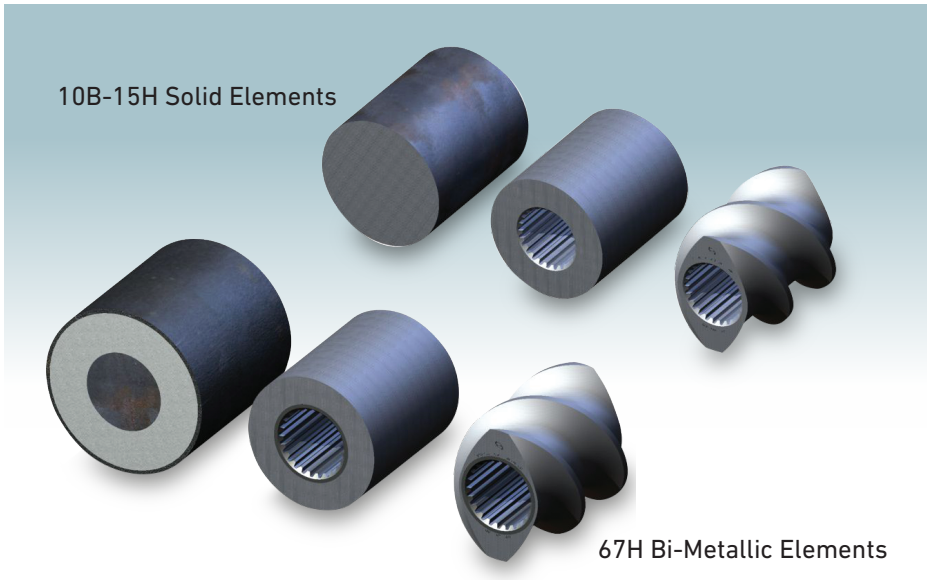
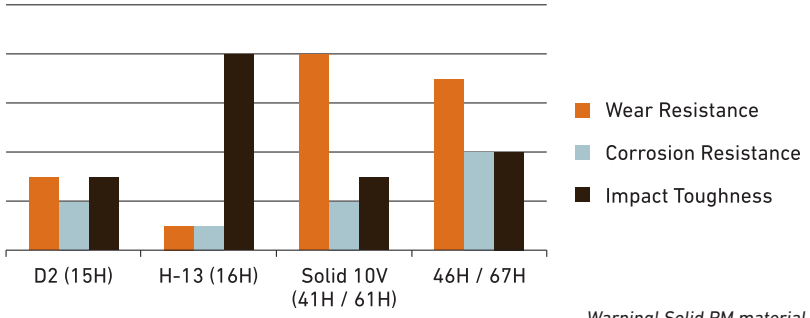
ENTEK Material Specifications for SCREW ELEMENTS

For Sizes	Material Code	Surface Treatment	Surface Hardness	Toughness (Impact Resistance)	Relative Abrasion Resistance	Relative Corrosion Resistance	Specifications	Common Applications
All	15H	Through-hardened	58 - 60 HRc	3	3	2	D2 tool steel	Low corrosion applications with more wear resistance than 10B. Through hardened so wear does not accelerate toward end of life.
All	16H	Through-hardened	46 - 49 HRc	8	1	1	H13	Used in high impact zones, feed screws (CoFs), and mixing elements (CoMs). Through hardened so wear does not accelerate toward end of life.
27mm - 43mm	41H	Through-hardened	60 - 62 HRc	3	8	2	Solid PM 10V	High wear, non- corosive applications such as highly filled color compounding. Solid 41H = 27mm - 43mm. Bi-Metallic 61H = 53mm and up.
53mm and up	61H	PM - HIP, bimetallic	60 - 62 HRc	3	8	2	Mild steel core (typ.1018), PM exterior	
27mm - 43mm	46H	Through-hardened	56 - 59 HRc	4	7	4	Solid PM	High wear, high corrosion applications such as organic fiber, aggressive volatiles, solvents/acids, in conjunction with abrasive components. Solid 46H = 27mm - 43mm. Bi-Metallic 67H = 53mm and up.
53mm and up	67H	PM - HIP, bimetallic	56 - 59 HRc	4	7	4	Mild steel core (typ. 1018), PM exterior	



Screw Material Wear Chart



Solid =	15H	16H	41H	46H
Bi-Metallic =	–	–	61H	67H

Warning! Solid PM material (no soft core) can be prone to cracking in high impact conditions.

*Please note: We have provided a range of the most economic, medium and high end grade products which are standard stock materials by ENTEK. Other materials are available upon request (not stocked). Nickel-based options exist for very high corrosion resistance requirements (not stocked).

