

# **TBC** - High Head and High Flows for Hydraulic Transport



## Choose the GIW<sup>®</sup> Minerals TBC High Pressure Pump for Long Distance Hydraulic Transport

#### Wear Parts

- Slurry Diverter: Our latest technology dramatically increases suction liner life by reducing particle recirculation between the impeller and liner.
- Impeller: Designed for wear-resistant operation in highly abrasive slurries using our flow simulation computer program. Heavy section impeller clearing vanes actively keep solids out of nose gap.
- Replaceable Suction Liner: Facilitates pump internal inspection and minimizes wear part usage costs. Liner can be rotated at intervals to increase wear life.
- Pump shell: "Tie Bolt Construction" design of the shell allows for safety and reliability in high pressure applications.



 Lower Specific Speed Design: Large diameter impeller allows the pump to run slower for better parts wear life and gives the pump the ability to operate over a wide range of flows to meet varying flow conditions.

#### **Maintenance Friendly**

- Impeller Release Ring: Provides for easy impeller removal and is standard on all TBC pumps. The 3 piece segmented ring is mounted between shaft sleeve and shaft shoulder.
   Drastically reduces time for wet end change outs for less down time
- TBC 54 and larger pumps have a special 2-piece suction plate design for more uptime and increased production.
   Inner suction plate "Front Door" allows replacement of suction liner and impeller without removing the outer suction plate.



#### Interchangeability

To optimize wear life and flexibility, various hydraulic design and material options can be used on the same mechanical end. Easily modified for changing conditions.

#### Reliability in Design

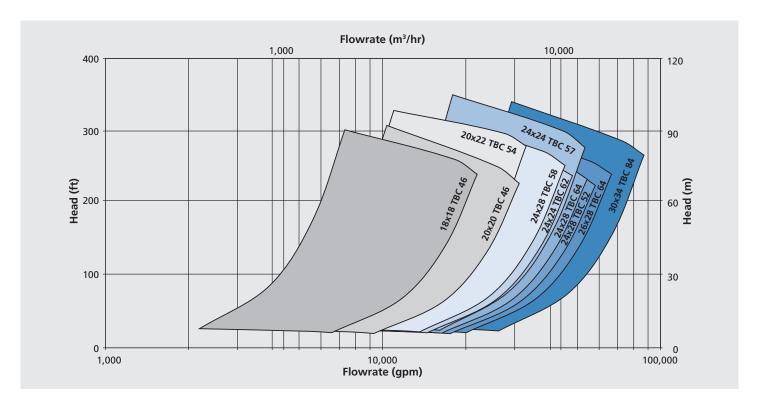
TBC pumps are constructed as horizontal end suction centrifugal pumps to give maximum resistance to solids. The pump design can withstand very high pressures. The pressure load against the shell is transferred to non-wearing side plates which are held together by large tie bolts to ensure safety. Shell and impeller hydraulics are computer designed to optimize performance and wear, providing high suction capability and large solids passage. The TBC pump is constructed of abrasion resistance white irons, ductile irons and special alloys to match duty requirements. Alternative wear liner materials such as urethane and neoprene are also available.

# TBC shaft seals Throat Bushing Minimum Dilution SpiralTrac™

Technical Data	Applications		
Discharge	18 to 30 in (450 to 760 mm)	<ul><li>Severe duties</li><li>Oil sands</li><li>Hydraulic transport</li></ul>	
Flow rates	up to 80,000 gpm (18,200 m³/h)		
Total head	up to 300 ft (90 m)	<ul> <li>Ore and mineral</li> </ul>	
Pressure rating	up to 533 psi (up to 37 bar)	tailings • Pipeline booster	
Power rating	10,000 hp (7450 kW)	stations	

### Whatever you need, it's here:

## TBC offers a wide selection range



Assembly Number	Nominal Size		Free Passage		Vane Number & Type	Nominal IMP Diameter
	in	mm	in	mm		
6853C	18x18-46	450x450-1170	4x5	104x124	5 ME	46
6845C	18x18-46	450x450-1170	4x5	104x124	5 ME	46
9824D	20x20-46	500x500-1170	6x8	152x206	4 ME	44
9823D	20x20-46	500x500-1170	5x9	133x225	4 ME	44
9830D	20x22-54	500x500-1370	8x10	203x260	4 ME	54
9831D	20x22-54	500x500-1370	5x9	122x222	5 ME	54
9832D	20x22-54	500x500-1370	9x10	222x246	3 ME	54
9839D	24x24-57	600x600-1448	6x12	152x295	4 ME	57
9836D	24x24-62	600x600-1575	12x12	292x298	3 ME	62
9840D	24x24-62	600x600-1575	12x12	292x298	3 ME	62
9566D	24x28-52	600x700-1320	7x12	183x295	4 ME	52
9528D	24x28-58	600x700-1470	6x12	162x295	4 ME	58
9551D	24x28-64	600x700-1625	8x8	210x210	5 ME	67
9549D	26x28-64	600x700-1625	8x11	210x275	5 ME	66
9841D	26x28-64	660x700-1625	9x14	235x343	5 ME	67
9842D	26x28-64	660x700-1625	14x14	343x343	5 ME	67
8818D	30x34-84	760x865-2135	12x15	294x375	5 ME	84
9119D	30x34-84	760x865-2135	14x15	343x375	5 ME	84

