Exposure to sunlight can have adverse effects on the useful life of plastic products. Ultraviolet (UV) radiation can break down the chemical bonds in a polymer. Photo-degradation causes cracking, chalking, color changes and the loss of physical properties.



Therefore, UV stabilizing packages are vital to ensuring a polymer. Generally, UV stabilizers are categorized by two classifications: UV absorbers and hindered amine light stabilizers (HALS). High performance UV stabilizer masterbatches offer the optimal UV stability to meet current and upcoming requirements.

Product Benefits

- Excellent UV resistance to meet end use requirements
- Optimal balance between UV stability and long-term thermal stability
- Tailored products as per end use requirements
- · Good processability.

Applications and Recommended UV Stabilizer System

- Polyolefin films (for thin wall thickness like film, HALS is more efficient UV stabilizer than UV absorbers)
- Polyolefin injection molded (synergistic HALS mixture)
- PP fiber pigmented (Combination masterbatch between HALS and UV absorber)
- PP pipes (HALS)

ANTIOXIDANT MASTERBATCH

Product Description

HII AO 11 is the combination of antioxidant additive in LLDPE carrier. It is used to protect polymers from degradation, both during processing and during use. The percentage of use of masterbatches is recommended about 1 and 5%.



Application

Pipes, Profiles, Films, Cables, Injection molding, Tapes, Geotexfiles, Blowmolding

ANTI-BLOCK MASTERBATCH

Introduction

In plastic films production, anti-blocking properties are crucial for further handling and converting because plastic layers tend to stick together. The addition of an anti-block agent creates space between 2 plastic layers (surface roughness) preventing so-called blocking.



Mostly Anti-block masterbatch is used in multilayer structure films in order to have the highest benefit. It is used to lessen the ad-hesion of the surface of products made from the formulation of like or different surfaces

Description

Anti block masterbatch is an additives masterbatch in PE resin based. This can give an advantage in end-use ap-plications such as opening plastic bags.

Application

Blowing film: Shopping bags, grocery bags, carry bags

SLIP AGENT

Introduction

In film processing, films tend to adhere to themselves (film-to-film) and metal surfaces (film-to-metal) due to their high coefficient of friction (COF), which damages to the surface of products, reducing optical properties, reducing force, affecting the appearance and deforming the products, affecting the printing process, etc.



CACO3 FILLER MASTERBATCH

Caco3 filler masterbatch

Product description:

CaCO3 filler masterbatch is used to save production cost and improve specific characteristics of the end products. With outstanding quality Calcium Carbonate from Vietnam knowledge and experiences, we can supply fillers for various application. Beside that, we also can customize our formulas to meet customers special requirements.

CACO3 FILLER MASTERBATCH IN PE RESIN BASED

Application:

- Blowing film: PE Film and bags
- Injection molding: furniture, food containers, water tanks
- Extrusion: HDPE pipe





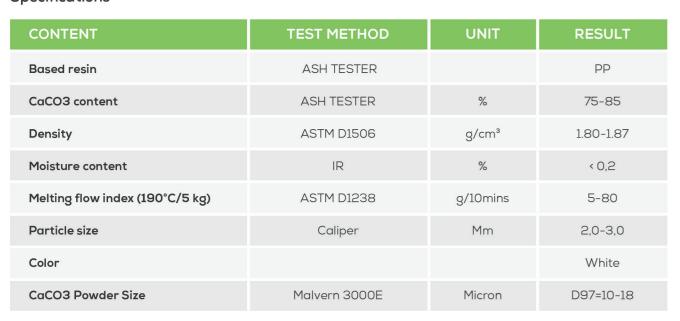
CONTENT	TEST METHOD	UNIT	RESULT
Based resin	ASH TESTER		PE
CaCO3 content	ASH TESTER	%	60-86
Density	ASTM D1506	g/cm³	1.80-1.87
Moisture content	IR	%	< 0,2
Melting flow index (190°C/5 kg)	ASTM D1238	g/10mins	3-10
Particle size	Caliper	Mm	2,0-3,0
Color			White
CaCO3 Powder Size	Malvern 3000E	Micron	D97=10-15

CACO3 FILLER MASTERBATCH IN PP RESIN BASED

Application:

- Raffia: PP woven, PP small bags, jumbo bags
- PP Lamination
- PP Non-woven
- PP injection and extrusion

Specifications







CALCIUM CARBONATE POWDER (CACO3)

Product description

Superfine Calcium Carbonate Powder is manufactured from natural, white and pure limestone and calcium carbonate which has the best quality in Vietnam. An Tien Industries' coated and uncoated Calcium Car-bonate powder having highest whiteness and brightness is produced by the most advanced technology production lines.



CONTENT	SPECIFICATIONS
Top-cut: D97	8-55µm ± 2
Mean size: D50	2,5 - 5µm ± 0,5
Whiteness	98% Min
Brightness	96% Min
Moisture (Ex-work)	0,25% Max
Density (Raw material)	2,7 g/cm³
PH	8-9
CaCO3 content	99% Min



Application

- Plastic industry: Filler masterbatch, plastic pipes, cables, etc.
- Paint industry
- Paper industry
- Construction industry



PRECISION ENGINEERING & MOLDING

An Phat Holdings has a subsidiary that specializes in manufacturing all kinds of molds, specialized equipment for technology and production of household and high-tech plastic products.

Taking the initiative to have a mold factory will help An Phat Holdings be proactive in designing, manufacturing, and manufacturing supporting components as well as being proactive in maintaining, shortening production time and costs.



QUALITY

HPC: **250 - 300 sets/year** VMC: **280 - 320 sets/year**



WEIGHT 30 tons



MAXIMUM SIZE 4500mm x 1900mm x 1500mm























