

Summary of Non-Metallic Material

UHMW-PE

Ultra High Molecular Weight Polyethylene is one of the best thermoplastics for impact and abrasion resistance. It also has a low coefficient of friction making it ideal for wearing surfaces such as wear strips and flight wear shoes. UHMW-PE is also ideal for situations where durability and dimensional stability are needed, such as sprockets, because of its lack of water absorption and high tensile strength. Along with all these properties UHMW-PE has high chemical resistance for more extreme applications.

NYLONS

Nylon has several copolymers and compounds available. Type 6 (cast) and Type 6/6 (extruded) are the most commonly used for waste water industry components. Both materials offer excellent tensile strength and wear resistance, but Type 6 offers slightly better mechanical properties. Nylon can be imbedded with oil, offering a lower coefficient of friction for bearings and wear parts, if desired.

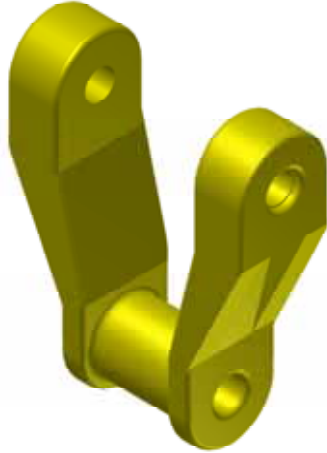
PHENOLICS

This is one of the oldest forms of plastic, consisting of two components of high pressure laminated materials. These normally are a thermosetting resin and a reinforcing material such as canvas, paper, or linen. All grades exhibit good dielectric strength, dimensional stability, and chemical resistance making them ideal for such things as circuit boards and power insulators. It can also be used in waste water applications as a liner on bearings or other frictional surfaces.

POLYURETHANE

Polyurethane is one of the most diverse plastics on the market. It is made from combining a polyol with a diisocyanate or polymeric isocyanate, because there are a wide variety of these chemicals the vast amount of combinations leads to a many different polyurethanes. The type used specifically in waste water applications is a thermoplastic called a polyurethane elastomer. Its high load bearing capacity and abrasion resistance along with its easy machinability make it ideal for sprocket hubs as well as many other things.

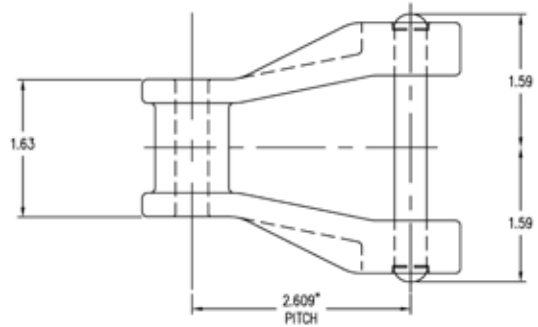
Drive Chain



Allied-Locke Industries' **NH78** drive chain is perfect for rectangular clarifier power transmission needs. The chain is made from injection molded Nylon-6 for superior corrosion resistance and strength. Links are connected with stainless steel pins that are rounded at both ends. This chain is excellent for areas where design clearances are tight. If the chain is to be used as a collector chain for tolerance reasons, F2 attachments are available so it can be connected to a flight. As a drive chain it is designed to travel with the barrel end forward. Recommended direction of travel as a conveyor chain is open end forward. It is also available in stainless steel and cast promal for applications when more torque is to be transmitted.

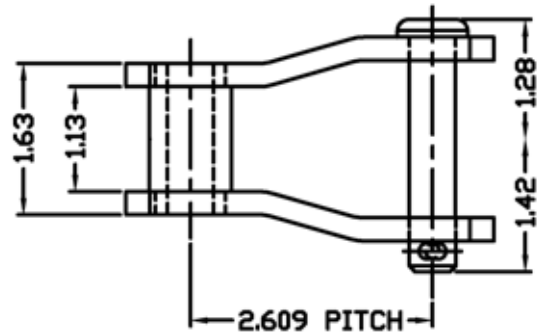
Non-Metallic Chain – NH78

Pitch in Inches	2.609
Links per 10 Feet	46
Weight per Foot in Lbs.	1.5
Average Ultimate Strength in Lbs.	3,100
Working Load in Lbs.	1,750
Pin Diameter in Inches	0.38
Maximum Allowable Sprocket Face in Inches	0.94



Stainless Steel Metallic Chain – MSS78

Pitch in Inches	2.609
Links per 10 Feet	46
Weight per Foot in Lbs.	4.2
Average Ultimate Strength in Lbs.	24,000
Working Load in Lbs.	3,300
Pin Diameter in Inches	0.500
Maximum Allowable Sprocket Face in Inches	1.05



Promal Metallic Chain – H78

Pitch in Inches	2.609
Links per 10 Feet	46
Weight per Foot in Lbs.	2.9
Average Ultimate Strength in Lbs.	14,300
Working Load in Lbs.	2,130
Pin Diameter in Inches	0.44
Maximum Allowable Sprocket Face in Inches	0.94

