

# Niftylift Point Loadings Chart - European Products *(USA Products on Page 2)*

Updated - 23 June 2016

	Mass	SWL	Max Weight	Transit <sup>(1)</sup>	Working <sup>(2)</sup>	Tyre	Foot	Point Loading <sup>(3)</sup>			Floor Loading <sup>(4)</sup>		Floor Loading <sup>(5)</sup>				
	A [kg]	B [kg]	C [kN]	Area	Area	Area	Area	(Realistic Worst Case)			(Transit)		(Working)				
				D [m <sup>2</sup> ]	E [m <sup>2</sup> ]	F [cm <sup>2</sup> ]	G [cm <sup>2</sup> ]	H [kN]	J [lb <sub>f</sub> ]	K [kN/cm <sup>2</sup> ]	L [kN/m <sup>2</sup> ]	M [lb <sub>f</sub> /in <sup>2</sup> (psi)]	N [kN/m <sup>2</sup> ]	P [lb <sub>f</sub> /in <sup>2</sup> (psi)]	Q [kN/m <sup>2</sup> ]	R [lb <sub>f</sub> /in <sup>2</sup> (psi)]	
				<small>= ((A + B) x 9.81) / 1000</small>	<small>= wheelbase x width</small>	<small>= working footprint area</small>	<small>= area of one tyre</small>	<small>= area of one foot</small>	<small>= C x 0.6</small>	<small>= H x 2.25</small>	<small>= H / (F or G)</small>	<small>= K x 10000</small>	<small>= L x 0.145</small>	<small>= C / D</small>	<small>= N x 0.145</small>	<small>= C / E</small>	<small>= Q x 0.145</small>
<b>Nifty 120M</b>	1195	200	13.68		7.29		182.4	8.21	1845.90	0.045	450	65			1.88	0.27	
<b>Nifty 120T</b>	1400	200	15.70		13		324.3	9.42	2117.16	0.029	290	42			1.21	0.18	
<b>Nifty 150</b>	1775	225	19.62		14.86		314.2	11.77	2646.45	0.037	375	54			1.32	0.19	
<b>Nifty 170</b>	2160	200	23.15		19.34		540	13.89	3122.81	0.026	257	37			1.20	0.17	
<b>Nifty 210</b>	3495	225	36.49		22.5		680	21.90	4922.40	0.032	322	47			1.62	0.24	
<b>HR12N</b>	3435	200	35.66	2.85	2.85	383		21.40	4809.92	0.056	559	81	12.51	1.81	12.51	1.81	
<b>HR12 4x4</b>	3470	200	36.00	2.85	2.85	504		21.60	4856.24	0.043	429	62	12.63	1.83	12.63	1.83	
<b>HR15NE</b>	7250	225	73.33	2.925	2.925	340		44.00	9891.11	0.129	1294	188	25.07	3.64	25.07	3.64	
<b>HR15N Hybrid</b>	7250	225	73.33	2.925	2.925	340		44.00	9891.11	0.129	1294	188	25.07	3.64	25.07	3.64	
<b>HR15 4x4</b>	4500	225	46.35	4	4	370		27.81	6252.24	0.075	752	109	11.59	1.68	11.59	1.68	
<b>HR15 Hybrid</b>	4800	225	49.30	4	4	370		29.58	6649.21	0.080	799	116	12.32	1.79	12.32	1.79	
<b>HR17NE</b>	7650	225	77.25	2.925	2.925	340		46.35	10420.40	0.136	1363	198	26.41	3.83	26.41	3.83	
<b>HR17N Hybrid</b>	7650	225	77.25	2.925	2.925	340		46.35	10420.40	0.136	1363	198	26.41	3.83	26.41	3.83	
<b>HR17 4x4</b>	5000	225	51.26	4	4	370		30.75	6913.85	0.083	831	121	12.81	1.86	12.81	1.86	
<b>HR17 Hybrid</b>	5000	225	51.26	4	4	370		30.75	6913.85	0.083	831	121	12.81	1.86	12.81	1.86	
<b>HR21 2x4</b>	6660	225	67.54	5.2	5.2	370		40.53	9110.41	0.110	1095	159	12.99	1.88	12.99	1.88	
<b>HR21 4x4</b>	6660	225	67.54	5.2	5.2	370		40.53	9110.41	0.110	1095	159	12.99	1.88	12.99	1.88	
<b>HR21 Hybrid</b>	6660	225	67.54	5.2	5.2	370		40.53	9110.41	0.110	1095	159	12.99	1.88	12.99	1.88	
<b>HR28 Hybrid</b>	14650	280	146.46	6.474	6.474	679		87.88	19755.76	0.129	1294	188	22.62	3.28	22.62	3.28	
<b>SD120T</b>	2260	200	24.13	2.832	13		324.3	14.48	3255.13	0.045	446	65	8.52	1.24	1.86	0.27	
<b>SD170</b>	2750	200	28.94	3.72	19.34		504	17.36	3903.52	0.034	345	50	7.78	1.13	1.50	0.22	
<b>SD210</b>	3950	225	40.96	4.4	19.7		558	24.57	5524.47	0.044	440	64	9.31	1.35	2.08	0.30	
<b>TD120T</b>	1890	200	20.50	0.67	15.83		324.3	12.30	2765.54	0.038	379	55	30.60	4.44	1.30	0.19	
<b>TD150T</b>	2025	225	22.07	0.695	14.86		314.2	13.24	2977.26	0.042	421	61	31.76	4.61	1.49	0.22	

