

### Polystone® M (UHMW-PE) Extruded Profiles



Semi-finished Thermoplastics

#### Polystone® M (UHMW-PE) extruded profiles

#### Competence in plastics Standard and Custom profiles

Developers and manufacturers of machinery used in conveyor, material handling, packaging and bottling industries heavily rely on thermoplastic components and parts. Extruded profiles play an integral part in the design and are used wherever good sliding characteristics are needed along with high wear and abrasion resistance. Röchling offers a wide selection of UHMW-PE shapes, whether you need Clip on-, Z-, L-, U-, C-, Tsquare-profiles or complex geometries — you can choose from an extensive range of extruded standard profiles or special profiles customized just for you. Our experienced team will provide comprehensive advice to help you select the right profiles for your application.

#### Competence in materials Polystone® M (UHMW-PE) extruded profiles

Polystone® M is a unique polymer with exceptional properties. As an extruded profile, this ultra-high molecular weight polyethylene solves problems of friction, wear and material flow in countless technical applications. Modern conveyor and material handling technology could not do without this high-performance material today.

### Outstanding slide characteristics

The low sliding coefficient of friction enables extruded profiles made of Polystone® M to reduce the drive energy required in conveyor systems, increase the stability of processes and allow the machinery to run at much higher speeds. Polystone® M also has extraordinary long-lasting self-lubrication properties.

## Extreme wear resistance/ long service life

Polystone® M profiles can withstand long-term stress thanks to their extremely high wear resistance. Lower friction results in lower temperature, which ultimately equates to less wear of the profile and its sliding partner.

# Continuous operating temperature from -480° to +180° Fahrenheit

Extruded profiles from Röchling are used in a large number of applications ranging from high to very low temperatures, such as high-speed package conveyors and spiral freezers.

#### Other unique properties:

- Natural and most other grades are FDA Compliant
- High impact strength
- · Very high resistance to chemicals
- · No moisture absorption
- · High resistance to cracking

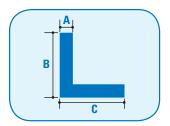
### Numerous grades and modifications:

- Natural
- Reprocessed
- Custom colors
- MDT (metal detectable)
- XDT (X-ray detectable)
- LubX® C
- LubX® CV
- Other custom formulations

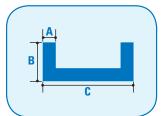


### **Extruded Shapes**

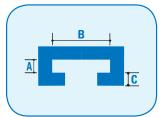
#### **Standard Profile Shapes**



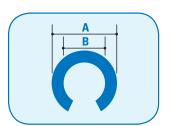
Shape			
Profile #	Α	В	C
P048	.25	1.50	1.50
P049	.25	2.00	2.00
P003	.50	3.00	3.00



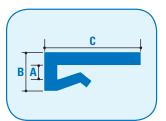
Shape			
Profile #	Α	В	C
R210	.14	.59	2.00
R256	.38	1.25	4.00
P017	.50	1.25	3.00
P020	.50	1.50	3.00



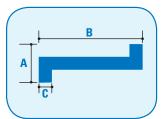
Shape				
Profile #	Α	В	C	
R289	1.04	1.04	.12	
R19	.24	2.80	.20	
P012	.25	2.00	.10	
R331	.39	1.59	.12	



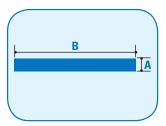
Shape			
Profile #	Α	В	
R425	.51	.31	
R95	.56	.37	
P023	.64	.47	



Shape			
Profile #	Α	В	C
R218	.16	.39	1.00
R217	.16	.39	1.57
P083	.20	.53	3.00



Shape				
Profile #	Α	В	C	
R205	.47	.90	.12	
R8	.47	1.00	.21	
R424	.59	1.00	.12	



Shape		
Profile #	Α	В
P031	.18	3.00
P032	.25	2.00
P033	.25	3.00
P041	.37	2.00

#### **Custom Profile Shapes**

Our capabilities also include assisting our customers in the design of custom, proprietary extruded shapes.

Based on drawings or sample parts, we will guide you through the design process, production capabilities, critical tolerances and first article inspection.



#### LubX® — the new benchmark for the conveyor industry

In response to the demand for better performance and sliding properties, we developed a very unique, high performance polymer, LubX® C. Designed specifically for conveying and material handling applications, LubX® C blends UHMW-PE with a proprietary blend of dry-running lubricants. This product is proven to reduce the coefficient of friction up to 75% and eliminates slip-stick in tight curves. Conveying systems equipped with LubX<sup>®</sup> C require considerably less energy even when running at higher speeds.

Our next-generation product, LubX® CV offers the ultimate in low coefficient of friction. Designed to provide solutions to higher speed and productivity demands, the result is longer wear and a longer life span of the entire system.

# Advantages of LubX® profiles:

- Extraordinary wear resistance
- Coefficient of sliding friction can be reduced by up to 75%
- Higher productivity with faster run-speeds
- Noise-reduction
- · Suitable for contact with food
- Energy-saving

Contact our experienced staff for technical assistance and details of the specific advantages of our LubX® products.





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