



BULK MATERIAL WEAR ITEMS & OTHER PLASTICS



Industrial plastics for
your application.

PRODUCT OVERVIEW

Industrial plastics have many uses - they can be incorporated into structural elements, used as liners or protective shields and guards, act as wear plates or wear edges on equipment, molded into custom parts or profiles, or simply used as hanging curtains, doors, or dividers. Purvis Industries carries a wide variety of plastics, including UHMW, HMW, Polyurethane, and clear plastic sheets and drapes. Our experts can help you find the correct material and form for your application!

STOCK PLASTICS AVAILABLE IN THESE FORMATS



SHEET



ROLL



ROD



TUBE



CUSTOM
PROFILE

THINGS TO CONSIDER WHEN CHOOSING PLASTICS



SUNLIGHT/UV

UV radiation breaks down polymers without the addition of UV inhibitors



TEMPERATURE

Heat/cold affect the integrity of all plastics (includes fire retarding)



PRESSURE

How much load are your plastics bearing? (Weight, liquid, or gas)



FDA

Does your process require food contact?



ABRASION

Different polymers have different resistance to abrasion (wear)



IMPACT/SHOCK

Plastics used in safety applications must be specified correctly



WATER

Some polymers will absorb water and swell, reducing life and changing dimensions



STATIC ELECTRICITY

If spark or ESD is a problem, stay with anti-static polymers

APPLICATIONS



Food & beverage
(sanitary applications)



Agricultural applications



Plastic rollers & sleeves



Liners (Chute, bin, bed, silo,
tank, hopper)



Wear parts on equipment (Blades,
cleaners, strips, spacers)



Conveying screws & rods

WEAR PROTECTION FOR AGGREGATE APPLICATIONS

Many aggregate wear parts are made of rubber and polyurethane. Both are great options, polyurethane has a higher abrasion resistance than rubber. Polyurethane can cost substantially more than rubber, but has become a standard in the aggregate world, where downtime is unacceptable.

- Conveyor skirt board
- Springs and shocks
- Crown bar
- Chute liners
- Classifier shoes and flights
- Spray bar deflectors and seals
- Screens

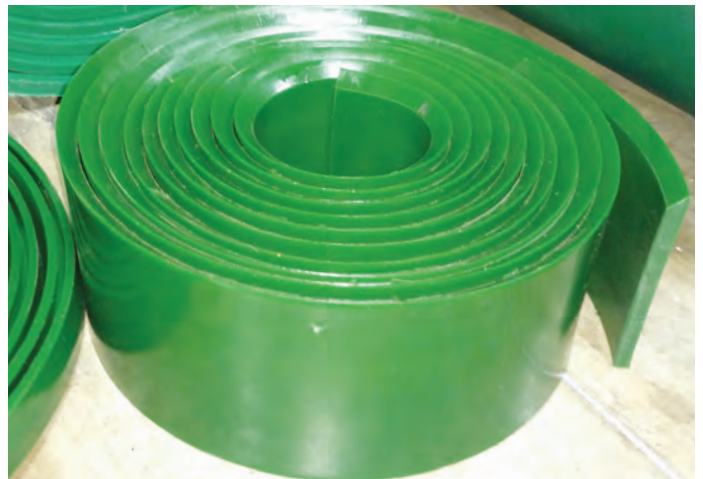
Stock Forms



Application Solutions



Skirt board installed



Bulk skirt board



Belt cleaner installed



Crown bar

POLYETHYLENE

STOCK FORMS

- Roll
 - Up to 120" width
 - 1/8" - 1/2"
 - Thickness
 - Up to 400' length

STOCK COLORS

- Natural (white)
- Black



HIGH MOLECULAR WEIGHT

Generally used for liners and outdoor applications, especially UV-resistant, non-stick

APPLICATIONS

- Material handling liners
- Trailer liners
- Agricultural spreaders & feeders
- Outdoor equipment

UHMW

HMW

STOCK FORMS

- Sheet
 - 1/8" - 1" thickness
 - 4' x 8'

STOCK COLORS

- Natural (white)
- Black (utility grade)



HIGH DENSITY POLYETHYLENE

General purpose plastic - all kinds of applications

APPLICATIONS

- Dividers
- Cutting boards
- Play-grounds
- Marine board
- Containers

HDPE

LDPE

ULTRA HIGH MOLECULAR WEIGHT

For constant contact wear
(dragging, rubbing, or sliding)

APPLICATIONS

- Chain guides
- Roller bushings/wheels
- Wear strips
- High-abrasive liners
- Belt slides
- Scrapers

STOCK FORMS

- Sheet
1/8" - 3" Thickness
Sizes ranging from
4' x 8' to 5' x 12'
- Roll
- Rod
- Tube

STOCK COLORS

- Natural (white)
- Black repro
- Blue



LOW DENSITY POLYETHYLENE

Non-industrial
plastic - easily
formed

NOT STOCKED

APPLICATIONS

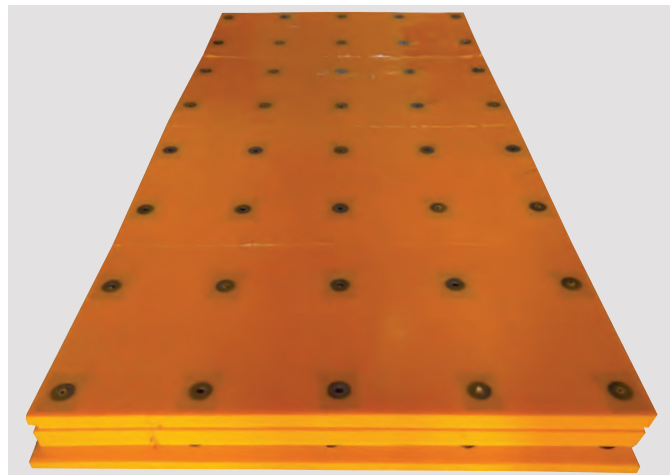
- Bags
- Light duty packaging



POLYURETHANE

- High chemical resistance
- Ether and ester based
 - Ether - less water absorption
 - Ester - not for high water contact
- Standard hardness range in ShoreA - 60 through 95
- Thicknesses from 1/8" - 1"
- Highest abrasion and impact resistance of all polymers
- Very little memory - application for polyurethane includes springs

Polyurethane is a unique material that offers the elasticity of rubber combined with the toughness and durability of metal. Polyurethane is most commonly used in the aggregate, agricultural, food processing, and industrial markets.



