

Artek Plastics Make UHMW Rod and UHMW Profiles In Wide Range of Colors

Hayden Hess June 24, 2015



Color coding of products is simple with a colored UHMW rod or UHMW profile. A large range of colors available in rod and profiles from Artek Plastics.

(Newswire.net -- June 24, 2015) Anaheim, CA -- UHMW is an easy to machine plastic. The material is light weight, having a density of .93 - .94, making it lighter than water, thus it will float in water. This lightweight plastic will replace many other raw materials that are many times its weight. This factor makes the use of UHMW a common material for replacing less wear resistant materials and eliminates the need for external lubricants like are required with metals and other materials.

UHMW rod and UHMW profiles have evolved over the last 20 years. UHMW plastic is known as one of the best wearing plastic materials and for excellent abrasion resistance. UHMW has a very long molecular chain, which yields the exceptional wear resistance, but is very light weight.

The UHMW starts as a powdered resin. The most popular ways to produce a shape from this resin is through compression molding or ram extrusion.

Compression molding of UHMW Sheet

The compression molding process starts with large metal platens which the resin is place on in a frame. Two platens are brought together under extreme pressure, and heated slowly to molding temperature. The temperatures are held until the resin is heated completely throughout the thickness of the material. The platens are then cooled slowly, over several hours, which eliminates the possibility of stress in the sheets.

The finished product is a smooth and slippery plastic sheet. Some in the industry refer to UHMW as 'The Poor Mans PTFE'. Other plastic materials in sheet and rod that are common for wear applications are: Acetal, Delrin, Nylon, PET, and PTFE. All of these materials are more expensive than the UHMW materials.

Ram Extrusion Process

The ram extrusion process is most common in producing UHMW rod or UHMW profiles or cross-sections. The same powdered resin is feed into an extrusion machine. But instead of the traditional screw process, this extruder has a large hydraulic ram that moves slowly back and forth. This ram slowly pushes the powdered resin through a long heated cylinder and then a die. This is a slow process, and each cycle of the ram may only produce a fraction of an inch of finished rod or profile.

Because of this continuous process, lengths of UHMW rod or UHMW profiles can be produced in almost any lengths. Small profiles are produced into coils, and can be many hundreds of feet long. Larger cross-sections are commonly produced in 10 foot lengths.

UHMW Extruded Profiles

Industry standard profile shapes include: C-Rail Cover with optional Aluminum Assembly, Drive Bar Cap, Dog Bone, Full & Half Round Snap-On, Bar Clip-On, J-Leg, Guide Rail Snap-On, Duravar Chain Guide Profiles, Roller Chain Profiles, and V & Round Roller Belt Profiles made to industry specifications.

Why Use Colored UHMW Rod

The standard UHMW rod and profiles are produced in Natural (translucent to white) which is normally FDA approved. The other very common standard color is Black. The black is available in Virgin Black or a reprocessed version of Black, which is made up of all left colors, over runs and start-up materials.

Artek produces UHMW under the trade name Duravar . A variety of standard colors and blends are readily available for specific requirements. Colors: gray oil filled, red, yellow, blue, green, natural, black (virgin and repro). The common standard sizes of extruded UHMW rod are in diameters from 1/4" to 8". The standard extruded rods come in 10 foot lengths, with larger diameters (7" & 8" diameters) of Duravar UHMW-PE Extruded Rod Stock being offered in custom lengths as short as 12".

Duravar Guide Rail Difference

Artek utilizes a specialized crimping process to lock the Duravar UHMW-PE Guide Rail Profile Shape permanently in place to create a solid Guide Rail that eliminates the potential for hidden contamination. Artek's specialized crimping process also locks the Duravar UHMW-PE Guide Rail Shape tightly in place to reduce the linear shrinkage problems experienced by competitive UHMW Profile Shapes in the Stainless Steel Sheaves. This specialized crimping process also creates a stronger lock between the Duravar UHMW-PE Guide Rail Shape and the 14 Gauge Stainless Steel Sheave, minimizing the gaping and perking that occurs on competitive rails when they are formed into curved shapes. Artek's Duravar Guide Rails meet the requirements set forth by FDA for food contact applications, USDA Standards for handling meat and poultry, and 3-A Sanitary Standards for contact surfaces of dairy equipment.

The complete line of Artek UHMW Rod and UHMW profiles are available from Industrial Plastic Supply. Contact them directly for more information.

About Industrial Plastic Supply, Inc

Since 1975, Industrial Plastic Supply, Inc. has provided high quality plastic sheet, rod and tube materials to industry. Over 80 plastic material types in a huge range of sizes, all in stock and ready to ship. Cut to size parts and near net shapes are a specialty. When you need quality materials, and need them now, go to Industrial Plastic Supply.

Industrial Plastic Supply, Inc

2240 S. Dupont Drive

Anaheim, CA 92806

United States

7149783520

info@iplasticsupply.com

Source: <http://newswire.net/newsroom/pr/00085795-artek-plastics-colored-uhmw-rod.html>