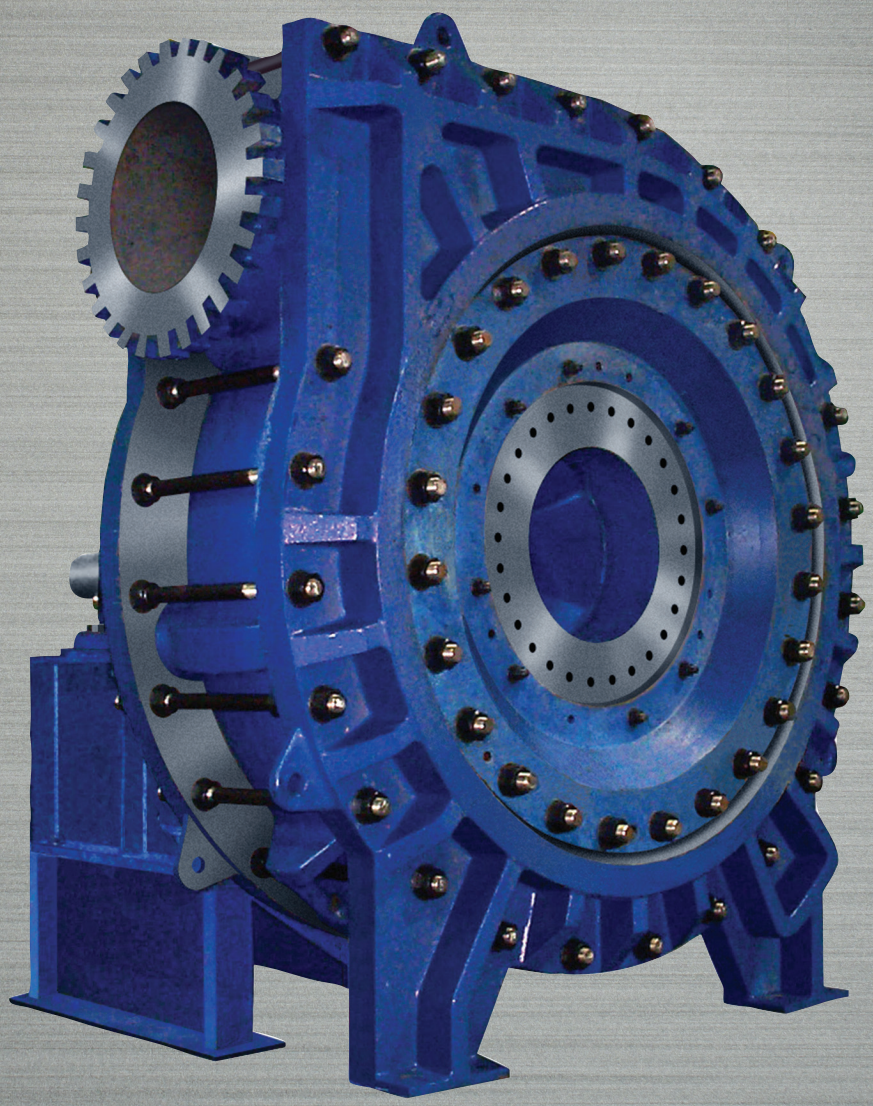
2376.024/01-US

KSB MINING

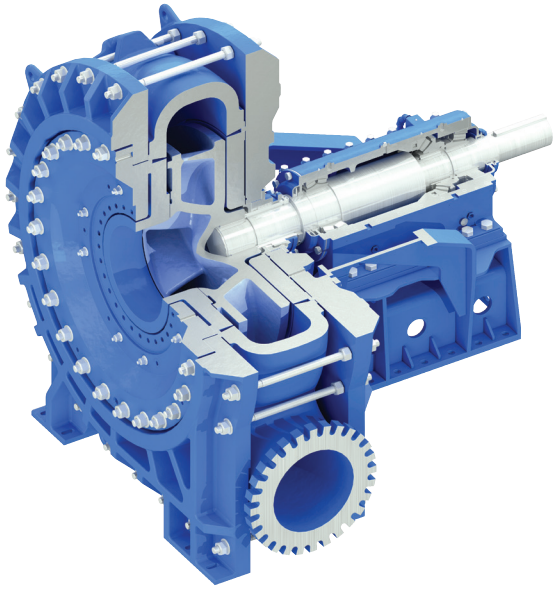
LENNTECH
WATER TREATMENT SOLUTIONS

KSB

# GIW® TBC - High Head and High Flows for Hydraulic Transport



# Choose the GIW® 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.

### Efficiency

- **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.

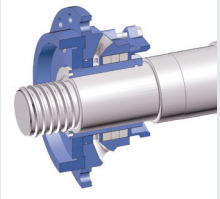
### Interchangeability

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.

