# TIB-PB50 Pitched Blade Impeller Mixing Tanks



The Pitch Blade Turbine Impeller is the workhorse of the mixing industry. The simple design of the pitched blade turbine impeller provides a combination of both radial and axial flow, generates high shear levels, and provides excellent mixing ability while providing easy cleanup. Because of the simple design, it is also very cost effective in large applications and high viscosity applications. While useful in most applications, this design excels in heavy mixing. The Pitch Blade Turbine Impeller can be fabricated to fit any shaft diameter and comes standard in 316 Stainless Steel, but 304 Stainless Steel, Aluminum, and Carbon Steel versions are also available. Various surface finishes are available.



### Applications :

• Blending, solid suspension or draw down, gas inducement, and heat transfer.

#### Advantages :

- Constructions with two to eight blades are used (three and four being most common).
- Combined axial and radial flows are achieved.
  Especially effective for heat exchange with vessel walls or internal coil.
- These impellers can be used in either down-pumping or up-pumping

#### Technical features :

- · Moderate shear and moderate flow
- Moderate viscosity mixing up to 10,000 cps High intensity mixing.
- Axial flow design suitable for wide changes in process viscosity.
- Good for blending and solids suspension where elevated shear is needed.
- Able to handle higher gas rates over high efficiency designs.

# TANK SERIES TIB-PB50 SPECIFICATION

Tank Volume	
- Maximum Operating Volume	50 L
- Minimum Operating Volume	20 L
Dimension	
- Tank Diameter x High (mm.)	430 x 450 mm.
- Total height from floor to gearmotors (mm.)	1180 mm.
Agitator	
- Pitched Blade Impeller	Yes
- Number of Stages	1
- Number of Blades (For more number of blade depend on your application.)	2
Temperature Limit	
- Maximum Operating Temperature	150 °C



	Quantity (Pcs.)	Size
	Quantity (1 03.)	
- Ball Valve Inlet	×1	1"
- Ball Valve Outlet	1	1 1/2"
- Ball Valve Drain	<u>2</u>	2
- Temperature Guage	Ξ.	12
- Pressure Guage	2	12
- Pressure Reluid Valve	Ξ.	12
Electric Control Box		
- Electric Control Box		Yes
- VCT 4x2.5 Wiring from Control Box to Gearmotors		10 m.
- Digital Variable Frequency Drive (VFD)		Yes

\*\*\* For the other capacity can be specific upon request.