



JACK SIZES					JACK SELECTION								
MODEL	Capacity (tons)	Lifting Screw Dia. (in)	Screw Lead (in)	Root Dia. (in)	Gear Ratio	Turns of Worm for 1" Travel	Maximum Input Torque (in.-lb.)	Maximum Allowable Input (hp)	Maximum Worm Speed at Rated Load	Maximum Load at 1750 RPM	Torque to Raise 1 lb. (in.-lb.)	Tare Drag Torque (in.-lb.)	Page Ref
2SS-MSJ	0.66	1	.250	.698	6:1	24	33	2	1800	1330	.0250	4	337
					24:1	96	14	1/2	1800	1320	.0150	4	337
5SS-MSJ	1.67	1 1/2	.375	1.066	6:1	16	125	3	1510	2873	.0376	10	338
					24:1	64	48	3/4	985	1875	.0144	10	338
10SS-MSJ	3.33	2	.500	1.410	8:1	16	251	5	1255	4775	.0377	20	339
					24:1	48	128	1 1/2	739	2813	.0192	20	339
15SS-MSJ	5.00	2 1/4	.500	1.684	8:1	16	407	5	774	4424	.0407	20	340
					24:1	48	218	1 1/2	434	2478	.0218	20	340
20SS-MSJ	6.66	2 1/2	.500	1.908	8:1	16	580	5	540	4140	.0435	40	341
					24:1	48	291	1 1/2	325	2478	.0218	40	341
25SS-MSJ	8.30	3	.667	2.287	10 2/3:1	16	903	11	768	8764	.0452	50	342
					32:1	48	471	3 1/2	468	5364	.0235	50	342
35SS-MSJ	11.66	3 3/4	.667	3.083	10 2/3:1	16	1150	11	603	8035	.0493	50	343
					32:1	48	600	3 1/2	368	5022	.0251	50	343

* Measurements listed are for non-keyed units. See individual jack pages for keyed jack info.

NOTES:

- 1) The recommended maximum speed is 1800 rpm provided that the recommended horsepower and temperature are not exceeded.
- 2) Input torque is shown as torque to lift one pound of load. Starting Torque is 100% greater than torque shown. Tare drag torque should be added for all loads.
- 3) Maximum allowable horsepower ratings are based on a 25% duty cycle. For operation at higher duty cycles or repeated use over any segment of the total travel, temperature must be monitored and remain less than 200°F.
- 4) Overload capacity of the Stainless Steel Machine Screw Jack is as follows: 10% for dynamic loads, 30% for static loads.
- 5) Stainless Steel Machine Screw Jacks having gear ratios between 20:1 and 32:1, are self-locking and will hold loads without backdriving in the absence of vibration. All other ratios may require a brake to prevent backdriving.
- 6) All units are suitable for intermittent operation providing that the housing temperature including ambient is not lower than -20°F. or higher than +200°F. Factory supplied grease in standard units will operate in this range. For higher or lower operating temperature ranges consult Nook Industries.

- 7) Accessories such as boots, top plates and clevises are available.
- 8) Catalog dimensions are representative only and are subject to change without notice. For construction, use only certified prints.
- 9) Units are not to be used as personnel support or movement.
- 10) End-of-travel stops are not provided.

‡ For greater capacity, specify a 17-4PH hardened worm.

* Tare drag torque need only be added if operating under 25% rated load.

$$\text{Horsepower per jack} = \frac{\text{Torque to raise one pound} \times \text{Number of pounds to be raised} \times \text{rpm}}{63,025}$$

Starting Torque is 100% greater than torque shown.