



Nylon Fasteners

Types of Polymer

Glass Fibre Reinforced Nylon (GFR PA6.6):

Same properties as PA6.6 with enhanced mechanical properties of tensile strength, fatigue strength, impact strength, friction and abrasion resistance.

Polypropylene (PP)

Polypropylene is very resistant to fatigue and complies with food standards. A major use is in piping systems where rigidity and resistance to corrosion and chemical leaching are required.

Polyethylene (PE)

Is the most widely used plastic in the world with annual production of approximately 80 million tonnes and is used extensively in packaging applications such as foam, shrink wrapping and plastic bags.

Polycarbonate (PC)

It is a very durable transparent material with high impact resistance but low scratch resistance.

Polyvinylidene Fluoride (PVDF)

Is a highly non-reactive thermoplastic fluoropolymer. It has excellent resistance to solvents and acids.

Acetal (POM)

Acetal resins are odourless, tasteless and non-toxic. Acetal is widely used in the automotive, electrical, machinery, equipment and watch making industries.

Polyamide Nylon (PA, PA6.6, 66)

Is the standard polymer used in the Hobson range of fasteners and is recognised worldwide for being the most suitable material for fasteners. It offers excellent filling qualities and hence is easily moulded even into very difficult long shapes such as threaded rod.

It provides good toughness, tensile strength and resistance to creep, particularly in the high temperature range. Nylon has excellent wear properties, low coefficient of friction and exceptional chemical resistance to aromatic hydrocarbons, greases and oils.

Nylon is a hygroscopic material which has a tendency to absorb water or moisture from the surrounding environment. The amount of absorption will depend on the environmental conditions. When water or moisture is absorbed by Nylon, it behaves like a plasticizer in plastics reducing the tensile strength, stiffness; and increasing elongation, impact strength and energy absorbing characteristics.

Outdoor weathering can be improved by the addition of carbon black. Nylon will perform well in long range service in most applications. Nylon is a translucent to off white in colour. Depending on the raw material used, there will always be slight colour differences from bright white to a very dull off white to light grey.



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