BBA Pumps

In this overview you will find information on the specific properties of the most widely used BBA Pumps impeller models. The major focus is directed at the balance between the free passage, efficiency, maximum head, resistance to wear and performance when pumping air.

Enclosed impeller

The flow enters through the eye of the impeller and is then channeled in a radial motion. Enclosed impellers have a low NPSH requirement and provide efficient flow and high head. This impeller is best used for pumping clear water and contaminated water. Typical applications are high head and mine dewatering.

Solids handling(Ø)	● ●
Fibrous material	●
Pump efficiency (%)	● ● ● ●
Head (mwc)	● ● ● ● ●
Air mixture (%)	● ● ●
Wear resistance	● ●

Semi-open impeller

The back of the impeller is closed and the front of the vanes rotate against a wear plate with a small clearance. The space between the vanes determines the maximum free passage. This impeller is the best choice for pumping dirty water and wastewater. Typical application is the all-round rental pump for versatile use.

Solids handling(Ø)	● ● ●
Fibrous material	●
Pump efficiency (%)	● ● ●
Head (mwc)	● ● ● ●
Air mixture (%)	● ● ● ●
Wear resistance	● ● ●

Channel impeller

The impeller has one channel and a wide blade, creating a large free passage. A wear ring at the suction opening ensures efficiency, but is less suitable for abrasive liquids. Best for pumping sewage and wastewater, this impeller is typically found in sewer bypassing and temporary pumping on wastewater treatment plants.

Solids handling (Ø)	● ● ●
Fibrous material	● ● ●
Pump efficiency (%)	● ● ●
Head (mwc)	● ●
Air mixture (%)	●
Wear resistance	● ●

Screw impeller

This special designed closed screw impeller (corkscrew) is a real waste warrior. Even at higher speed, or with pumping air bubbles, the pump runs vibration-free. The screw impeller is the best choice for sewer bypass jobs. Pumping untreated raw sewage water with long-fibrous materials without clogging.

Solids handling (Ø)	● ● ● ●
Fibrous material	● ● ●
Pump efficiency (%)	● ● ●
Head (mwc)	● ● ● ●
Air mixture (%)	● ● ● ●
Wear resistance	● ●