



brookfield industries  
99 West Hillside Ave  
Thomaston, CT 06787  
T 860.283.6211  
F 860.283.6123  
[karl@bfimfg.com](mailto:karl@bfimfg.com)  
[www.bfimfg.com](http://www.bfimfg.com)

## Declaration of Hinge Capacities

We, brookfield industries, inc of 99 West Hillside Ave Thomaston, CT 06787, declare the following list of products have been engineered and tested in order to develop the working load capacities as listed below and all published documents. In conjunction with physical testing, we performed a thorough stress analysis of the entire hinge under static and dynamic conditions that identify the critical stress areas. We then utilized the following reference documents for determining the required safety factors and/or allowable loads/stresses. Unless noted otherwise, all internal bearing are rated for 1 million cycles at full thrust and radial load under ideal conditions. Actual bearing life may vary depending on installed conditions.

Steel Construction Manual AISC Allowable Stress Design (ASD)  
Structural Welding Code AWS D1.1  
Thrust/radial bearing manufacturer's catalogs  
ANSI 156.1

Model Number	Thrust Capacity (lbs)	Radial Capacity (lbs)
W-500HD	1000	400
W-875HD	3000	1200
W-100HD	4000	1630
W-125HD	8000	3300
W-150HD	13000	6280
W-200HD	20000	8800
W-250HD	25000	14000
W-300HD	40000	25000
W-400HD	75000	45000
i-8505*	800	320
i-8506*	800	320
i-8507*	800	320
i-8508*	800	320
i-8510	2000	800
i-8511	2000	800
i-8512	2000	800
i-8513	2000	800

\*exceeds ANSI 156.1 Grade 1 requirements (2.5 million cycles)

Karl P. Kinzer  
President