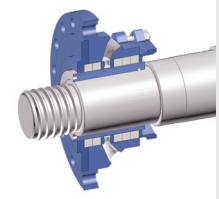
## Reliability in Design

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.

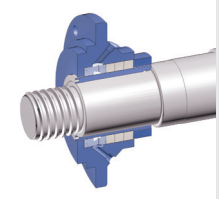
## TBC shaft seals



Throat Bushing



Minimum Dilution



SpiralTrac™

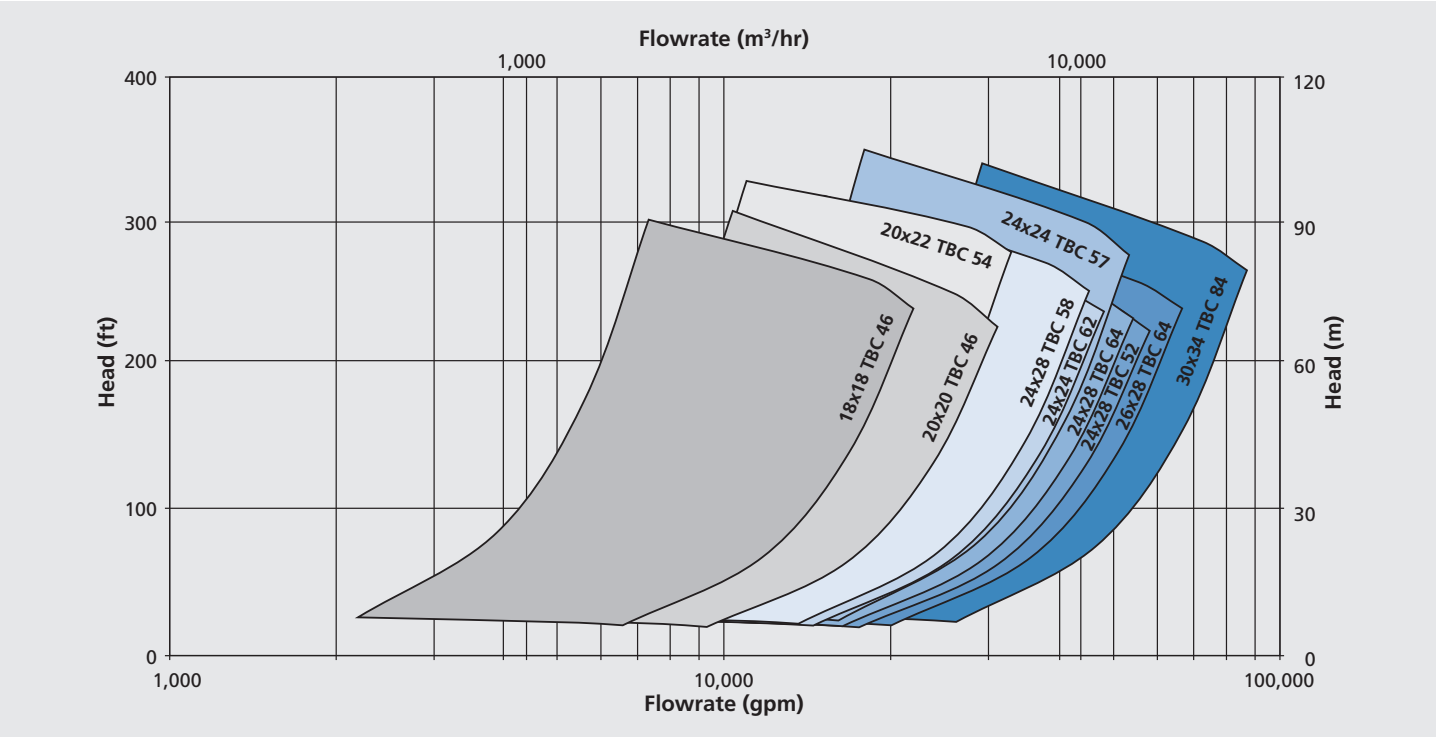
| Technical Data | |
|---|---|
| Discharge | 18 to 30 in (450 to 760 mm) |
| Flow rates | up to 80,000 gpm (18,200 $m^3/h$) |
| Total head | up to 300 ft (90 m) |
| Pressure rating | up to 533 psi (up to 37 bar) |
| Power rating | 10,000 hp (7450 kW) |

**Applications**

- Severe duties
- Oil sands
- Hydraulic transport
- Ore and mineral tailings
- Pipeline booster 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 |

LENNTECH
WATER TREATMENT SOLUTIONS
info@lenntech.com Tel. +31-152-610-900
www.lenntech.com Fax. +31-152-616-289



0000.000-US / 03.21 / © GIW Industries, Inc. 2021· Subject to technical modifications.