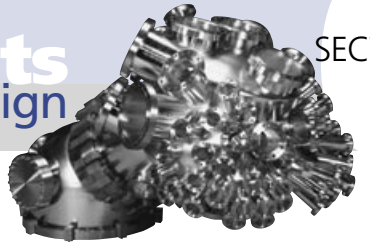


HOW TO SPECIFY CHAMBER PORTS

When specifying chamber ports, first dimension the main chamber body. Secondly, dimension levels with one or more targets from one end of the chamber. This provides the machinist and inspector with a common reference point for all levels. Once targets are established either on the centerline of the chamber or referenced from the centerline at each level, ports may be completely described with the following information.

Flange Type
Specify the flange type and size for each port. You must also specify rotatable or non-rotatable, and whether tapped flanges are required.

Port Tube OD
Port tube diameter and wall thickness

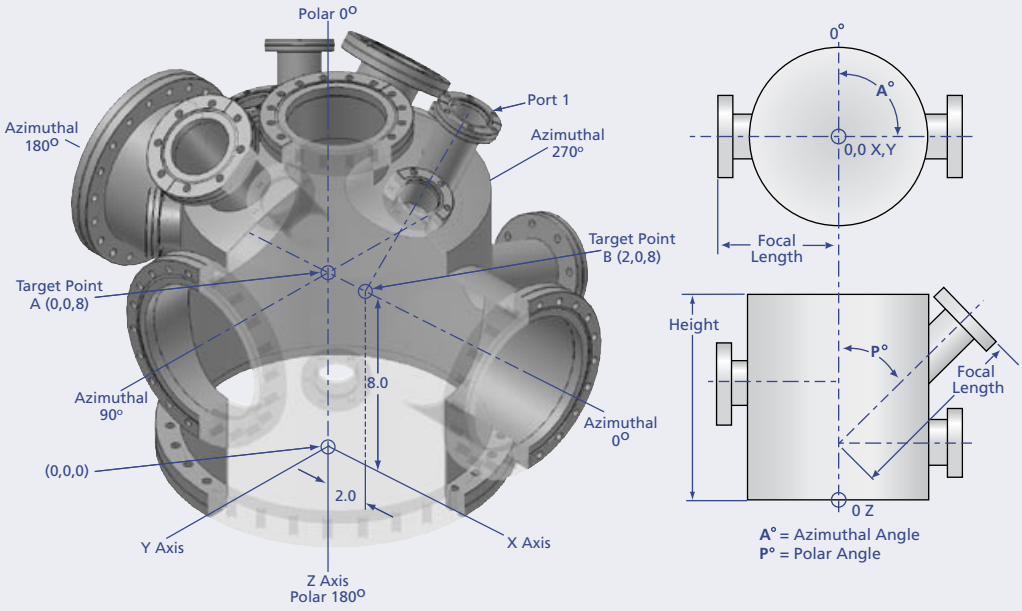
Target Point
Define using X,Y,Z coordinates.

Focal Length
The focal length, or distance from the flange face to the target.

Azimuthal Angle
Establish 0° on one of the axes when viewing the chamber along its centerline. Indicate the clockwise degree of angle from 0° to the centerline of the port.

Polar Angle
The polar angle between the chamber's vertical axis and the port centerline.

Instrument Type
Define the instrument to be attached to each port.



Note: *0,0,0 (X,Y,Z) is typically the center point of the base flange face.*

Vacuum Chamber Port Configuration Worksheet

PORT NUMBER	FLANGE TYPE	TUBE OD	TARGET POINT	FOCAL LENGTH	AZIMUTHAL ANGLE	POLAR ANGLE	INSTRUMENT TYPE