NEXSPAN2™ H SERIES TECHNICAL SUBMITTAL

FOR OVERHEAD MEP APPLICATIONS

ALLFASTENERS.COM | 888.859.6060

INFO

OVERVIEW & INFORMATION

Allfasteners NexSpan2™ H Series is a system for overhead MEP applications where heavy load capacities are required.

When it comes to challenging environments such as airports, data centers, hospitals, and waste/water treatment plants, NexSpan2™ H Series is the intersection between high load capacity and simplicity.

NexSpan2™ H Series consists of a slotted hollow structural tube design, universal beam clamps, and threaded rod, which ensure a quick, easy, and reliable support structure.

APPLICATIONS

- **Airports**
  - Heavy mechanical piping
  - Large HVAC ductwork
  - Industrial heating & cooling units
- **Data Centers**
  - Heavy chiller piping
  - Large HVAC ductwork
  - Industrial cooling equipment
- **Hospitals**
  - Large HVAC ductwork
  - Chemical process piping
  - Industrial heating & cooling units
- **Water/Waste Treatment Plants**
  - Pipe support stands & racks
- **Supplemental Steel**
- **Overhead Trapeze Applications**

PENDING PATENT PENDING

MADE IN USA

KEY BENEFITS

- No on-site welding needed
- No need for heavy lifting equipment
- Suited for installation in challenging environments
- Assembled with impact driver or torque wrench only
- Easy to level
- Hot dip galvanized (per ASTM A123/A123M Standard)
- Meets MSS SP 58 design requirments for Type 59 Trapeeze

Revit/BIM files available

- Compact packaging allows for simple transport in the back of a van
- Cost effective
- Made in the USA
- Made by AISC Certified Fabricator

AMERICAN INSTITUTE OF STEEL CONSTRUCTION AISC FOUNDED 1921

Certified AISC Fabricator
#22001115120RFN

Locations Nationwide
888-859-6060

Headquarters
959 LAKE RD., MEDINA, OH 44256

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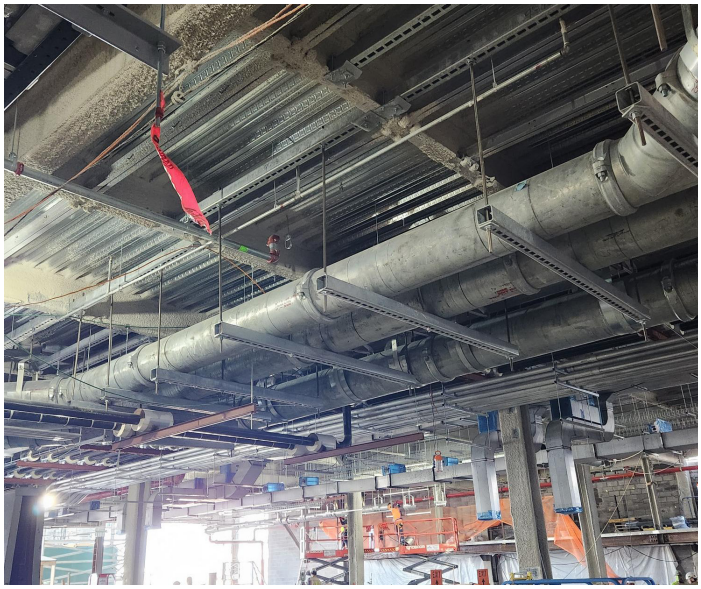
APPLICATION EXAMPLES



