FIRE PUMPS

A fire pump is a device that increases the pressure of an available water supply. It can be considered part of the water supply for a fire protection system. It may either boost available pressure or generate all pressure for a given water supply. It is important to recognize that a fire pump cannot create water and increase the water supply’s overall quantity (volume). As alluded to earlier, what a fire pump does is increase the pressure of water at a specific flow.

A fire pump is most often utilized in conjunction with a municipal water supply. Where a public main is not available a stored water supply (i.e. tank) can be combined with a fire pump to supply the fire protection system. Other sources of water supplies may be ponds, lakes, rivers or wells.

A fire pump may powered by an electric motor or diesel engine. On very rare occasions a fire pump is powered by a steam turbine.

Types of fire pumps include: horizontal split case, vertical split case, vertical inline, vertical turbine, and end suction.

The National Fire Protection Association’s (NFPA) standard that governs fire pump installations is NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection.