

MLB Engineers, Inc.

Required Data for Compressor Torsional Analysis:

Compressor

Geometry (provide for each throw):

- Cylinder Bore
- Piston Stroke Length
- Connecting Rod Length
- Connecting Rod Diameter
- Reciprocating Weight*
- H.E. and C.E. total clearance Percentage/Volume

Gas Conditions:

- Suction, Discharge and Stage Pressures
- Ratio of Specific Heat

Torque or Power Demand by each cylinder

(if not available, required torque will be approximately calculated)

**(generally 1/3 weight of the connecting rod + piston & rod assembly + crosshead assembly + balance nut)*

Mass - Elastic data of the Crankshaft:

- Tabulated inertia and stiffness values
- Diameter of the Crank Shaft
- Shaft Material Specifications

Electric Motor:

- Rotor Moment of Inertia
- Shaft Drawing with dimensions
- Rated RPM
- Rated Power
- Shaft Material Specifications

Coupling:

- Coupling Mass Elastic data (Moment of Inertia and Torsional Stiffness) or manufacturer name and model number.