

What does an engine drive pump do?

The majority of gasoline powered pumps sold in North America are referred to as general purpose, utility, or transfer. This is simply moving liquid from one point to another. Pump construction can be a variety of materials. Preference is given to light weight and portability.

Types of engine drive pumps

Agricultural

Pumps designed to handle today's agricultural chemicals (fertilizer, herbicides, and pesticides) would fall into this category. Construction is either a poly derivative or cast iron. Aluminum is usually not used as it does not provide strong chemical resistance. Solids handling is not required. The seal elastomer is usually EPDM or fluorelastomer.

Semi-Trash

A pump is considered semi-trash if it has some semi-solids handling capabilities. The pump impeller is usually semi-open vane clearance to pass a spherical solid 1/2" to 3/4" in diameter. The mechanical seal faces are usually of a hard material like silicon carbide. This is for abrasion resistance. Typical application is drainage, construction dewatering, etc.

Trash

Similar in application to the above except that solids handling is typically 50% of suction port size. (Usually greater than 1" solids) and most manufacturers allow for a removable casing to allow access to internal hydraulics for cleaning and repair.

Category	Construction	Application Examples
General Purpose	Poly Aluminum Cast Iron	Water Transfer Flood Control
Agricultural	Poly Aluminum Cast Iron	Chemical Transfer (Fertilizer) Nurse Trailer
Solids Handling	Aluminum Cast Iron	Construction Semi-Trash Trash
High Pressure	Aluminum Cast Iron	Irrigation Fire Fighting