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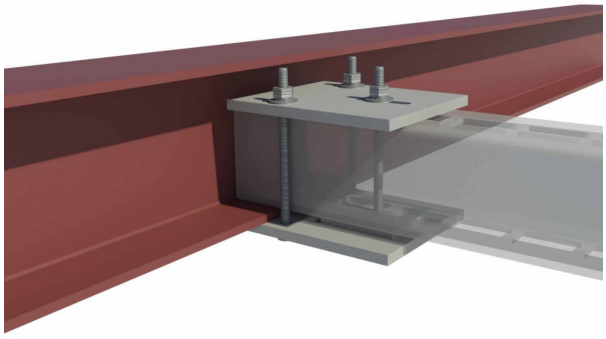
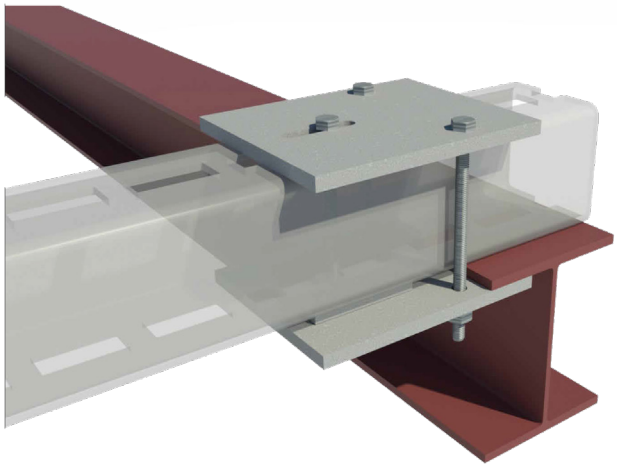
BEAM SUPPORTED APPLICATION EXAMPLES



RESTING ON LOWER FLANGE



RESTING ON UPPER FLANGE

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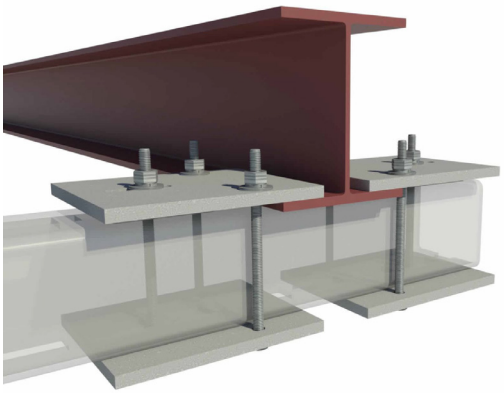
BEAM SUPPORTED APPLICATION EXAMPLES



MOUNTED BELOW I-BEAM

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TRAPEZE APPLICATION EXAMPLES

NOTES

1. See Allowable Load Charts for NexSpan2™ H Series tube capacities.
2. Capacity of the supporting member may dictate allowable configurations.
3. For resting on lower flange configurations, ensure a minimum seat distance of the tube equal to or greater than 3", at both ends of the tube. See installation instructions.
4. For resting on upper flange configurations, ensure the tube sits across the entire beam flange. See installation instructions.
5. For mounting below I-beam configurations, the maximum allowable hanging load is 5400 lbs per I-beam mounting location. Where the load distribution is symmetrical across the length of the NexSpan2™ member, the load at each I-beam mounting location is half the total load on the NexSpan2™ member. Where the load distribution is not symmetrical across the length of the NexSpan2™ member, the load at each I-beam mounting location should be assumed to be equal to the total load on the NexSpan2™ member, or an analysis should be performed to verify the actual loads on each I-beam mounting location.
6. When 14NSH84 is used as supplemental steel, a bolted or welded connection to the supporting member is required.

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ORDERING INFORMATION - TUBES

TABLE 1: NEXSPAN2™ H SERIES ORDERING INFORMATION

PART #	SIZE	LENGTH	SLOT WIDTH	WEIGHT PER FOOT
14NSH310	3 x 3 x 1/4"	10'	0.6875"	8.3 lb/ft
14NSH410	4 x 4 x 1/4"	10'	1.250"	11.5 lb/ft
14NSH510	5 x 5 x 1/4"	10'	1.250"	14.7 lb/ft
14NSH320	3 x 3 x 1/4"	20'	0.6875"	8.3 lb/ft
14NSH420	4 x 4 x 1/4"	20'	1.250"	11.5 lb/ft
14NSH520	5 x 5 x 1/4"	20'	1.250"	14.7 lb/ft