**Notes:**

- (1) The transit area for self-propelled (HR) and self-drive (SD) machines is the wheelbase multiplied by the overall transit width, in the case of the track drive (TD) machines it is the track length in contact with the ground multiplied by the overall track width.
- (2) The working area is the machine footprint, in the case of trailer units it is the floor area of the machine over the footplate outside edges when jacked to the extreme.
- (3) Point loadings are the total weight of the machine and operator(s), supported on the area of one foot or tyre and multiplied by a factor of 60%. We have found this to be a very close approximation to the Realistic Point Loading figure, and can be worked to as an absolute. If additional factors of safety are required they should be added to this figure.
- (4) The transit area floor loadings are given for self-propelled (HR) and self-drive (SD) and track drive (TD) machines and are the weight of the machine and operator(s) divided by the transit area. This loading applies to the machine when the booms are stowed.
- (5) The working area floor loadings given for trailer units, and are the weight of the machine and operator(s) divided by the floor area of the machine.

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# Niftylift Point Loadings Chart - USA Products

	Mass		SWL	Max Weight		Transit Area <sup>(1)</sup>	Working Area <sup>(2)</sup>		Tyre Area	Foot Area	Point Loading <sup>(3)</sup> (Realistic Worst Case)		Floor Loading <sup>(4)</sup> (Transit)	Floor Loading <sup>(5)</sup> (Working)
	A [lbs]	B [lbs]	C [lbs]	D [ft <sup>2</sup> ]	E [ft <sup>2</sup> ]	F [in <sup>2</sup> ]	G [in <sup>2</sup> ]	J [lb <sub>f</sub> ]	M [lb <sub>f</sub> /in <sup>2</sup> (psi)]	P [lb <sub>f</sub> /ft <sup>2</sup> (psf)]	R [lb <sub>f</sub> /ft <sup>2</sup> (psf)]			
	= (A + B)			= wheelbase x width	= working footprint area	= area of one tyre	= area of one foot	= C x 0.6	= J / (F or G)	= C / D	= C / E			
TM34M	2630	500	3130			78.47		28.27	1878	66.43			39.89	
TM34T	3100	500	3600			139.93		50.27	2160	42.97			25.73	
TM42T	3915	500	4415			159.95		48.70	2649	54.39			27.60	
TM50	4760	500	5260			208.17		83.70	3156	37.71			25.27	
TM64	7700	500	8200			242.19		105.40	4920	46.68			33.86	
SP34N	7575	500	8075	30.68	30.68	59.37			4845	81.61	263.23		263.23	
SP34 4x4	7650	500	8150	30.68	30.68	78.12			4890	62.60	265.67		265.67	
SP45N	15980	500	16480	31.48	31.48	52.70			9888	187.63	523.43		523.43	
SP45N Hybrid	15980	500	16480	31.48	31.48	52.70			9888	187.63	523.43		523.43	
SP45 4x4	9920	500	10420	43.06	43.06	57.35			6252	109.01	242.01		242.01	
SP45 Hybrid	10580	500	11080	43.06	43.06	57.35			6648	115.92	257.34		257.34	
SP50N	16870	500	17370	31.48	31.48	52.70			10422	197.76	551.70		551.70	
SP50N Hybrid	16870	500	17370	31.48	31.48	52.70			10422	197.76	551.70		551.70	
SP50 4x4	11020	500	11520	43.06	43.06	57.35			6912	120.52	267.56		267.56	
SP50 Hybrid	11020	500	11520	43.06	43.06	57.35			6912	120.52	267.56		267.56	
SP64 2x4	14685	500	15185	55.97	55.97	57.35			9111	158.87	271.30		271.30	
SP64 4x4	14685	500	15185	55.97	55.97	57.35			9111	158.87	271.30		271.30	
SP64 Hybrid	14685	500	15185	55.97	55.97	57.35			9111	158.87	271.30		271.30	
SP85 Hybrid	32300	620	32920	69.69	69.69	105.25			19752	187.68	472.41		472.41	
SD34T	4980	500	5480	30.48	139.93			50.27	3288	65.41	179.77		39.16	
SD50	6000	500	6500	40.04	208.17			78.12	3900	49.92	162.33		31.22	
SD64	8700	500	9200	47.36	212.05			86.49	5520	63.82	194.25		43.39	
TD34T	4170	500	4670	7.21	170.39			50.27	2802	55.74	647.55		27.41	
TD42T	4500	500	5000	7.48	159.95			48.70	3000	61.60	668.37		31.26	

**Notes:**

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