



# DAVIS-STANDARD®

Where your ideas take shape.

## Aftermarket

## Barrels

### Overview

Davis-Standard, LLC offers a complete range of bimetallic barrels to support all extrusion applications, including those with highly abrasive and corrosive properties. All products are based on extensive testing and customer feedback, and have evolved over the years to support marketplace demands.

Our manufacturing facility in the United States is unparalleled when it comes to bimetallic barrel production, service, and support. We build bi-metallic barrels ranging in bore size from 3/4 to 20 inches (19 to 500mm) in diameter and up to 315 inches (8,000mm) long.

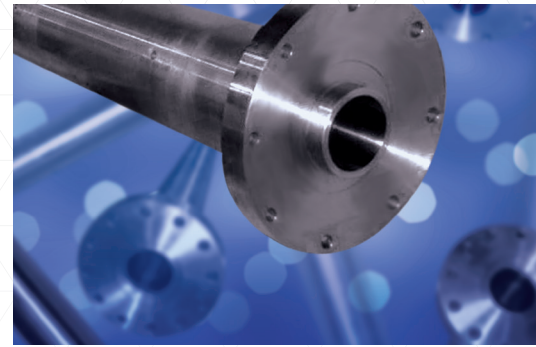
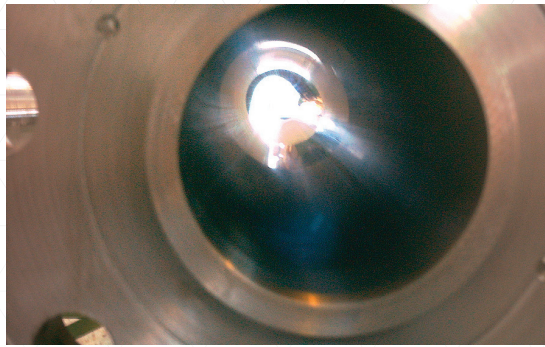
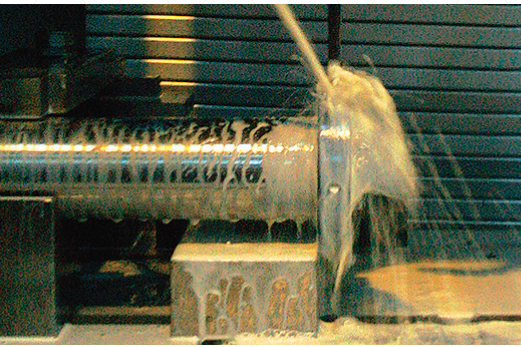
### Services

- Our in-stocking program allows us to have most common barrel sizes readily available for quick delivery.
- Installation assistance includes borescoping to ensure machine alignment for minimal screw and barrel wear.

### Features

- Our bimetallic liners provide dramatically enhanced abrasion and corrosion resistance to severe operating conditions, especially those using filled materials including fiberglass, titanium, dioxide, quartz, talc, mineral oxides and other fillers.
- New barrels for plastics and rubber applications are designed to last four to five times longer than equivalent nitrided products.
- With knowledge of virtually every extruder brand in operation today, we have the expertise, people, and production facilities to supply you with barrels anywhere in the world.

# Barrels



## Benefit

Each individual barrel is engineered to give customers the most value for their investment. These products are compatible with the majority of screw finishes including Nitriding, Chrome, Colmonoy 56 & 83, Stellite 6 & 12, and Flame Hardened 4140 to name a few.

### DS 1000

This iron-based barrel lining is for general purpose wear environments and fitted on nearly all Davis-Standard machines as a standard item.

### DS 8000

A nickel-based alloy, this product is engineered with a high percentage of tungsten carbide particles suspended within its matrix. This lining is designed for corrosion and wear resistance for applications requiring highly filled/reinforced compounds and/or extreme corrosion.

### Bimetallic Barrel Lining Design Parameters

Model	DS 1000	DS 8000
Alloy Type	Fe, Ni, Cr, B, C	Cr, Co, C, W
Hardness	58-64 RC	58-64 RC
Straightness	1-20000	1-20000
Backing Material	4140 HR	4140 HR
Utilization	Wear Resistance (Most Common)	Premium Wear & Corrosion

## Barrel Liner Recommendations

Material Type	Typical Product	Wear Environment	Recommended Barrel Liner
Unfilled Resins (Except materials listed separately)	Film, Sheet, Profiles, Pipe	Normal	DS1000
Polyethylenes LLDPE, HMWPE (Includes Blends)	Film, Sheet, etc.	Abrasive (high pressure)	DS8000
LDPE, HDPE (Conventional)	Film, Sheet, etc. Blow Molding, Profiles	Normal	DS1000
Vinyl Resins	Profiles, Tubing, Film	Low/Med Abrasive	DS1000
Vinyl Resins	Profiles, Pipe, Sheet	Abrasive Resins	DS8000
Corrosive Compounds (Materials containing corrosive flame retardants)	Compounding, Sheet, Wire and Cable Profiles	Corrosive	DS8000
Fluoropolymers	Tubing, Wire & Cable Profiles, Tubing, Film, Sheet	Corrosive	DS8000
Silicones	Tubing, Wire & Cable Profiles	Abrasives	DS8000
High-Temperature Resins	Profiles	Abrasive	DS8000
Filled/Reinforced Compounds (glass, CaCO <sub>3</sub> , etc.)	Sheet, Profiles, Compounding, Pipe	Highly Abrasive	DS8000