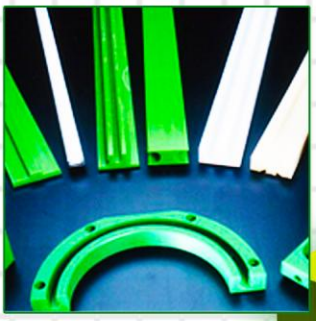
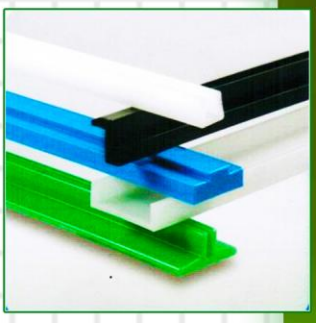
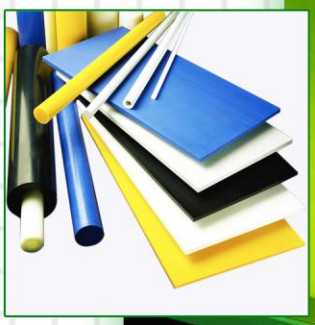
Pectra Plast

www.systemplaast.com







INTRODUCTION

SPECTRA PLAST INDIA PVT LTD is one of the largest engineering and high performance plastic finished parts producer with a tradition of quality and remains committed to engineering excellence and customer service.Our record of successsful applications with Engineering plastics is a long one, and we are ready to put this expertise to work for you.

Our fleet of equipments include Compression Moulding Presses, Ram Extruders, Screw Extruder, CNC Routers, Sintering Press, Turning Centres, Planners, Spindle Moulders, etc.

UHMWPE

ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE is the densests, toughest thermoplastic available today. No other material, not even stainless steel, stands up as well to severe abrasion, corrosion and abusive impact. Its not just tough, with a molecular weight of over 4.2 million, has slippery, frictionless surface that virtually eliminates the gradual wear that occurs with metal parts.

STANDARD SUPPLY PROGRAMME:

SHEETS:
2000 x 1000 x 10 - 200mm
3000 x 1250 x 10 - 70mm
4000 x 2000 x 10 - 70mm
6000 x 2000 x 10 - 70mm

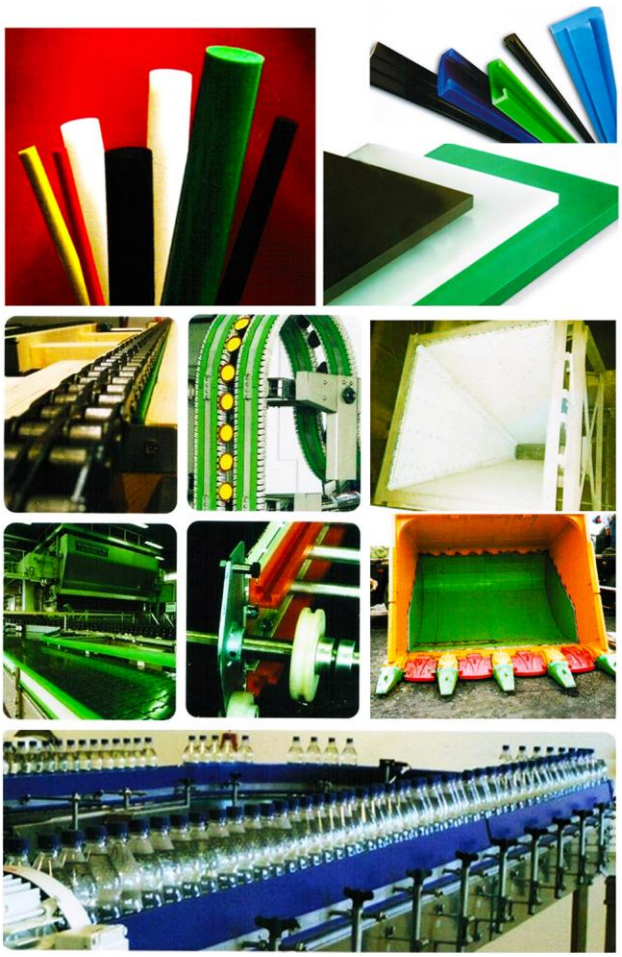
RODS:
DIA 25 – 200 x 1000mm

PROFILES:
Profiles are ram extruded as per the required shape like Z , L ,T , C ,U sections etc,