ORDERING INFORMATION - CLAMPS

TABLE 2: NEXSPAN2™ UNIVERSAL CLAMP ORDERING INFORMATION

PART #	BOLT LENGTH	FITS PART #
14NSHC6	6"	14NSH3, 14NSH4, 14NSH5
14NSHC7	7"	
14NSHC8	8"	
14NSHC9	9"	

Notes:

1. Clamps are sold individually. Two (2) clamps are required for NexSpan2™ supplemental steel installation.
2. To determine appropriate bolt length, use the following equation: (tube size) + (I-beam flange thickness) + (2.25“) ≤ (bolt length).
3. Clamp kits come standard with (2) 1/8", (2) 1/4", (2) 3/8" and (1) 1/2" filler plates. Extra plates can be ordered below.

TABLE 3: NEXSPAN2™ FILLER PLATE ORDERING INFORMATION

PART #	HOLE SIZE	WIDTH	THICKNESS	FITS PART #
2SW091612400	9/16"	4"	1/2"	14NSH3, 14NSH4, 14NSH5
2SW091638400	9/16"	4"	3/8"	
2SW091614400	9/16"	4"	1/4"	
2SW091618400	9/16"	4"	1/8"	

FRONT ELEVATION VIEW

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ORDERING INFORMATION - TRAPEZE

TABLE 4: SQUARE WASHER INFORMATION

PART #	HOLE SIZE	WIDTH	THICKNESS	ROD DIAMETER
2SW091638300	9/16"	3"	3/8"	1/2"
2SW111638300	11/16"	3"	3/8"	5/8"
2SW131612400	13/16"	4"	1/2"	3/4"
2SW111612400	1-1/16"	4"	1/2"	1"

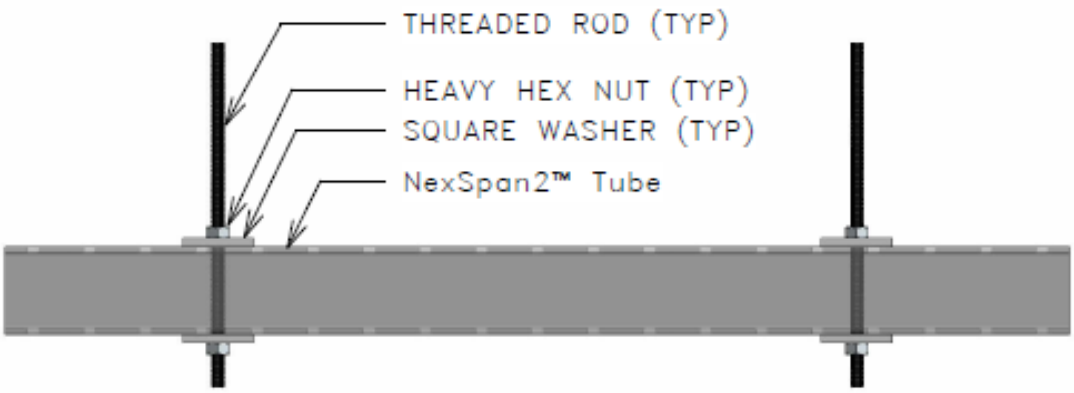
TABLE 5: THREADED ROD A307 MATERIAL INFORMATION

PART #	SIZE	COATING
2TRZ1213	1/2-13	Zinc Plated
2TRZ5811	5/8-11	Zinc Plated
2TRZ3410	3/4-10	Zinc Plated
2TRZ0108	1-8	Zinc Plated

TABLE 6: HEAVY HEX NUT INFORMATION

PART #	SIZE	WAF	HEIGHT	MATERIAL/FINISH
2HHN1213	1/2-13	7/8"	31/64"	A563 Grade A Zinc
2HHN5811	5/8-11	1-1/16"	39/64"	A563 Grade A Zinc
2HHN3410	3/4-10	1-1/4"	47/64"	A563 Grade A Zinc
2HHN0108	1-8	1-5/8"	63/64"	A563 Grade A Zinc

Note: For each rod, which has to be connected to both the supplemental steel tube and the trapeze tube, (4) HH nuts and (4) square washers are required; (2) rods are needed to install each NexSpan2™ trapeze.