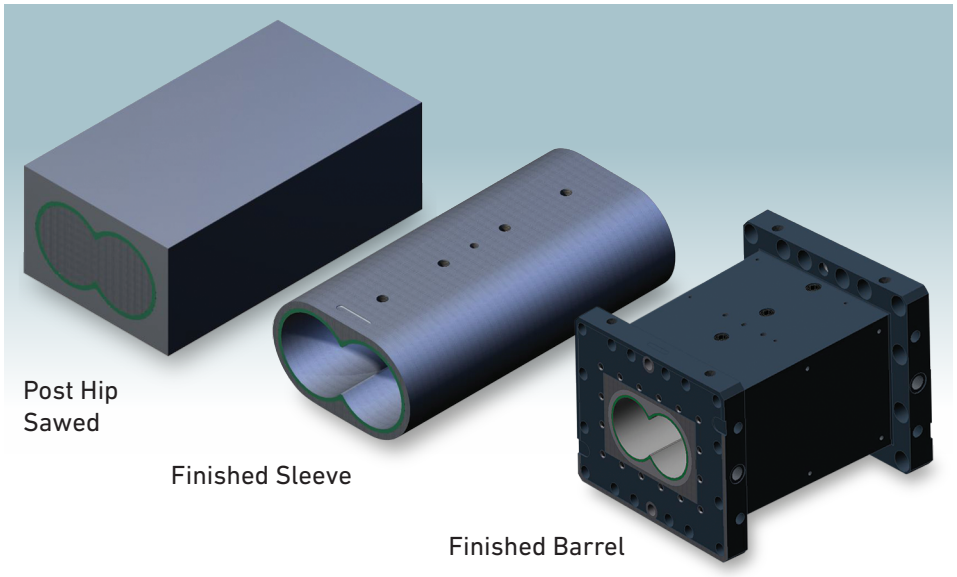
ENTEK

RAISING EXPECTATIONS. KEEPING THEM THERE.

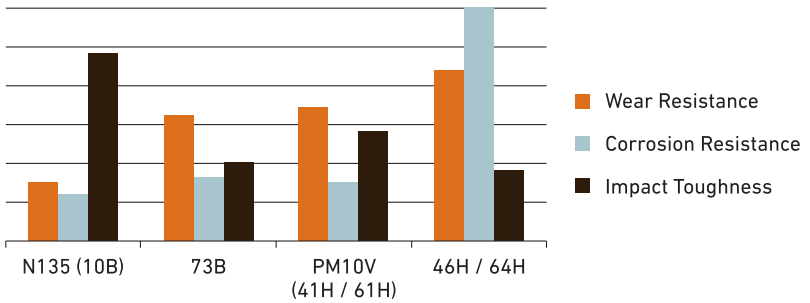
ENTEK Extruders
PO Box 39, 200 Hansard Avenue, Lebanon, Oregon, USA, 97355 | Tel: 541-259-1068 | Fax: 541-259-8018 | www.entek.com

ENTEK Material Specifications for BARREL SEGMENTS

For Sizes	Material Code	Surface Treatment	Surface Hardness	Toughness (Impact Resistance)	Abrasion Resistance	Corrosion Resistance	Specifications	Common Applications
All	10B	Nitrided	61 - 63 HRc	10	1	2	Non-sleeved, N135	Low wear, low corrosion applications such as color compounding, or where high toughness is required; feed barrels on 43mm, 73mm, and 103mm.
All	73B	Cast material - Nitrided	58 - 52 HRc	2	6	4	Sleeved	Medium wear, medium corrosion applications providing more wear and corrosion resistance than 10B.
27mm - 40mm	46H	Through-hardened	56 - 59 HRc	2	8	9	Sleeved	High wear, high corrosion applications such as abrasive mineral fill, silica, fiberglass, organic fiber and /or chemical solvents, acids. Solid 46H = 27mm -40mm. Bi-Metallic 64H = 43mm and up.
43mm and up	64H	PM - HIP	61 - 63 HRc	2	10	10	Sleeved	



Barrel Material Wear Chart



Solid =	10B	73B	41H	46H
Bi-Metallic =	–	–	61H	64H

*Please note: We have provided a range of the most economic, medium and high end grade products which are standard stock materials by ENTEK. Other materials are available upon request (not stocked). Nickel-based options exist for very high corrosion resistance requirements (not stocked).

ENTEK

RAISING EXPECTATIONS. KEEPING THEM THERE.

ENTEK Extruders
PO Box 39, 200 Hansard Avenue, Lebanon, Oregon, USA, 97355 | Tel: 541-259-1068 | Fax: 541-259-8018 | www.entek.com