Impeller Types

All pumps are designed for counter-clockwise operation. The liquid enters the eye (or face) of the impeller and is moved out of the impeller and into the case.

All impellers are balanced to .01 oz. inches per pound on a microcomputer-based balancer with a repeatability of ± .002 oz. inches. This precision balancing assures maximum motor bearing and mechanical seal life, as well as smooth and quiet operation.

#15 iron keyed impeller

View of rear hub and vane

View of impeller eye

Enclosed impellers *are best suited for clear liquids and are designed for high efficiency, quiet operation and long life. The tight tolerance, approximately .015, between the impeller eye and the case or wear ring provides maximum efficiency. While enclosed impellers can pass some suspended solids, they are limited to the "max sphere" diameter listed on the performance curve. In addition, some suspended solids can break down in the high velocity motion found inside the impeller and get* caught on the impeller vanes. *This build up results in reduced efficiency and can ultimately plug the impeller.*

Unlike the enclosed impellers that have a tight fit between the impeller eye and case, ***semi-open impellers*** *run the complete diameter of the impeller vane, approximately .015 to .020, from the machined case. This gap provides better removal of suspended solids and self-cleaning of the impeller. Shims can be inserted behind the impeller to renew efficiency as the impeller wears.*

#25 bronze keyed impeller

View of rear hub

View of impeller vanes

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