STANDARD COLOURS:
White, Green, Black

ADVANTAGES:
Food grade
High impact strength
No water absorption
Low coefficient of friction
Self-lubricating properties
Resists high dynamic stresses
High abrasion and wear resistance
Suitable for deepfreeze applications
Resistant to corrosion and chemicals
Excellent resistance to stress cracks

APPLICATIONS:
Food
Mines
Pharma
Conveyor
Automobile
Material handling
Packaging industry
General engineering
Chain and cam guidance



HDPE

HIGH DENSITY POLYETHYLENE offers excellent sliding properties and abrasion/wear resistance due to its low co-efficient of friction. HDPE is a tough and impact resistant, even at low temperature, it is light weight, easy to weld.

SHEETS:
2000 x 1000 x 1 - 100mm

STANDARD COLOURS:
White, Green, Black

RODS:
DIA 25 – 250 x 1000mm

APPLICATIONS:
Wheels
Gaskets
Bushings
Gear, Roller
Sliding profiles
Medical applications
Parts for tank
Lining for chute
Pumps and valve parts

ADVANTAGES:
Food grade
Low density
High toughness
High elongation
Chemical resistant
Low steam permeability
High chemical resistance
Low coefficient of friction
Very low water absorption
Good electrical properties
Suitable for low temperatures

PP

POLYPROPYLENE is an economical material that offers a combination of outstanding physical, chemical, mechanical, thermal and electrical properties not found in any other thermoplastic. Compared to low or high density polyethylene, it has a lower impact strength, but superior working temperature and tensile strength.

SHEETS:
2000 x 1000 x 1 - 100mm

STANDARD COLOURS:
White, Grey

RODS:
DIA 25 – 250 x 1000mm

APPLICATIONS:
Pumps
Gears
Valves
Gaskets
Separator
Pickling tanks
Clicking board
Chemical tanks
Absorption duct
Electroplating tanks

ADVANTAGES:
Light weight
High heat resistance
High tensile strength
High surface strength
Inert to most chemicals
High chemical resistance
Unique cracking resistance
Good electrical properties

CAST NYLON

CAST NYLON, available in a variety of grades, offers a combination of good mechanical properties, excellent bearing and wear characteristics, and the large size capabilities of the casting process. Its fatigue resistance, and light weight make ideal for metal relacement applications, such as bearings, gears, sheaves and sprockets. At 1/8th the weight, cast nylon is easier to handle than metals, has good wear resistance, high tensile strength and high modulus of elasticity.

SHEETS:
2500 x 1250 x 6 – 150mm

STANDARD COLOURS:
Natural, Black, Blue

RODS:
DIA 50 – 300 x 1000mm

APPLICATIONS:
Gear
Wipers
Bushes
Rollers
Bearings
Cam disks
Sprockets
Chain guides
Sliding parts
Rope pulleys
Conveyor stars

ADVANTAGES:
Low abrasion
Reduces noise
Good at dampening
Good glide characters
Good chemical stability
Low coefficient of friction
High strength and stiffness
High heat deflection temperature
High impact and notch impact strength
Good sliding properties vs. Steel and POM

POM

POLY OXY METHYLENE is a semicrystaline engineering plastic that is manufactured by the polymerisation of formaldehyde, is an excellant material for machining,has excellent dimensional stability to help intricate products remain stable and accurate.

