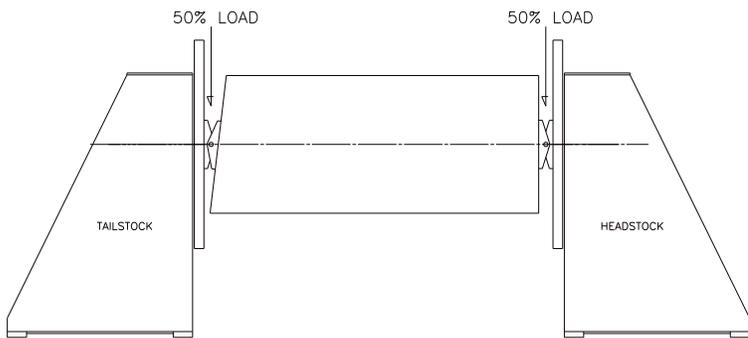


How to Size Head & Tailstocks

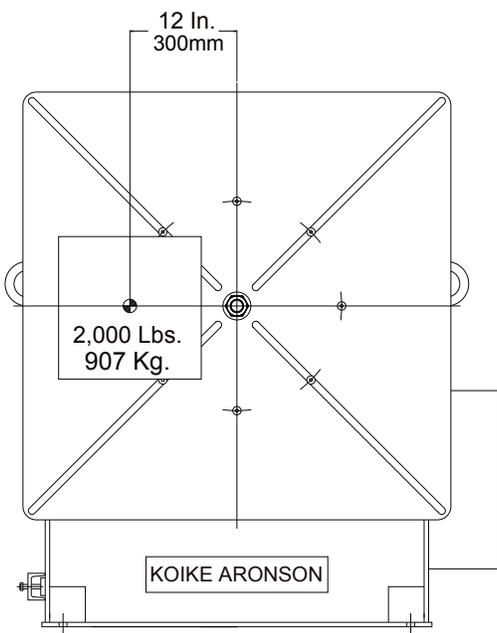
Weight Capacity

The basic Head and Tailstock configuration includes one (1) Powered rotation Headstock and a companion Non Powered Tailstock. The Headstock supports one end of the work-piece and imparts rotational motion to the work. The Tailstock merely supports the other end of the work-piece as it rotates. The first factor in selecting a HTS is to determine the maximum weight capacity required. The load should be evenly distributed between the head and tailstock; if either supports more than half of the load, (determined on CG location along the rotational centerline), an increased capacity model may be required.



Rotation Torque Load:

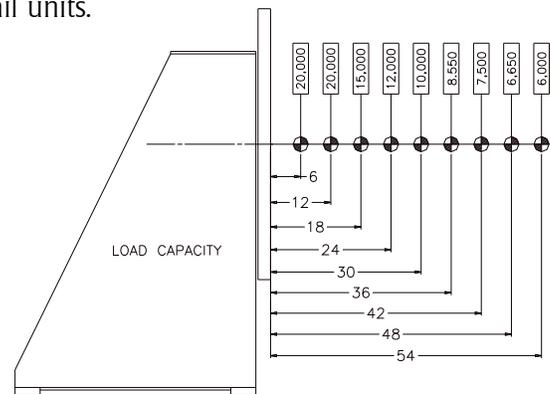
To find your weldments' Rotation Torque Load, multiply the weldment weight in Pounds by the distance in inches that the Center-of-Gravity (CG) will be from the center of the table. This measurement is taken parallel to the table surface. Do not exceed the maximum load torque shown in the "rotation" column.



Overhung Loads:

Head and tail units are rated for overhanging loads. Determine the weight and how far off of the table surface the CG (Center-of-Gravity) of the work-piece will be located, and then select the proper model Positioner.

When head and tail units are used together, the load weight is shared by both units. As explained below, if the weight is imposed on a universal joint or clamping fixture, the distance that the flexible point is off from the table face determines the overhanging load on the head and tail units.



Fixturing:

Rigidly mounted work pieces between a head and tailstock should be avoided if possible. Misalignment, or inaccurate work pieces can create stresses that can tear the work form the table or damage the Positioners, leading to un-safe work conditions or machine failures.

