



DESIGN OF NEXSPAN2™ H SERIES

LOAD TABLES

LOAD TABLES FOR NEXSPAN2™ 14NSH3

3 X 3 X 1/4 H SERIES

CASE 1 - UNIFORMLY DISTRIBUTED LOAD

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	4300	0.09
60	3400	0.14
72	2800	0.20
84	2000	0.27
96	1500	0.36
108	1200	0.45
120	1000	0.55

CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	2100	0.07
60	1700	0.11
72	1400	0.16
84	1200	0.22
96	1000	0.28
108	700	0.36
120	600	0.44

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

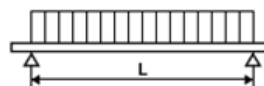
SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	1600	0.09
60	1200	0.15
72	1000	0.21
84	700	0.28
96	500	0.36
108	400	0.46
120	300	0.56

CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

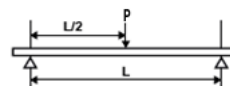
SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	1000	0.09
60	800	0.14
72	700	0.19
84	500	0.26
96	400	0.34
108	300	0.43
120	200	0.52

NOTES:

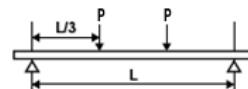
1. Load table is based on a simply supported beam
2. Span is measured from the supports
3. HSS 3x3x1/4 compatible with rods up to 5/8"
4. $\Delta < L/360$ at mid-span
5. Minimum factor of safety of 3

CASE 1: $P = L \cdot w$ 

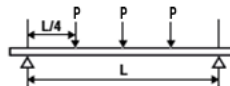
CASE 2:



CASE 3:



CASE 4:



HSS 3"X3"X1/4" ASTM A500 GR. C W/ 11/16" WIDE SLOTS

TECHNICAL DATA					
E(ksi)	Fy(ksi)	A(in ²)	I(in ⁴)	S(in ³)	Ma(lbs-ft)
29000	50	1.80	2.37	1.58	2193

**DESIGN OF NEXSPAN2™ H SERIES**

LOAD TABLES

LOAD TABLES FOR NEXSPAN2™ 14NSH4**4 X 4 X 1/4 H SERIES****CASE 1 - UNIFORMLY DISTRIBUTED LOAD**

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	7500	0.07
60	6000	0.11
72	5000	0.15
84	4200	0.21
96	3600	0.27
108	2900	0.34
120	2300	0.41

CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	3800	0.05
60	3000	0.09
72	2500	0.12
84	2100	0.17
96	1800	0.22
108	1600	0.27
120	1400	0.33

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

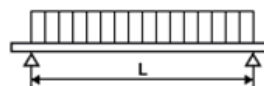
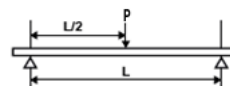
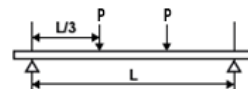
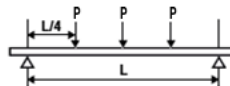
SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	2800	0.07
60	2200	0.11
72	1800	0.16
84	1600	0.21
96	1300	0.27
108	1000	0.35
120	800	0.42

CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	1800	0.07
60	1500	0.10
72	1200	0.15
84	1000	0.20
96	900	0.26
108	700	0.32
120	600	0.40

NOTES:

1. Load table is based on a simply supported beam
2. Span is measured from the supports
3. HSS 4x4x1/4 compatible with rods up to 1"
4. $\Delta < L/360$ at mid-span
5. Minimum factor of safety of 3

CASE 1: $P = L \cdot w$ **CASE 2:****CASE 3:****CASE 4:****HSS 4"X4"X1-1/4" ASTM A500 GR. C W/ 1-1/4" WIDE SLOTS**

TECHNICAL DATA					
E(ksi)	Fy(ksi)	A(in ²)	I(in ⁴)	S(in ³)	Ma(lbs-ft)
29000	50	2.21	5.51	2.75	3824

**DESIGN OF NEXSPAN2™ H SERIES**

LOAD TABLES

LOAD TABLES FOR NEXSPAN2™ 14NSH5**5 X 5 X 1/4 H SERIES****CASE 1 - UNIFORMLY DISTRIBUTED LOAD**

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	20700	0.08
60	16500	0.13
72	13700	0.18
84	10900	0.25
96	8300	0.33
108	6600	0.41
120	5300	0.51

CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	6900	0.04
60	5500	0.10
72	4500	0.15
84	3900	0.20
96	3400	0.26
108	3000	0.33
120	2700	0.41

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

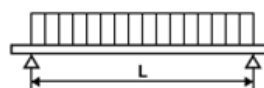
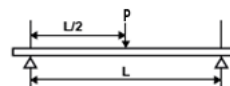
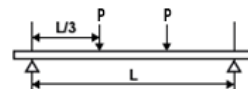
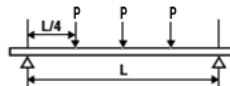
SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	7700	0.08
60	6200	0.13
72	5100	0.19
84	4000	0.26
96	3000	0.33
108	2400	0.42
120	1900	0.52

CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)
48	5100	0.08
60	4100	0.12
72	3400	0.18
84	2800	0.24
96	2100	0.31
108	1700	0.39
120	1400	0.48

NOTES:

1. Load table is based on a simply supported beam
2. Span is measured from the supports
3. HSS 5x5x1/4 compatible with rods up to 1"
4. $\Delta < L/360$ at mid-span
5. Minimum factor of safety of 3

CASE 1: $P = L \cdot w$ **CASE 2:****CASE 3:****CASE 4:****HSS 5"X5"X1-1/4" ASTM A500 GR. C W/ 1-1/4" WIDE SLOTS**

TECHNICAL DATA					
E(ksi)	Fy(ksi)	A(in²)	I(in⁴)	S(in³)	Ma(lbs-ft)
29000	50	3.14	12.46	4.99	10386