

Chemineer™ WSE-3 High Efficiency Side Entry Impeller



Chemineer’s impeller for side entry applications offers greatly improved efficiency and unparalleled process performance.

Side entry agitators typically run faster and draw more power than their top entry counterparts. We have developed the WSE-3 specifically for side entry applications. Its advanced geometry results in decreased operational cost, lower investment costs and proven process performance. The WSE-3 impeller is the most efficient side entry impeller available.

More Efficient

More efficient means equipment can meet process requirements at lower power or with lower initial investment costs. It has been highly difficult to find an impeller that offers both lower equipment costs and lower power requirements. Both items are very important in today’s competitive environment; with the WSE-3 they are no longer mutually exclusive. Depending on the impeller configuration, using the WSE-3 can lower power draw between 15% and 40% from existing impellers. This means smaller, less expensive equipment with savings averaging 20% – 30% over machines using existing technology. Installed equipment can benefit from this technology with fast and easy retrofits of operating impellers.

WSE-3 Features

The WSE-3 impeller offers many advantages in demanding services like Pulp and Paper and Flue Gas Desulfurization (FGD). With the increasing energy costs, the lower power draw to accomplish the process requirements is very important, especially in side entry applications where the power draw can be significant. Lower tip speeds result in considerably lower abrasion rates. The lower abrasion rates can reduce or eliminate the need for costly coatings, elastomeric coverings or harder metals. Impeller diameters are available from 12" to over 100". Standard materials of construction are carbon steel or 316/316L stainless steel. High alloys or coverings are available for the most severe environments.

Performance Comparison

Existing Impeller				WSE-3			
Power	Agitator Speed	Impeller Diameter	Machine Shaft Size	Power	Agitator Speed	Impeller Diameter	Machine Shaft Size
200 HP	235 rpm	57"	6"	150 HP	235 rpm	49"	5"
75 HP	300 rpm	42"	4"	125 HP	175 rpm	57"	5"
				60 HP	300 rpm	36"	3"
				50 HP	230 rpm	42"	3"

For each of the two existing impeller cases, there are two WSE-3 variations. The first variation is at constant speed and the second is at constant impeller diameter. Lower power draw and machine size are common when using the WSE-3.