SHEETS:
2000 x 1000 x 5 – 60mm
2000 x 620 x 8 – 100mm
1000 x 620 x 110 – 150mm

RODS:
DIA 5 – 200 x 1000mm

STANDARD COLOURS:
White & Black

ADVANTAGES:
Good machinability
Good UV-resistance
Low creep tendency
High thermal stability
High abrasion resistance
High dimensional stability
Resistant to stress cracks
Low absorption of moisture
Good electrical properties
High resistance to solvents
Outstanding sliding properties

APPLICATIONS:
Seals
Wipers
Rollers
Bearings
Housings
Sprockets
Insulators
Chain guide
Sliding rails
Gear wheels
Dough elements

PET

POLYESTER POLYETHYLENE TEREPHTHLATE (PET) is a excellent dimensionally stable engineering plastic with optimum electrical insulating properties. On exposure to heat, PET shows only low thermal expansion.

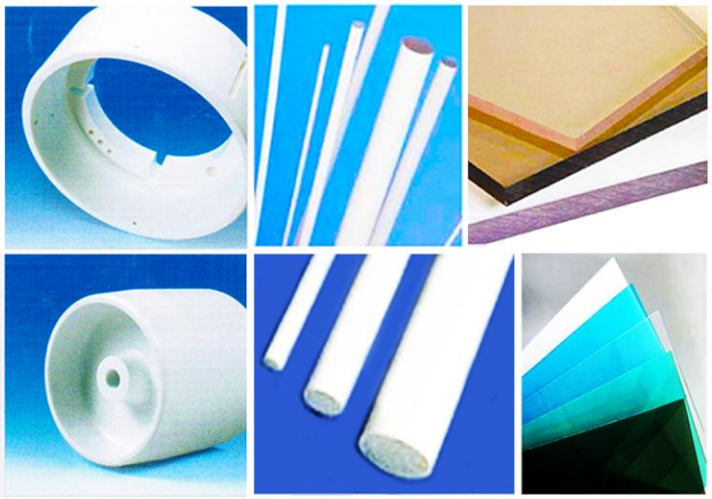
SHEETS:
3000 x 620 x 8 - 60mm
2000 x 620 x 70 - 100mm

RODS:
DIA 25 – 200 x 1000mm

APPLICATIONS:
Seals
Carriers
Bearings
Insulators
Connectors
Housings
Sliding rails
Gear wheels
Dough elements

STANDARD COLOURS:
White & Black

ADVANTAGES:
Wear resistant
Chemical resistant
Good machinability
High tensile strength
Dimensionally stable
High surface strength
Low thermal expansion
Good sliding properties
Excellent creep behavior
Good electrical properties
Very low water absorption



PEEK

POLYETHERETHERKETONE is a unique semi-crystalline, high temperature engineering thermoplastic that is an excellent material for a wide spectrum of applications where thermal, chemical, and combustion properties are critical to performance. Especially significant in this regard is PEEK's ability to retain its flexural and tensile properties at very high temperatures-in excess of 250°C (482°F).

SHEETS:
3000 x 620 x 5 - 60mm

RODS:
DIA 10 – 200 x 1000mm

APPLICATIONS:
Seals
Gears
Fittings
Aviation
Pump vanes
Valve seats
Piston rings
Wafer carriers

STANDARD COLOURS:
Natural & Black

ADVANTAGES:
Good weldability
Resistant to chemicals
Excellent sliding properties
Excellent dimensional stability
Resistant to high-energy radiation
High abrasion and wear resistant
Good electrical insulator even at high voltages
Hydrolysis resistance even above + 200ºc
Low coefficient of linear thermal expansion
Outstanding mechanical properties even at high temperatures
Optimized balance of stiffness, tensile strength and impact strength
Continuous operating temperature up to + 260ºc and briefly even up to + 300ºc

PU

POLY URETHANE is a unique material that offers the elasticity of rubber combined with toughness and durability of metal, due to broad range of hardness it allows to replace rubber, plastic and metal. In many applications PU cuts down-time and cost of parts. Urethanes have better abrasion and tear resistance than rubbers, while offering higher load bearing capacity.