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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.)	SPAN/180	SPAN/240	SPAN/360
24	8894	0.02	NA	NA	NA
36	5915	0.05	NA	NA	NA
48	4420	0.09	NA	NA	NA
60	3520	0.14	NA	NA	NA
72	2917	0.21	NA	NA	2819
84	2484	0.28	NA	NA	2048
96	2157	0.37	NA	NA	1545
108	1901	0.47	NA	1835	1197
120	1694	0.57	NA	1463	946
144	1379	0.83	1330	971	612
168	*	*	932	668	404
192	*	*	667	465	263
216	*	*	480	320	161
240	*	*	341	211	82

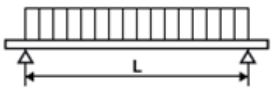
CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
24	4447	0.02	NA	NA	NA
36	2957	0.04	NA	NA	NA
48	2210	0.07	NA	NA	NA
60	1760	0.12	NA	NA	NA
72	1458	0.17	NA	NA	NA
84	1242	0.23	NA	NA	NA
96	1078	0.30	NA	NA	966
108	950	0.38	NA	NA	748
120	847	0.47	NA	NA	591
144	689	0.67	NA	607	383
168	574	0.92	NA	417	253
192	*	*	417	291	164
216	*	*	300	200	100
240	*	*	213	132	51

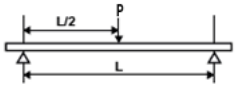
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 3x3x1/4 is compatible with rods up to 5/8”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.

CASE 1: P = L*w



CASE 2:



HSS 3"X3"X1/4" W/ 11/16" WIDE SLOTS

TECHNICAL DATA							
t_{des} (in)	Slot Length (in)	E (ksi)	Fy (ksi)	A (in^2)	I (in^4)	S (in^3)	Ma (lbs-ft)
0.233	2-9/16	29000	50	2.12	2.41	1.60	2228

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LOAD TABLES FOR NEXSPAN2 14NSH3 - 3 x 3 x 1/4 H SERIES

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
24	3335	0.02	NA	NA	NA
36	2218	0.05	NA	NA	NA
48	1657	0.09	NA	NA	NA
60	1320	0.15	NA	NA	NA
72	1094	0.21	NA	NA	1034
84	931	0.29	NA	NA	751
96	809	0.38	NA	NA	567
108	712	0.48	NA	673	439
120	635	0.59	NA	537	347
144	517	0.84	488	356	225
168	*	*	342	245	148
192	*	*	245	171	96
216	*	*	176	117	59
240	*	*	125	78	30

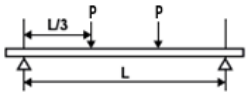
CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
24	2223	0.02	NA	NA	NA
36	1478	0.05	NA	NA	NA
48	1105	0.09	NA	NA	NA
60	880	0.14	NA	NA	NA
72	729	0.20	NA	NA	NA
84	621	0.27	NA	NA	536
96	539	0.35	NA	NA	404
108	475	0.45	NA	NA	313
120	423	0.55	NA	383	248
144	344	0.79	NA	254	160
168	*	*	244	175	106
192	*	*	174	122	69
216	*	*	126	84	42
240	*	*	89	55	22

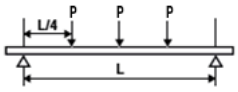
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 3x3x1/4 is compatible with rods up to 5/8”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.

