

## ***There Is No Substitute For Experience!***

***EnviroSeal has a proven and growing portfolio of materials that can face the challenges in pumps and rotating process equipment. Reduced power requirements, chemical exposure, increased meantime between rebuild, dimensional stability and temperature capability all have an effect on the equipment reliability.***



### ***SpiralTrac made from Bearing Grade PEEK material saves Paper Company over \$80,000 per year***

The paper company was having issues with one of their press pit agitators. It was leaking constantly and required packing maintenance every 3-5 days due to a shaft runout deflection of up to 0.100". Average fiber and ash loss was \$112.14 per day plus maintenance materials and labor costs.

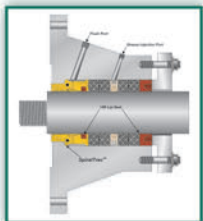


A SpiralTrac Version P made from BGE was designed to aid in stabilizing the shaft as well as protecting the packing. This was installed with a high quality packing and a live load set for the gland bolts. With 14+ months in operation this sealing solution has required no adjustments and there is zero stock leakage. The customer was so pleased they also installed the same sealing solution on the adjacent press pit agitator. Both are operating great, with a customer calculated savings of over \$80,000 per year



### ***SpiralTrac made from Heat Treated 17-4 PH material saves Mining Company an average of \$336,000 per year***

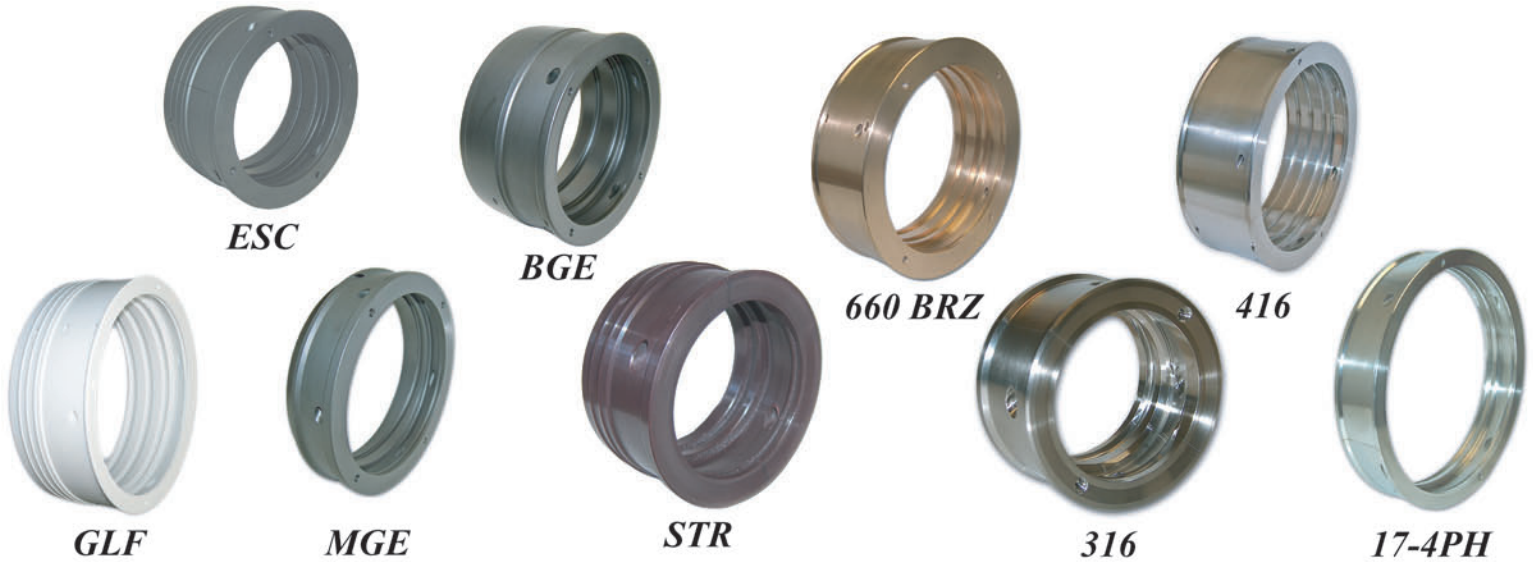
The mining company was using rental pumps to supply flush water to a Tailings Pond Slurry Pump at a cost of \$4,500 per month. The slurry pump was pumping a slurry of bitumen, tar sand, fines and recycled water. The flush water being pumped by the rental pumps was still not proven to be clean enough to keep the packing gland clear and the Slurry pump had to be repacked every four days at a cost of \$1,500.00 per repack.



A SpiralTrac Version P was manufactured from 17-4 PH material and then heat treated to harden it further and increase its wear resistance. This was coupled with an innovative sealing solution using high quality packing, split restriction bushings and a grease purge. The Tailings Pond Slurry pump is now running flush free. The rental pumps are no longer required and the stuffing box of the Slurry Pump only requires 10-15 shots of grease once per week. This amounts to a savings of \$28,000 per month for a total average savings of \$336,000 per year!



**Engineered To Your Specifications!  
Manufactured In A Variety Of Material Choices  
Aimed At Your Particular Needs And Process Specifications.**



**How do you select the best material for your specific application and design?  
Systematic selection of the best material for a given application begins with the  
material properties. Mechanical, thermal, chemical and other properties.**

ENV ID	Material	Max Temp	Application Information	Industry
GLF	Glass Filled PTFE (Shore D 59 - 63)	250 F / 121 C	Engineered "white" Polymer typically used in applications where process fluid is white.	Pulp and Paper
ESC	Carbon Graphite PTFE (Shore D 63 - 66)	250 F / 121 C	Engineered Polymer used in a wide variety of applications.	Chemical, Commercial Water, General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater
MGE	Fortron PPS (Shore D 82 - 86)	500 F / 260 C	High Performance Polymer suited for applications where intermittent shaft support is required.	Chemical, Commercial Water, General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater
BGE	Bearing Grade PEEK (Shore D 83 - 87)	500 F / 260 C	High Performance Polymer designed for applications that require maximum shaft support.	Chemical, Commercial Water, General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater
STR	Poly-Urathane (Shore D 46 - 50)	185 F / 85 C	Excellent wear properties for slurry services.	Mining, Power, Steel, Wastewater
BRZ	Bronze (Brinell 262)	n/a	Good wear properties. Material is non-sparking and will absorb moderate shaft deflection without damaging the shaft	General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater
316	316 Stainless Steel (Rockwell B 95)	n/a	Used in corrosive services.	Chemical, Commercial Water, General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater
416	416 Stainless Steel (Rockwell C 26.6)	n/a	Ideal for erosive services where chemical compatibility is not an issue.	Chemical, Commercial Water, General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater
174	17-4 Stainless Steel (Rockwell C 36)	n/a	Ultimate wear resistance for tough slurry services.	General Manufacturing, Mining, Power, Pulp & Paper, Steel, Wastewater

NOTE: Many times, it comes down to the customer's choice as to what is required for material for the SpiralTrac. The most common restrictions here would be material availability, machinability and cost. In the event that the customer is unsure of the material choice, then EnviroSeal can give guidance as to what standard materials are offered and what to use where. Product compatibility, cost, pump construction, and installation type are all to be considered when choosing what material is to be used. The above list is only a guideline for material selection and Industry applicability. Please consult EnviroSeal directly for any application that does not fall within the above guidelines.



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