FLOOR AND POINT LOADINGS. USA

10/02/11

Trailers & Self Drives

MODEL	MAX WEIGHT LBS	AREA in^2	AREA ft^2		FLOOR LOADING lbs/ft^2		POINT LOADING		
	(0) MACHINE + SWL	(1) FOOT (TIRE)	(2) WORKING	(3) TRANSIT	(4) WORKING	(5) TRANSIT	(6) PSI	(7) PSI	(8) LBS.
TM34M	2552 + 500 **2992**	28.3	8.86' x 8.86' **78.50**	N/A	38.11	N/A	64	N/A	**1795**
TM34H	2860 + 500 **3360**	50.3	11.02' x 11.65' **128.38**	N/A	26.17	N/A	39	N/A	**2016**
TM34T	3080 + 500 **3580**	50.3	12.00' x 11.65' **139.8**	N/A	25.61	N/A	42	N/A	**2148**
TM40	3234 + 500 **3734**	50.3	11.00' x 10.50' **115.50**	N/A	32.33	N/A	45	N/A	**2240**
TM42	3740 + 500 **4240**	48.7	12.76' x 12.53' **159.88**	N/A	26.52	N/A	55	N/A	**2544**
TM50M	4180 + 500 **4680**	50.3	14.44' x 13.94' **201.29**	N/A	23.25	N/A	55	N/A	**2808**
TM50MGE	4400 + 500 **4900**	50.3	14.44' x 13.94' **201.29**	N/A	24.34	N/A	58	N/A	**2940**
TM50H	4180 + 500 **4680**	83.7	14.52' x 14.34' **208.22**	N/A	23.34	N/A	33	N/A	**2808**
TM50HGE	4400 + 500 **4900**	83.7	14.52' x 14.34' **208.22**	N/A	23.53	N/A	35	N/A	**2940**
TM64	7700 + 500 **8200**	105.4 (58)	16.40' x 14.76' **242.06**	N/A	33.87	N/A	47	N/A	**4920**
SD34DE	4972+ 500 **5472**	50.3	12.00' x 11.65' **139.8**	5.8' x 5.25' **30.45**	39.14	179.7	65	N/A	**3283**
SD50 2WD	5390 + 500 **5890**	83.7 (78)	14.52' x 14.34' **208.22**	7.87' x 5.08' **39.98**	28.29	147.32	42	N/A	**3534**
SD50 4WD	6105 + 500 **6605**	83.7 (78)	14.52' x 14.34' **208.22**	7.87' x 5.08' **39.98**	31.72	165.21	47	N/A	**3963**
SD64	8910 + 500 **9410**	105.4 (87)	15.09' x 14.04' **211.86**	7.22' x 6.56' **47.36**	26.65	119.21	67	N/A	**5646**

FLOOR AND POINT LOADINGS. USA

10/02/11

Track Drive Models

MODEL	MAX WEIGHT LBS	AREA in^2	AREA ft^2		FLOOR LOADING lbs/ft^2		POINT LOADING		
	(0) MACHINE + SWL	(1) FOOT (TIRE)	(2) WORKING	(3) TRANSIT	(4) WORKING	(5) TRANSIT	(6) PSI	(7) PSI	(8) LBS.
TD34T (Variable width)	3630 + 500 **4130**	50.27	14.63' x 11.65' **170.44**	4.56' x 4.92' = **(22.44)** 4.56' x 0.79' x 2 = **7.2**	24.23	**(184.04)** 573	49	N/A	**2478**
TD34T (Fixed Width)	4070 + 500 **4570**	50.27	14.63' x 11.65' **170.44**	4.56' x 4.92' = **(22.44)** 4.56' x 0.79' x 2 = **7.2**	26.81	**(203.65)** 634	54	N/A	**2742**
TD34TN (Variable Width)	3894 + 500 **4158**	50.27	11.68' x 9.61' **112.24**	4.56' x 3.77' = **(17.19)** 4.56' x 0.79' x 2 = **7.2**	37.04	**(241.88)** 666	49	N/A	**2495**
TD42T	4455 + 500 **4955**	48.7	12.76' x 12.53' **159.9**	4.56' x 4.59' = **(20.93)** 4.56' x 0.82' x 2 = **7.48**	30.99	**(236.74)** **662**	61	N/A	**2973**
TD50T	5325 + 500 **6825**	83.70	13.78' x 13.78' **189.89**	5.28' x 6.07' = **(32.05)** 5.28' x 0.85' x 2 = **9**	34.94	**(212.95)** 758	49	N/A	**4095**

