

Tiger Shark[®] Pumps

**FLEXIBLE OPERATING RANGE AND EXTENDED RUN LIFE
FOR CHALLENGING WELL APPLICATIONS**

STANDARD AND OPTIONAL MATERIALS

Typical construction for 338, 400, 513, 538, and 675 series mixed flow pumps

Component	Standard Materials	Optional Materials
Head/Base	Carbon Steel AISI 1045/1035	Stainless Steel 410/416
Housing	Carbon Steel C45 DOM Tube	Stainless Steel 9Cr1Mo/13Cr
Impellers/Diffusers (Mixed Flow Type)	Ni-Resist Type 1 ASTM A436	Ni-Resist Type 4 ASTM A351
AR Stage Flanged Sleeves and Bushings	Tungsten Carbide K20/ASTM B276	Tungsten Carbide K20/ASTM B276
Shaft	K500 MONEL [®] UNS N05500	Inconel [®] 718/UNS N007718
Keystock/Shaft Retaining Ring	Inconel [®] 718/UNS N007718	Inconel [®] 718/UNS N007718
Compression Bearing	Ni-Resist Type 1 ASTM A436	Ni-Resist Type 4 ASTM A351
Compression Tube	Ni-Resist Type 1 ASTM A436	Stainless Steel 300 Series
Thrust Washers	Cotton Phenolic	Cotton Phenolic
Head/Diffuser/Base O-Rings	EPDM	Aflas [®]
Fasteners	K500 MONEL [®] UNS N0550	K500 MONEL [®] UNS N0550
Shipping Caps	Cast Iron F11701	Cast Iron F11701



Features	Benefits
Patented HTEM ring – high thermal expanding material	Provides secondary bushing retention method for high temperature conditions
Patented Erosion Buster® technology	Provides abrasive resistance
Patent-pending snap trap sleeve that interlocks shaft and snap ring	Provides secondary snap ring retention
Wide flow range stage designs available (see pump curves for capacities)	Allows for extended operation in dynamic wells
High-efficiency stages (see pump curves for efficiency rates)	Reduces total total cost of ownership and operation
Abrasion-resistant construction	Enables operation in highly abrasive environments
Enhanced highly reliable abrasion-resistant compression module design	Enhances run life and increases uptime performance
High-pressure housing	Allows for pressure rises up to 6,500 psi

SYSTEM BENEFITS

- » Improved pump durability in extreme operating environments and conditions
- » High-efficiency hydraulic stage designs for lower operating costs
- » Enhanced run life with selection of optimal materials for challenging well characteristics

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