

PLASTICS



FOREFRONT OF CHAIN TECHNOLOGY

ENGINEERED PLASTICS

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Introduction

To complement Can-Am's different Chains types engineered plastics are used in many installations such as wear guides, chain supports, chain flights, roller lugs etc. As well as plastic chains for special applications in many different industry sectors such as the wood industry, waste water/sewage etc. These plastics are manufactured for use in extreme conditions.



Due to increasing demand from our customers and our commitment to serving the industry, we have broadened our selection base and to achieve this we work directly with composite manufacturers to formulate special materials to suit our particular needs.

PLASTIC CHAIN

Plastics offer a great alternative to steel chains when conditions demand their unique features.



ACETAL CHAIN

CAN-AM NH78 is designed for use in non-marking and corrosive applications. It is a great alternative to conventional steel 78 chain, when conditions demand its features.

CAN-AM NH78 used in and around dip tanks, finished wood product, and sewage treatment are a few examples of environments that call for alternative solutions. Acetal chain is not available in Camelback form.







Acetal-orange chains are non-water absorbing, wear resistance, and excellent for water/waste water applications.

Specifications:Lengths 10ft (3.048M)Ultimate strength = 2300KgLengths 10ft (3.048M)Material = Acetal (colour = safety orange)Pins = 304 Stainless Steel

CAN-AM NH45 Acetal Chain Is a smaller chain to the NH78 (ADD MORE TEXT)







CAN-AM 720S Chain is a two piece system. The chain body is manufactured from a modified type 6 Nylon

That increases its elasticity when submerged in water. This elasticity gives it up to 21 degree deflection rate giving it the ability to withstand flight misalignment. The side bar ribs are reinforced and thickened to increase its torsional and tensile strength.

The chain pin is manufactured from a co-polymer acetal that does not absorb moisture thus preventing any swelling between the pin and chain link, reducing chain binding.











PLASTIC SPROCKETS

Plastics sprockets complement the plastic chains used in the waste water industry. These sprockets are available in A,B and C styles. They provide reduced barrel wear, durable, reduced noice and are of course light weight.

Standard material is black Polyethylene





Custom Sprockets

Mill and Roller Chain Sprockets with any hub configuration are available in Black Polyethylene, White Polyethylene, Orange Polyurethane



Engineered Plastics

CASTLE BLACK

Can-Am Castle Black has delivered successful performance, with, and without lubrication, in a variety of diverse applications, particularly as a wear guide material. It is lightweight, offers extremely good wear resistance in comparison to UHMW, high tensile strength and high modulus of elasticity. Other significant properties include:

- High impact resistance
- Excellent vibration resistance
- Resistance to brittleness and deterioration
- Easy machinability and abrasion resistance
- High heat distortion temperature
- Extra long life in very heavy duty chain applications



Wear Guard[™]



Wear "Indicator"

CAN-AM "Wear Guard" is a custom engineered UHMW formulation that has two integral layers of polymer moulded together in two contrasting colours. The top layer is a Cross-linked UV stabilised (to retard the effects of sunlight) formulation offering *premium* wear resistance against sliding abrasion.

The bottom layer is a wear indicator that when viewed from above will indicate that the wear plate has performed to a point where it needs to be replaced. "A preventive maintenance tool!" CAN-AM "Wear Guard" is designed for use as chain wear plate, conveyor liner, and hopper liner, especially in dark or hard to see areas, where performance of the liners requires monitoring.

PULP SAFE Wear Guard PS is a metal filled UHMW designed for application where pulp chip contamination is an issue. It's high specific gravity allows it to sink in the pulping process, and it's metal content makes it detectable in metal detection systems.

Available in sheet thickness - ½", 5/8" and ¾"

CAN-AM PowerPlate is a modified UHMW that makes it one of the lowest coefficient of friction plastic wear plates available in today's marketplace. In addition, it's modifiers offer higher load and higher abrasion features than regular UHMW. These features make PowerPlate an excellent choice for chain wear plate where minimal drag needs to be obtained. As well, PowerPlate excels in most bulk material handling liner applications, because it's low coefficient of friction properties allow material to release faster than it would on regular wear materials.