SHEETS:
1000 x 1000 x 3 - 50mm

STANDARD COLOURS:
Natural, Red, Yellow

RODS:
DIA 10 – 150 x 1000mm
Tubes & Bushes available on request.

APPLICATIONS:
Seals
Gears
Rollers
Bellows
Gaskets
Bumpers
Wear strips
Diaphragms
Roller covers
Cutting Surfaces
Sandblast curtains
Machinery mounts
Metal forming pads
Sound-dampening pads
Chute and hopper liners
Prototype machined parts

ADVANTAGES:
Flex-Life
Tear resistant
Weather resistant
Electrical properties
Load bearing capacity
Heat and cold resistant
Oil and solvent resistant
Excellent noise abatement properties

PTFE

PTFE can be used to make a variety of articles having a combination of mechanical, electrical, chemical, temperature and friction-resisting properties unmatched by articles made of any other material. PTFE, usually fabricated by cold forming and sintering techniques. PTFE resins have a continuous service temperature of 260°C (500°F). PTFE provides exceptional chemical, electrical, mechanical and thermal properties for a multitude of applications. PTFE is almost totally unaffected by the chemicals.

SHEETS:
1000 x 1000 x 1 - 100mm

RODS:
DIA 10 – 200 X 1000mm
Tubes & Bushes available on request.

STANDARD COLOURS:
White

ADVANTAGES:
Very good UV resistance
Very good sliding properties
Outstanding electrical properties
High resistance to stress cracking
Suitable for use even at low temperatures
Exceptionally high resistance to chemicals

APPLICATIONS:
Seals
Tubes
Rolls
Pumps
Flanges
Housings
Insulators
Valve housings
Container linings

POLYCARBONATE

POLY CARBONATE is an amorphous engineering thermoplastic with high transparency and toughness, making it ideal for one-time-use medical devices. PC has good strength and heat deformation resistance. It is easily machined, welded and bonded, and provides good electrical insulation. PC shapes are certified as meeting the requirements of USP Class VI. It is commonly used to make medical devices.

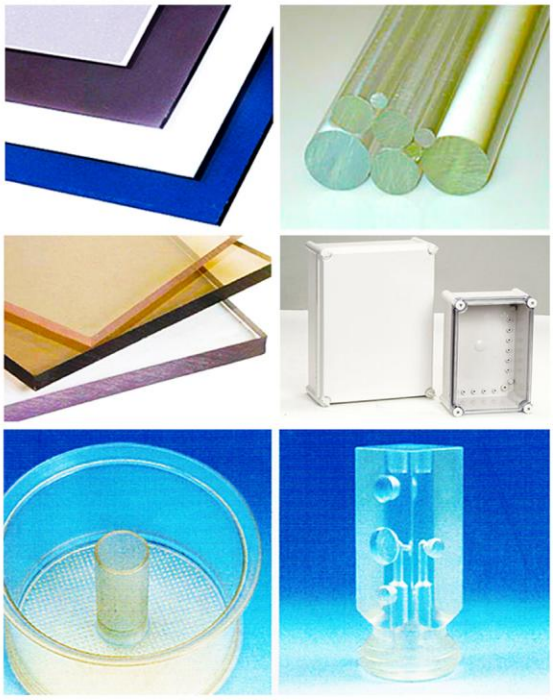
SHEETS:
3000 x 620 x 6 – 60mm
2000 x 620 x 70 – 100mm

RODS:
DIA 6 – 200 x 1000mm

STANDARD COLOURS:
Transparent

ADVANTAGES:
Transparent
Extremely high impact
High dimensional stability
High mechanical strength
Good chemical resistance
Good insulating properties
High resistance to radiation
High temperature resistance

APPLICATIONS:
Housings
Coil bodies
Caps and covers
Relay components
All types of lights
For insulating parts
Medical consumer goods



ACRYLIC

ACRYLIC'S distortion-free view enhances a product or message without distracting from it. Available in crystal clear, Acrylic has high mechanical and chemical resistance and is easy to work with.

