

"V" Guide System - Engineering Notes

Fia. 1

When necessary to carry outboard loads, use setup as shown or similar. Keep ratio of O.D. to C.D. as low as possible. Approximation of Max. Load is given by the Formula: $M.L. = \frac{C.D.}{Q.D.} \times T.L.$ Where: M.L. = Max. Load C.D. per Guide . Wheel C.D. = Center Distance O.D. = Outboard Distance

Fig. 2

possible.

Rotating motion in large plates can be accomplished as shown in Fig. 2. A valuable feature of the quide system is that excellent stability of the plate with maximum available working area unencumbered by

shafts and spindle bearings is

C.D.

NOTES: • Rigidity decreases as O.D. increases.

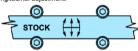
· Max. Load not to exceed Thrust Load Limit.

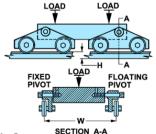
T.L. = Thrust Load

Limit

Fig. 3

Shows use of Guide Wheels to guide strip stock into punch press dies or roll forming machines. Use of all adjustable mounting bushings gives axial as well as longitudinal adjustment.





Where: M.L. = Max. Load per Guide Wheel C.D. = Center Distance O.D. = Outboard Distance

 $M.L. = \frac{C.D.}{O.D. + C.D.} \times R.L.$

R.L. = Radial Load Limit

Overhanging loads are mostly radial in nature. Use this formula for approximate Max. Load.

Max. Load not to exceed Radial Load Limit. Fia. 5

In practical application, on long fabricated equipment, it is difficult to hold track mounts to close tolerances. We recommend use of more than two wheels to support a heavy load, with construction approximately as shown in Fig. 5. This system will compensate for small differences in track alignment both height (H) and width (W).