Wear liner



Caster wheel



Rollers

Stock Forms



Application Solutions



MACHINABLES



Custom machined plastic parts

Machinables include many types of polymers that are often used in fabrication applications. These come in bar, tube, and sheet stock form, and are machined just like metal. These types of plastics come in different forms, thicknesses, and types. Purvis Industries stocks Acetal, Delrin, Nylon, PEEK, Ultem, Torlon, Vespel, and Teflon. These types are available in sheet, rod, plate, and tubular bar.

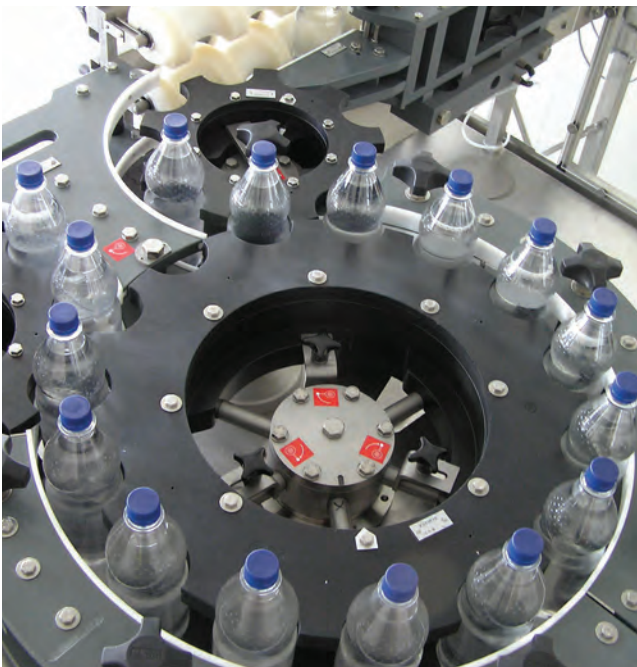
Stock Forms



Application Solutions



HIGH PERFORMANCE



Bottling line spacer & screw conveyor

High-performance plastics meet higher standards than standard or engineering plastics. This type of plastic can be used in environments with higher requirements for thermal stability, due to their ability to maintain a CST of upwards of 150 degrees Celsius. Some types of HPP can be used in temperatures above 250 degrees Celsius. High-performance plastics can have extreme durability, elasticity, hardness or malleability, depending on the type of plastic required. Certain types also have increased chemical resistance compared to standard plastics.

Stock Forms



Application Solutions



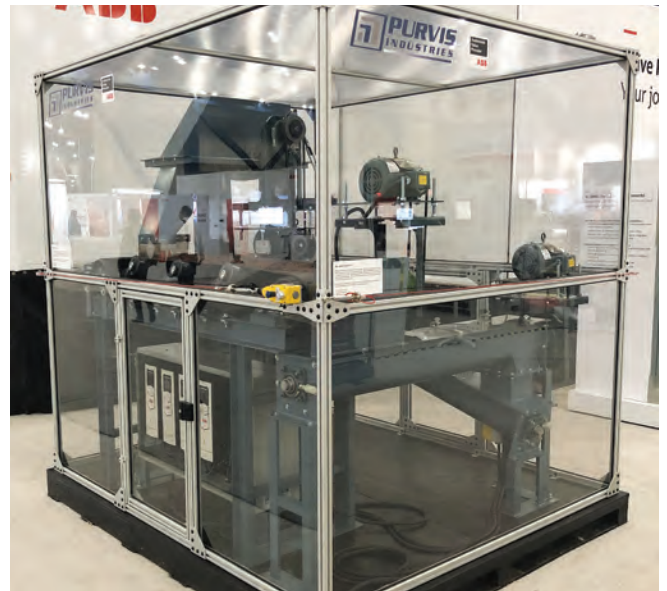
TRANSPARENT PLASTICS

- Acrylic (non-impact resistant)
- Polycarbonate (impact resistant)
- Film
- PVC (door curtain strips)
- Available options: UV-stabilized, scratch coating, tinting
- In-stock: 4' x 8' sheets, 1/8" - 1/2" thickness (both types)

Stock Forms



Application Solutions



Transparent polycarbonate sheets

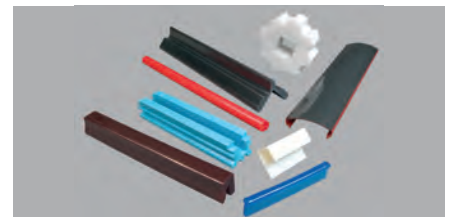
EXTRUDED PROFILES

This type of profile is found in nearly every plant and is available in custom profiles and molds. These products are commonly used in screw conveyor edge guards and chain wear strips, cable channels and roller covers.

Stock Forms



Application Solutions



Extruded plastic parts

OUR MISSION STATEMENT

We keep industry running and employees working to enrich our communities by providing superior technical products, solutions, and services.

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