CASE 3:



CASE 4:



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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.)	SPAN/180	SPAN/240	SPAN/360
24	15902	0.02	NA	NA	NA
36	10581	0.04	NA	NA	NA
48	7914	0.07	NA	NA	NA
60	6309	0.11	NA	NA	NA
72	5235	0.16	NA	NA	NA
84	4464	0.21	NA	NA	NA
96	3883	0.28	NA	NA	3751
108	3429	0.35	NA	NA	2931
120	3063	0.43	NA	NA	2341
144	2507	0.62	NA	2419	1564
168	2104	0.84	NA	1714	1086
192	*	*	1729	1248	767
216	*	*	1301	921	540
240	*	*	987	680	372

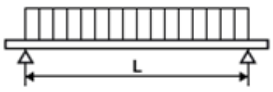
CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
24	7951	0.01	NA	NA	NA
36	5290	0.03	NA	NA	NA
48	3957	0.06	NA	NA	NA
60	3154	0.09	NA	NA	NA
72	2617	0.12	NA	NA	NA
84	2232	0.17	NA	NA	NA
96	1941	0.22	NA	NA	NA
108	1714	0.28	NA	NA	NA
120	1531	0.35	NA	NA	1463
144	1253	0.50	NA	NA	978
168	1052	0.69	NA	NA	679
192	897	0.90	NA	780	479
216	774	1.15	NA	575	338
240	*	*	617	425	232

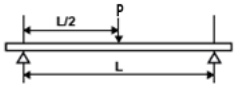
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 4x4x1/4 is compatible with rods up to 1”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.

CASE 1: P = L*w



CASE 2:



HSS 4"X4"X1/4" W/ 1-1/4" WIDE SLOTS

TECHNICAL DATA							
t_{des} (in)	Slot Length (in)	E (ksi)	Fy (ksi)	A (in^2)	I (in^4)	S (in^3)	Ma (lbs-ft)
0.233	2-9/16	29000	50	2.79	5.73	2.87	3982

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LOAD TABLES FOR NEXSPAN2 14NSH4 - 4 x 4 x 1/4 H SERIES

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
24	5963	0.02	NA	NA	NA
36	3967	0.04	NA	NA	NA
48	2967	0.07	NA	NA	NA
60	2366	0.11	NA	NA	NA
72	1963	0.16	NA	NA	NA
84	1674	0.22	NA	NA	NA
96	1456	0.28	NA	NA	1376
108	1285	0.36	NA	NA	1075
120	1148	0.44	NA	NA	859
144	940	0.63	NA	888	574
168	789	0.86	NA	629	398
192	*	*	634	458	281
216	*	*	477	338	198
240	*	*	362	249	136

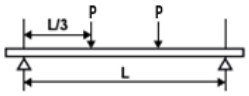
CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
24	3975	0.02	NA	NA	NA
36	2645	0.04	NA	NA	NA
48	1978	0.07	NA	NA	NA
60	1577	0.10	NA	NA	NA
72	1308	0.15	NA	NA	NA
84	1116	0.20	NA	NA	NA
96	970	0.26	NA	NA	NA
108	857	0.33	NA	NA	767
120	765	0.41	NA	NA	613
144	626	0.59	NA	NA	409
168	526	0.81	NA	449	284
192	448	1.06	NA	327	201
216	*	*	340	241	141
240	*	*	258	178	97

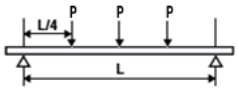
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 4x4x1/4 is compatible with rods up to 1”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.

