CURBELL PLASTICS We're everywhere. Put us to work – for you!™

For over 70 years, Curbell Plastics has worked with our customers to define their needs, understand their specific applications, and identify the right plastics solutions for those applications. Case histories from our customers have shown us that choosing the right material can improve production efficiency, reduce downtime, and ultimately save you money. Put us to work for you, and let us help you find the right plastic for the job.







HOPPER

Solution: UHMW

Benefits: Non-corrosive UHMW products provide flow promotion, wear resistance, and lubrication when conveying abrasive, wet, sticky, or fine particles in hoppers or chutes.



TAPES AND FABRICS

Solution: PTFE Coated Fabric Tape

Benefits: PTFE coated tapes offer very low coefficient of friction and high heat resistance that will permit material to easily flow through ovens and heat sealing applications.





CONVEYOR CHAIN WEAR GUIDES

Solution: Nylon, UHMW

Benefits: High performance engineering plastics offer conveyor chain applications the benefit of self lubrication, ease of movement, and elimination of metal on metal wear.



ERGONOMIC MATTING

Solution: Anti-Fatigue Matting

Benefits: Ergonomic matting increases worker comfort which could lead to higher productivity, less absenteeism, and decreased insurance costs.



NATIONWIDE 1.888.CURBELL www.curbellplastics.com

Here's where it works.

		TYPICAL APPLICATION		APPLICATION REQUIREMENTS	MATERIAL REPLACED
		PULLEY		•Tensile strength •Durability •Wear resistance	Steel, aluminum
2	- - +	BALL VALVE SEALS AND SEATS	•	 Dimensional stability High resilience Chemical, wear, and corrosion resistance 	Steel
3		CHEMICAL SPRAY WASH-DOWN NOZZLE		Chemical and corrosion resistance Dimensional stability Mechanical strength High temperature capabilities	Stainless steel, exotic metals
4		CONVEYOR BEARING COMPONENTS (rolling, turning, and sliding assemblies)		•Excessive wear fatigue resistance •Minimal product con- tamination •Eliminate need for lubrication	Metal guides and bearings
5		MANDREL		 Dimensional stability High temperature resistance No mutilation of fixtured components 	Steel
6	<	CONVEYOR SUPPORTS, TRAYS, AND FIXTURES		• Dimensional stability • Wear and corrosion resistance of components • Electrostatic dissipative	Aluminum, stainless steel, exotic metals
7		PISTON AND PUMP ASSEMBLIES		 High resistance to part wear Low moisture absorption High corrosion resistance Agency compliance 	Common and exotic metals
8		VALVE BODY MANIFOLD		Corrosion resistance High temperature resistance Dimensional stability Agency compliance	Common and exotic metals
9		IMPELLER		•Corrosion and chemical resistance •Resistance to abrading •Eliminates frequent part replacement	Common and exotic metals, rubber
10		ROBOTIC FIXTURES		 Resistance to part wear, static, and corrosion Dimensional stability Structurally strong 	Common and exotic metals
		SPROCKETS, GEARS, POWER TRANSMISSION COMPONENTS	•	Part wear • Dimensional stability • Corrosion resistance • Noise reduction	Common and exotic metals
12		CONVEYOR CHAIN TENSIONER	•	 High tensile strength Durability Wear resistance Dimensional stability 	Bearing grade metals
13		UHMW WEAR STRIPS	•	 Impact resistance Non marking Wear resistance Creep resistance Low thermal expansion 	UHMW

ENGINEERING PLASTIC SOLUTIONS	BENEFITS
Nylon, UHMW	•Excellent wear resistance •Lower abrasive wear •Cables last longer
Acetal, PBT, PEEK, PET	 Replaces expensive metal machining procedures and ensures proper seal Reduces or eliminates wear of mating parts Excellent wear resistance
ABS, Acetal, PAI, PBT, PEEK, PET, PI, PPS, UHMW	Replaces expensive exotic metals Reduces corrosion Decreases production downtime Cost savings
Acetal, Nylon, PAI (bearing grade), PBT, PEEK, PET, PI (bearing grade), PPS, UHMW,	Reduces maintenance No lubrication Decreases production downtime No product contamination Solid, clean, inert plastic
FDA Compliance: Acetal, PBT, PET, Nylon, Urethane (dry application only) Non-FDA Compliance: Hydlar®Z (Nylon/Kevlar®Fiber), PAI	•Stands up to continuous automated loading/unloading operations •Does not mark delicate machine surfaces on fixture parts •Wear resistance •Eliminates contamination
Acetal, PEEK, PBT, PET, Nylon, UHMW	 Replaces expensive metals Increases part life Decreases downtime Wear resistance FDA compliant Less costly to change design
FDA Compliance: Acetal, PBT, PEEK, PET, Polysulfone, Ultem® Non-FDA Compliance: PPS	 Excellent wear resistance Decreases metal contamination from wearing metal parts Good lubricity Good tensile properties Non-abrasive
FDA, USDA, and USP Compliance: Acetal, PBT, PEEK, PET Non-FDA Compliance: PPS	•No product contamination •Less maintenance and part replacement •Increases part life •Corrosion resistance
ABS, Acetal, PAI, PBT, PEEK, PET, PI, PPS, UHMW	 Increases part life No product contamination Decreases maintenance and part wear Decreases downtime Decreases part cost Chemical resistance
Acetal, Nylon, PAI (bearing grade), PBT, PEEK, PET, PI (bearing grade), PPS, UHMW	 Increases part life Decreases wear, breakage, and downtime Lighter weight Decreases static Less costly design changes Decreases product damage
Acetal, Nylon	 Increases part life and stability Decreases maintenance and downtime Fatigue resistance Decreases noise No contamination from metal particles
Acetal, Nylon, PBT, PET	 Corrosion resistance Lower coefficient of friction Fatigue resistance to continuous loads Doesn't wear mated metal components Noise reduction
Acetal, Nylon, UHMW	Heat resistance Low friction •Wear resistance •Dimensional stability •Self lubricating











TIMING SCREWS

Solution: Acetal, UHMW

Benefits: Engineering plastics' non-toxic, low-friction surfaces move materials predictably and smoothly, outperforming expensive stainless steels.

CONVEYOR CHAIN GUIDES AND SPROCKETS

Solution: Acetal, Nylon, PBT, UHMW

Benefits: Engineering plastics' are non-abrasive to mating components making them inherently superior to metals.

WEAR PADS AND FIXTURES

Solution: Acetal, Nylon, PBT, UHMW

Benefits: Engineering plastics withstand attack from harsh chemicals and wash downs. They keep machinery moving without lock-ups caused by corroded metal components.









GENERAL PURPOSE ONE PART SEALANT

Solution: RTV Silicones

Benefits: One part sealants cure at room temperature and offer good sealing and bonding properties.

PLUNGER

Solution: Acetal, PBT, PEEK, PET, Ultem®

Benefits: Many performance engineering plastics offer non-toxic, FDA compliant options for demanding caustic food processing environments.

SAFETY GLAZING

Solution: Acrylic, PETG, Polycarbonate

Benefits: Polycarbonate or PETG offer clear, virtually unbreakable options in safety or window grades that can stand up to harsh chemical environments.

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