Coefficient of friction: UHMW - .12 PowerPlate: - .09



ROCKET PLATE

100% UHMW sheet with hemispherical nodules which means very low co-efficient of friction. Developed to replace high maintenance ball transfers & plates

Super slick, maintenance free. Virtually eliminates slip, stick, & debris problems. Fairly flexible for transfer table, chutes, slides, and conveyor liners





Applications

Bulk mail conveyors

Food Processing

Agriculture Processing

Bulk Material handling

Processing plants

Production enhancement

SHOCK STOP

CAN-AM Shock Stop is a specially formulated material that isolates shock and impact, at its source. This, along with it's ability to minimize rebound, results in a measurable cost savings by reducing structural maintenance and product damage. Shock stop is custom made to suit each particular installation. Please contact us to discuss your requirements.



CAN-AM Shock Stop is custom manufactured. It's available
A) Bonded to steel c/w steel faceplate.
B) Bonded to steel, C) Plain,



Applications

Log Stops, Canter Stops, Board Stops, and Bulk Material Landing Areas are typical applications.



GUIDE RAILS

NYTRO-PVL

Can-Am Nytro-PVL is a High Performance Engineered Plastic which has been developed for extremely heavy wear, high pressure and high speed applications.

When it replaces steel guide rails, in all of the areas where this product has been used, there is a large increase in the life cycle of all the equipment.

Can-Am Nytro-PVL Benefits:

Increase in Chain, Sprockets and Guide Rail life

Increase in Conveyor Bends

Reduced running temperature and removes possible fire risk





The mechanical and self-lubricating properties of this product have proven benefits in high pressure and high velocity applications. It has proved highly successful on applications such as Board Lines and many other hardwearing applications.





Extreme Heavy Duty

Can-Am NYTRO-PVL is a high performance Engineered Plastic developed for high-speed roller, sharp top, and sharp chain applications.

Can-Am NYTRO-PVL high PV (pressure velocity) and self-lubricating features extend chain life by absorbing impact and lowering operating temperatures, resulting in the reduction of costly downtime.

Can-Am NYTRO-PVL chain Can-Am NYTRO-PVL beds are custom machined to meet rigid dimensional tolerances for specific chain types, & holds them <u>better than steel</u>.

Can-Am NYTRO-PVL dramatically reduces lubrication cost and lowers operating noise decibel levels.

Other - Sprocket bushings, Bearings, Friction slides, Transition wear-plate

Available - in sheet stock and tubular bar.

UHMW TRU/TRAK C2/C3/C4

Can-Am Chain UHMW Tru/trak - inserts for steel channel, gives maximum life and performance results. The Tru/trak feature supports

the barrel and sidebar equally, allowing for heavier loading, and carrying capacity.

This feature also maintains center chain tracking thru the sprocket and eliminates sidebar and rivet damage.



Minimum coefficient of friction and noise reduction are additional benefits for any retrofit or new installation.

Available for metric and imperial steel channel to suit all chain types.



CAN-AM Chains Plastics Physical Properties Sheet

PROPERTY	Unit	Wear Guard	Castle Black	Power Plate	NYTRO PVL
Material	Туре	UHNW	Eng/Plas	UHMW	PVL
Density / Specific Gravity	g/cm3	0.955	1.15	0.945	1.13
Tensile at break (@ 23°C)	Kg/cm2	443	844	295	844
Elongation at break	%	400	30	320	10
Flexural Modulus, 1% secant	Kg/cm2	7733	n/a	4780	30583
Thermal Expansion, 20°-100°C	K1	9x10⁵	0.8x10 ⁻⁴	9x10⁵	5x10 ⁵
Hardness, Shore D		68	85	68	81
Abrasion	Steel 100	14	N/A	14	N/A
Izod Impact	Kg cm/cm	No Break	No Break	No Break	18.5
Izod Impact - Double notch	Kg cm/cm	136	N/A	305	N/A
Coefficient friction vs CR steel	static	0.25	0.25	0.11	N/A
	dynamic	0.15	N/A	0.09	0.12
Melting point	°C	130	220	130	215
Max Service Temp	°C	90	170	90	150
Long term Service Temp	°C	80	105	80	100
Moisture Absorbtion	%	0	0	0	2.5
Moisture Absorbtion at Saturation	%	0	6.2	0	6