CASE 3:



CASE 4:



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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.)	SPAN/180	SPAN/240	SPAN/360
36	18754	0.03	NA	NA	NA
48	14038	0.06	NA	NA	NA
60	11202	0.09	NA	NA	NA
72	9306	0.12	NA	NA	NA
84	7948	0.17	NA	NA	NA
96	6925	0.22	NA	NA	NA
108	6126	0.28	NA	NA	NA
120	5484	0.34	NA	NA	5296
144	4512	0.50	NA	NA	3599
168	3810	0.68	NA	NA	2563
192	3275	0.88	NA	2945	1880
216	2852	1.12	NA	2243	1402
240	*	*	2414	1732	1051

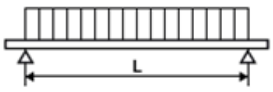
CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
36	9377	0.02	NA	NA	NA
48	7019	0.04	NA	NA	NA
60	5601	0.07	NA	NA	NA
72	4653	0.10	NA	NA	NA
84	3974	0.14	NA	NA	NA
96	3462	0.18	NA	NA	NA
108	3063	0.22	NA	NA	NA
120	2742	0.28	NA	NA	NA
144	2256	0.40	NA	NA	2249
168	1905	0.55	NA	NA	1602
192	1637	0.72	NA	NA	1175
216	1426	0.91	NA	1402	876
240	1253	1.13	NA	1083	657

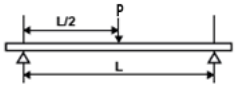
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 5x5x1/4 is compatible with rods up to 1”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.

CASE 1: P = L*w



CASE 2:



HSS 5"X5"X1/4" W/ 1-1/4" WIDE SLOTS

TECHNICAL DATA							
t_{des} (in)	Slot Length (in)	E (ksi)	Fy (ksi)	A (in^2)	I (in^4)	S (in^3)	Ma (lbs-ft)
0.233	2-9/16	29000	50	3.72	12.69	5.08	7050

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LOAD TABLES FOR NEXSPAN2 14NSH5 - 5 x 5 x 1/4 H SERIES

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
36	7032	0.03	NA	NA	NA
48	5264	0.06	NA	NA	NA
60	4200	0.09	NA	NA	NA
72	3490	0.13	NA	NA	NA
84	2980	0.17	NA	NA	NA
96	2597	0.23	NA	NA	NA
108	2297	0.29	NA	NA	2418
120	2056	0.35	NA	NA	1943
144	1692	0.51	NA	NA	1320
168	1428	0.69	NA	NA	940
192	1228	0.90	NA	1080	690
216	1069	1.14	NA	823	514
240	*	*	885	635	385

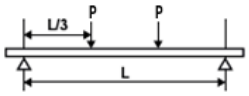
CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
36	4688	0.03	NA	NA	NA
48	3509	0.05	NA	NA	NA
60	2800	0.08	NA	NA	NA
72	2326	0.12	NA	NA	NA
84	1987	0.16	NA	NA	NA
96	1731	0.21	NA	NA	NA
108	1531	0.27	NA	NA	NA
120	1371	0.33	NA	NA	NA
144	1128	0.48	NA	NA	942
168	952	0.65	NA	NA	671
192	818	0.85	NA	771	492
216	713	1.07	NA	587	367
240	626	1.32	NA	453	275

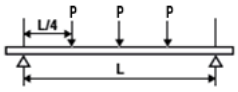
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 5x5x1/4 is compatible with rods up to 1”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.

CASE 3:



CASE 4:



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LOAD TABLES FOR NEXSPAN2 14NSH84 - 8 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.)	SPAN/180	SPAN/240	SPAN/360
48	23337	0.03	NA	NA	NA
60	18635	0.05	NA	NA	NA
72	15494	0.08	NA	NA	NA
84	13245	0.11	NA	NA	NA
96	11554	0.14	NA	NA	NA
108	10234	0.17	NA	NA	NA
120	9175	0.22	NA	NA	NA
144	7576	0.31	NA	NA	NA
168	6423	0.42	NA	NA	NA
192	5548	0.55	NA	NA	5354
216	4860	0.70	NA	NA	4128
240	4302	0.86	NA	NA	3241

