TD Dense Phase Pump for pneumatic conveying systems

**Pneumatic Conveying**
The pneumatic conveying process, enclosed and dustfree, ensures material transfer complies with stringent COSHH and other international regulations for industry and is less harmful to the environment than traditional mechanical methods.

**The original Dome Valve®**
Central to the operating efficiency of all Schenck Process pneumatic conveying systems, or as a stand alone valve is the original Dome Valve® which incorporates a unique and highly reliable inflatable sealing arrangement. The original Dome Valve® was developed by Clyde Materials Handling* in 1974 for use with pneumatic conveying systems and as a stand alone product.

**Dense Phase Conveying Technology**
The DensPhase system capitalises on all the assets of pneumatic conveying: simplicity, reliability and flexibility. Ensuring minimal breakage of friable products, the extensive range of DensPhase machines shares standard components, individually tailored to handle specific requirements of a wide range of materials.

**TD Pump**
The Schenck Process DensPhase system is a simple, effective and highly reliable method of conveying material from a single collection point to either single or multiple reception hoppers.

The DensPhase TD Pump is a batch transfer vessel similar in concept to the Standard Dense Phase Pump with improved capability for large tonnages and longer distance conveying with fine fluidisable materials. Throughput rates increased to 250t/h and distances up to 1500 metres. Optimum conveying over 600m.

Systems are capable of operating at temperatures up to 480ºC. The TD Pump has the lowest air consumption in the range.

The inherent simplicity of the Schenck Process Dome Valve® ensures system reliability and low maintenance operation. The TD Pump is designed to minimise material degradation by utilising the slow transfer velocities of dense phase conveying.

Typical applications for TD Dense Phase Pump include:
- Iron and Steel industry for the transfer of pulverised coal, coke, limestone and carbon materials
- Cement industry for the transfer of raw meal, fly ash, pulverised coal, gypsum and lime materials
- Aluminium industry for the transfer of cryolite material

*Clyde Materials Handling Ltd was purchased by Schenck Process in 2011 and the original Dome Valve® is part of Schenck Process technologies*
Standard Fabrication
DensPhase TD Pump vessel assemblies supplied complete with inlet & outlet Dome Valves, electropneumatic controls and air supply piping, strainer, pressure regulation and control equipment pre-piped and pre-wired ready for connection to isolated air and electric supplies.

- Vessels are manufactured to BS5500 Category 3 for a working pressure of 7 barg standard. Other specifications and pressures available.
- Vessels are free standing, special foundations are not required.
- Optional isolating valve and adapter are shown for reference only.
- Final working dimensions to be confirmed by certified drawings.
### Product Range

**TD Pumps**

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Custom applications available on request