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Sommario/riassunto

"The world pump industry for manufacturing and process plants is a multi-billion dollar business, and centrifugal pumps make up approximately 80% of this total. They are used in many different industries such as the oil industry, water industry, chemical industry, food industry, pharmaceutical industry, textile industry, metal treating industry, and electronic component manufacturing industry to name some of the more important ones. The worldwide demand for fluid handling pumps is projected to increase 5.6 percent per year to \$84.4 billion in 2022. Developing areas will see the fastest growth, especially in China, with the Asia/Pacific region remaining the largest market, accounting for almost half of global pump demand. Centrifugal pumps will remain the largest pump type, though diaphragm pumps and turbine pumps will post rapid gains. Utilities will exhibit the fastest growth among major pump markets Centrifugal Pumps are machines that lift, transfer, or otherwise move fluid from one place to another. They are usually configured to use the rotational (kinetic) energy from an impeller to impart motion to a fluid. The impeller is located on a shaft; together, shaft and impeller(s) make up the rotor. This rotor is surrounded by a casing; located in this casing are one or more stationary passageways that direct the fluid to a discharge nozzle. Impeller and casing are the main components of the hydraulic assembly; the region or envelope containing bearings and seals are called the mechanical as-sembly or power end"--
