Chemineer™ RL-3 Ragless Impeller

Superior Performance
The RL-3 ragless impeller is specifically engineered to prevent fibrous material build up. This is accomplished through several key product design features that eliminate any edges or protrusions that would allow fibrous material to agglomerate. Some of the design features include:
• A sweeping leading edge on the impeller blades
• A swept back connection to the central hub
• Welded design or bolted design with non-protruding fasteners
• High axial flow RL-3 impeller for superior mixing performance in blending and solids suspension applications

The RL-3 ragless impeller eliminates expensive maintenance and downtime caused by fibrous material build up on the agitator’s impeller.

Safe and Reliable Operation
The RL-3 impeller eliminates the need to frequently raise the shaft and impeller from the fluid in order to remove the fibrous material build up, providing significant benefits that include:
• Increased safety by eliminating frequent handling of the agitator by maintenance personnel
• Reduction in downtime and maintenance costs
• Elimination of fibrous material handling and disposal
• Strong central hub and sturdy blades designed to handle the loads related to material and flow impingement to ensure reliable operation and long service life

Minimal Maintenance and Fast Replacement
• The only maintenance required on the RL-3 impeller is a visual inspection during normal shutdown periods, saving time and reducing maintenance costs
• Existing agitators with impellers that are prone to ragging can be quickly and easily retrofitted with the RL-3 impeller using simple hub to shaft connections
• New installations using the RL-3 impeller can be completed quickly and easily

Application Versatility
• The RL-3 impeller is available in a wide range of sizes for quick and easy scaling to match process requirements
• A variety of materials of construction and impeller coverings are available to ensure application versatility
• High axial flow allows impeller placement higher in the basin and maintains complete basin control

Troubleshooting and Replacement Parts Assistance
• Application engineers are available to review your application requirements and recommend the proper RL-3 impeller to improve overall mixing performance
• Factory trained technicians are available for onsite troubleshooting and service of all your agitators to meet your needs
• Impeller sizing and retrofitting support services are available to ensure optimal performance and economical total cost of ownership

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Prevents Build Up

In blending and solids suspension applications where the fluid contains fibrous material, the resulting build up on the agitator’s impeller can deteriorate performance, increase energy costs and even damage the agitator seals and gearbox causing costly repair. The RL-3 ragless impeller prevents build up to eliminate maintenance costs and downtime, increase performance and extend the service life of the agitator.

Product Specifications

Sizes Available

• Impeller sizes range from lab scale to over 200” in diameter

Material Selection

• Carbon steel
• Stainless steel
• High alloy material
• Rubber, elastomeric or FRP impeller coverings available

Configuration Options

• Hub welded to shaft with welded blades
• Hub keyed to shaft with blades welded to hub
• Available in all bolted construction

Highest Overall Rating

During an independent study of ragless impeller technology, the RL-3 was rated the highest overall when compared against competitors for total suspended solids (TSS), visual ragging, number of installations and value.

HE-3 impeller ragging after eight weeks in operation at a Florida wastewater treatment facility

Fibrous build up of a competitive ragless impeller