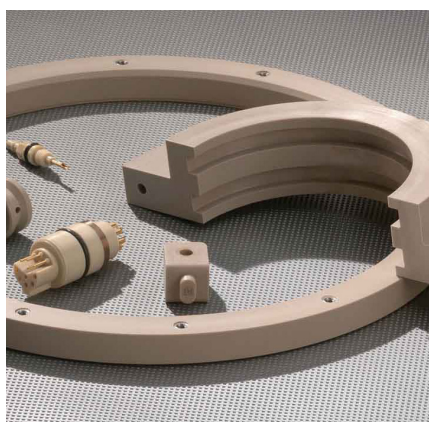


Arlon®

Machining Solutions



Machining Operations

Arlon®, a crystalline, high-temperature engineering thermoplastic, is suitable for processing by extrusion or injection molding using conventional equipment. However, shaping of molded articles or extruded bar is also possible using the same equipment and techniques normally used for machining mild steel. Equipment parameters for several typical machining operations are detailed in the accompanying table.

Guidelines for Machining Unfilled and Glass-Filled Arlon®

Turning Operations	Unfilled Arlon® 1000	Glass-Filled Arlon® 1160
Cutting Speed (ft/min)	1000	400 – 500
Feed (ins/rev)	0.016	0.008
Relief Angle	5°	5°
Top Rake Angle	6° – 12°	6° – 12°
Cutting Depth	0.30 in. (7.62 mm)	0.25 in. (6.35 mm)

Note: No coolants are required for turning operations.

Milling Operations

Unfilled grades of Arlon® require standard milling cutters. Cutter speeds of 250–350 ft/min. (7620–10668 cm/min) can be used with filled Arlon®. Speeds of 500–750 ft/min. (15240–22860 cm/min) can be used with unfilled Arlon® with plain water coolant for milling holes or deep pockets. Carbide-tipped tools are recommended for the milling of glass-filled grades.

Drilling Operations	Arlon® 1000	Arlon® 1160
Cutting Speed (ft/min)	400	250 – 400
Feed (ins/rev)	0.002 – 0.008	0.008
Lip Angle	118°	118°
Clearance Angle	12°	12°

Note: Use a plain water coolant for all drilling operations.

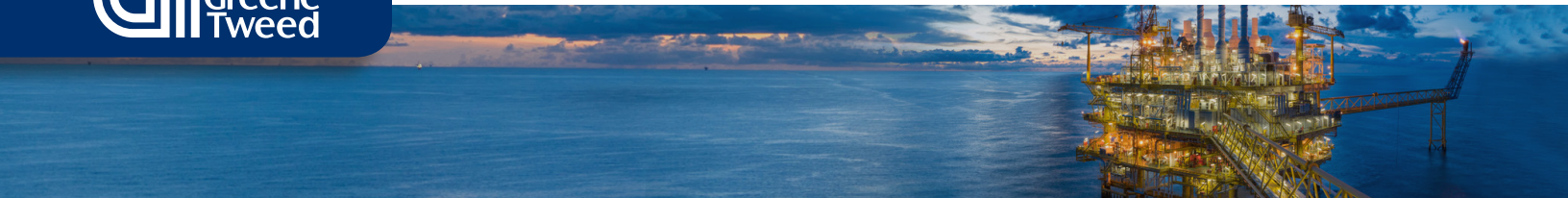
Contact Us

Greene Tweed
Houston, TX, USA

Tel: +1.281.765.4500
Fax: +1.281.821.2696

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.
© 2018, Greene Tweed all rights reserved. All trademarks are property of their respective owners.

07/18-GT DS-US-OF-089



Reaming Operations

Use spiral flute machine reamers where possible at speeds of 100–200 rpm for unfilled and glass-filled Arlon®. Greene Tweed advises using a water coolant. Arlon® can be very abrasive to high-speed drills, particularly when glass-filled grades are being machined. To minimize tool wear, use carbide-tipped tools. Work sharp corners with care to avoid the possibility of chipping. Although Arlon® is impervious to most coolants and oils, the use of these should still be restricted by nature of the final application products.

Contact Us

Greene Tweed
Houston, TX, USA

Tel: +1.281.765.4500
Fax: +1.281.821.2696

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.
© 2018, Greene Tweed all rights reserved. All trademarks are property of their respective owners.

07/18-GT DS-US-OF-089