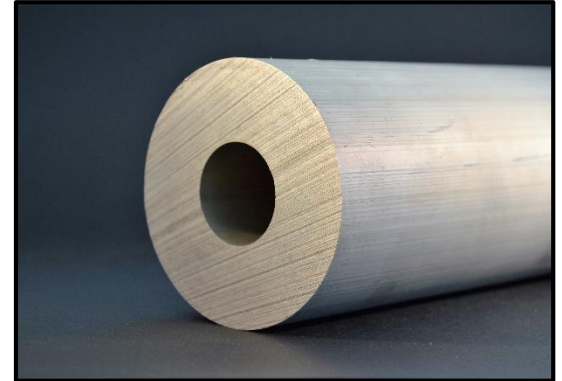




TervAlloy™

PRODUCT DESCRIPTION: DISSOLVABLE ALLOY

TervAlloy HD™ is a special **high-ductility** version of Terve's patent-pending dissolvable magnesium designed for oil and gas applications. This material is based on our TervAlloy Tax-100E product offering, and demonstrates similar dissolution rates in potassium chloride and sodium chloride brine solutions. TervAlloy HD is designed for higher ductility applications – allowing greater flexibility to meet the needs of specific customer applications.



Dissolution rates in common mediums for Tax-HD (mg/cm²•hr)

Temp (°C)	Freshwater	1% KCl	3% KCl	8% KCl	3.5% NaCl
60	0.0	5.3	11.9	20.6	--
90	0.0	21.2	34.2	42.7	39.9

Mechanical data	4.4:1 Extrusion Ratio
Ultimate tensile strength ¹ (ksi)	39.8
Yield strength ¹ (ksi)	23.5
Elongation ¹ (%)	19.0
Compressive Strength ¹ (ksi)	59.5
Shear Strength ¹ (ksi)	19.7

Physical data	
Density	1.79 g/cc

¹Longitudinal values

Mechanical Properties at Elevated Temperature

Temp (°C)	Yield Strength (ksi)	Ultimate tensile strength (ksi)	Elongation
20	21.7	38.6	15.0
50	19.5	38.8	20.9
100	17.0	33.2	41.4

Longitudinal, average value for extrusion ratio of 4.5:1 (tubulars)

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