Note! The point loadings of all trailer units, self drive or track mount machines can be altered as desired by the use of larger pads under the jack feet, or spreader plates. This may be made from substantially thick plywood or metal, so long as the plate itself is capable of transmitting the load over the chosen area. Using A material of insufficient stiffness makes little difference to the initial point loading, i.e. will not work as a load spreader.

FLOOR AND POINT LOADINGS. USA

10/02/11

Self Propelled Models

MODEL	MAX WEIGHT LBS	AREA in^2	AREA ft^2		FLOOR LOADING lbs/ft^2		POINT LOADING		
	(0) MACHINE + SWL	(1) TIRE	(2) WORKING	(3) TRANSIT	(4) WORKING	(5) TRANSIT	(6) PSI	(7) PSI	(8) LBS.
SP26	5280 + 500 **5780**	39.99	N/A	5.91' x 4.92' = **29.08**	N/A	198.76	87	N/A	**3468**
SP26 (SOLID TIRES)	5280 + 500 **5780**	10.85	N/A	5.91' x 4.92' = **29.08**	N/A	198.76	320	N/A	**3468**
SP34	6435 + 500 **6935**	59.37	N/A	5.91' x 5.91' = **34.93**	N/A	198.54	65	N/A	**3860**
SP34N	7480 + 500 **7980**	59.37	N/A	5.91' x 4.92' = **29.08**	N/A	274.4	81	N/A	**4788**
SP34N (SOLID TIRES)	7480 + 500 **7980**	10.85	N/A	5.91' x 4.92' = **29.08**	N/A	274.4	441	N/A	**4788**
SP34 4X4	7350 + 500 **7850**	78.12	N/A	5.91' x 5.25' = **31.02**	N/A	253	60	N/A	**4710**
SP45N	14850 + 500 **15350**	52.70	N/A	6.07' x 4.92' = **29.86**	N/A	514	175	N/A	**9212**
SP45 4X4	14110 + 500 **14610**	39.68	N/A	6.07' x 6.50' = **39.46**	N/A	370.25	221	N/A	**8766**
SP45N	15900 + 500 **16400**	52.70	N/A	6.07' x 4.92' = **29.86**	N/A	549.23	186	N/A	**9840**
SP50 4X4	13700 + 500 **14200**	39.68	N/A	6.07' x 6.50' = **39.46**	N/A	359.86	214	N/A	**8520**
SP53 4x4	13700 + 500 **14200**	80.14	N/A	7.55' x 7.38' = **55.72**	N/A	254.85	106	N/A	**8520**
SP64 4X4	14190 + 500 **14690**	57.35	N/A	7.55' x 7.38' = **55.72**	N/A	267.65	155	N/A	**8948**

COLUMN DESCRIPTION

(0) Total weight (weight of machine + the maximum safe working load)

(1) Area of Foot plate is indicated where a machine has outriggers; self-propelled machines show the tire area in brackets.

(2) The working area is the machine footprint, in the case of trailer units it is over the footplate outside edges.

(3) The transit area for a self-propelled machine is the wheelbase multiplied by the overall transit width, in the case of the Track Drive machines (TD) it is the track length in contact with the ground multiplied by the overall track widths.

(4) Working area loadings are given for trailer units, and are the weight of the machine and operator(s) divided by the floor area of the machine when jacked to the extreme.

(5) Transit area loadings are given for self-propelled 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. For the Track Drive machines (TD) an additional calculation has been given for the weight spread over the total track area itself. This is the figure below the bold one in brackets.

(6) Point loadings are given in all cases. They are the total weight of the machine and operator(s), supported on the area of one foot or tire 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.

(7) Multiply **P.S.I** by 144 to give **lbs/ft^2** , i.e., 82psi = 11808 lbs/ft^2 .

(8) The final column gives the point load as a mass, and not as had been calculated before, a pressure. This is gained by multiplying the floor loading pressure in column 6 by the area of the foot, or tire, listed in the third column from the left.