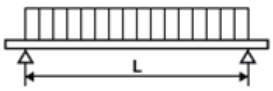
CASE 2 - CONCENTRATED LOAD AT CENTER

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
48	11668	0.03	NA	NA	NA
60	9317	0.04	NA	NA	NA
72	7747	0.06	NA	NA	NA
84	6622	0.08	NA	NA	NA
96	5777	0.11	NA	NA	NA
108	5117	0.14	NA	NA	NA
120	4587	0.17	NA	NA	NA
144	3788	0.25	NA	NA	NA
168	3211	0.34	NA	NA	NA
192	2774	0.45	NA	NA	NA
216	2430	0.57	NA	NA	NA
240	2151	0.70	NA	NA	2026

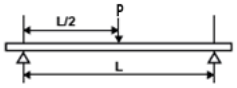
NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
5. HSS 8x4x1/4 is compatible with rods up to 1”.
6. The maximum allowable load is based on a minimum factor of safety of 3. Deflection (Δ) is based on max allowable load. Span/[length] loads are based on deflection criteria.
7. For lengths indicated with an asterisk (*), engineering analysis is required to use loads greater than those listed, which are based on deflection.
8. Values are based on the 8" tube dimension being in the vertical direction, with the 4" tube direction being in the horizontal direction.

CASE 1: P = L*w



CASE 2:



HSS 8"X4"X1/4" W/ 1-1/4" WIDE SLOTS

TECHNICAL DATA							
t_{des} (in)	Slot Length (in)	E (ksi)	Fy (ksi)	A (in^2)	I (in^4)	S (in^3)	Ma (lbs-ft)
0.233	2-9/16	29000	50	4.66	33.72	8.43	11707

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LOAD TABLES FOR NEXSPAN2 14NSH84 - 8 x 4 x 1/4 H SERIES

CASE 3 - TWO EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
48	8751	0.04	NA	NA	NA
60	6988	0.06	NA	NA	NA
72	5810	0.08	NA	NA	NA
84	4967	0.11	NA	NA	NA
96	4332	0.14	NA	NA	NA
108	3838	0.18	NA	NA	NA
120	3440	0.22	NA	NA	NA
144	2841	0.32	NA	NA	NA
168	2408	0.43	NA	NA	NA
192	2080	0.56	NA	NA	1964
216	1822	0.71	NA	NA	1514
240	1613	0.88	NA	NA	1189

CASE 4 - THREE EQUAL CONCENTRATED LOADS EQUALLY PLACED

SPAN (in.)	MAX ALLOWABLE LOAD P (lbs)	Δ AT MAX ALLOWABLE LOAD (in.)	SPAN/180	SPAN/240	SPAN/360
48	5834	0.03	NA	NA	NA
60	4658	0.05	NA	NA	NA
72	3873	0.07	NA	NA	NA
84	3311	0.10	NA	NA	NA
96	2888	0.13	NA	NA	NA
108	2558	0.17	NA	NA	NA
120	2293	0.21	NA	NA	NA
144	1894	0.30	NA	NA	NA
168	1605	0.40	NA	NA	NA
192	1387	0.53	NA	NA	NA
216	1215	0.67	NA	NA	1080
240	1075	0.83	NA	NA	848

NOTES:

1. The load values in these tables are based on simply supported beams for operating temperatures between -20° and 450° Fahrenheit.
2. The span is measured from the supports.
3. Beam weight has already been deducted from the tables.
4. Load values indicated as “NA” were found to be higher than the maximum allowable load, and therefore not applicable.
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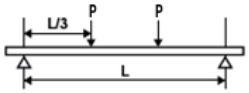
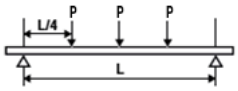
CASE 3:



CASE 4:



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PROJECT INFORMATION

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CONTRACTOR:		☐ NOT APPROVED
ENGINEER:		REMARKS:
SUBMITTAL DATE:		
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