SHEETS:
2400 x 1200 x 2 - 50mm

RODS:
DIA 10 - 150 X 1000mm

STANDARD COLOURS:
Clear, Opal Color, Opel White, Translucent, Transperent, Opeq Colours

ADVANTAGES:
Easier to bend
Shatter resistant
Great optical clarity
Strong and resilient
Good impact strength
Extremely high molecular mass
Outstanding weathering properties

APPLICATIONS:
Flood Windows
Interior Decoration
Signage Industries
Machine Windows
Rear Projection Screens

PVC

POLYVINYL CHLORIDE (PVC) is a flexible or rigid material that is chemically nonreactive. PVC has a broad range of applications, from high volume construction related products to simple electric wire insulation and coatings. Rigid PVC is easily machined, heat formed, welded, and even solvent cemented. PVC can also be machined using standard metal working tools and finished to close tolerances and finishes without great difficulty.

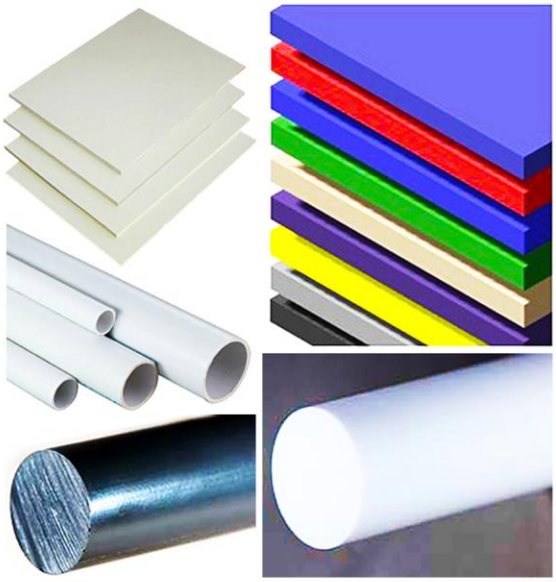
SHEETS:
2000 x 1000 x 5 - 100mm

RODS:
DIA 10 mm - 150 x 1000mm

STANDARD COLOURS:
Grey

ADVANTAGES:
High Rigidity
High Strength
High durability
High Hardness
Fire retardant
Low Water Absorption
Good Chemical Stability
Good electrical insulator
Highly resistant to degradation by UV

APPLICATIONS:
Ducting
Fume hoods
Water Tubing
Pump & Valve
Chemical Tank
Pharmaceutical
Leisure Industry
Nautical industry
Pipes and fittings
Bearing Component
Petroleum industries
Shoes and Footwear
Automotive applications



HYLAM

HYLAM is a tough and versatile engineering material for electrical and mechanical use. It is light in weight, a good electrical insulator, and resistant to water and chemicals.

SHEETS:
1200 x 1200 x 1 - 100mm

RODS:
DIA 3 - 150 x 1000mm

ADVANTAGES:
Dimensional accuracy
Mechanical strength
Heat resistance
Low absorption of water

APPLICATIONS:
Gears
Shuttles
Pulleys
Automobile couplings
Structural parts
Low voltage contact breaker
Friction plates

SPECTRA PLAST INDIA PVT. LTD.,
Factory : 31-A, Gandhi Street, Vilankurichi Post, COIMBATORE – 641035
Office : 2/108, Kanchi Ma Nagar, Vilankurichi (P.O), COIMBATORE - 641035
Ph. 0422 – 6539529, 2665529. Fax : 0422 – 2665872
E-mail : systemplast@vsnl.net sales@spectraplast.in
Web : www.systemplaast.com www.spectraplast.in www.uhmwpeindia.com