Tracks technical specifications

BHM track system

Curves and straight trajectories installation

X-Y configuration installation

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1 BHM rail

1.1 Rail model choice

The rail model selection is based on the range and the device capacity. The range is the longest distance to be covered by the rail, at between two fasteners, mural posts or parallel rails for X-Y.

Maximal span for BHM rails			
		BHM standard span	BHM Long Span
Device capacity :		**Distance maximum between supports**	
440 lbs	200 kg	2.80 m	6.00* m
600 lbs	270 kg	2.40 m	5.25 m
800 lbs	360 kg	2.10 m	4.55 m
1000 lbs	455 kg	1.85 m	4.05 m

* Maximum length available 6.00m

Table use :

- Identify the device capacity to be installed in the left column. Choose the higher capacity.
- Locate the longest distance between your support points in the central table. Always choose the higher limit.
- Determine the BHM rail meeting your need above the table ·
- Exemple for an 550lbs device capacity to install on a rail supported with 3.85m interval:
    - Choose the higher capacity, at 600lbs for a 550lbs
    - Choose the higher distance, at 5.25m for 3.85m.
    - You select BHM long span.

Note: the allowable maximum spans are calculated according to the deflection limit in agreement with the standard ISO 10535.

Zone of use of the various rails:

Capacity		Span (m)																	
Lbs	Kg	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00
440	200	SS	SS	SS	SS	SS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
600	270	SS	SS	SS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	NR	NR	NR
800	360	SS	SS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	NR	NR	NR	NR	NR	NR
1000	455	SS	LS	LS	LS	LS	LS	LS	LS	LS	LS	NR	NR	NR	NR	NR	NR	NR	NR

SS	BHM standard span	LS	BHM long span	NR	Not recommended installation

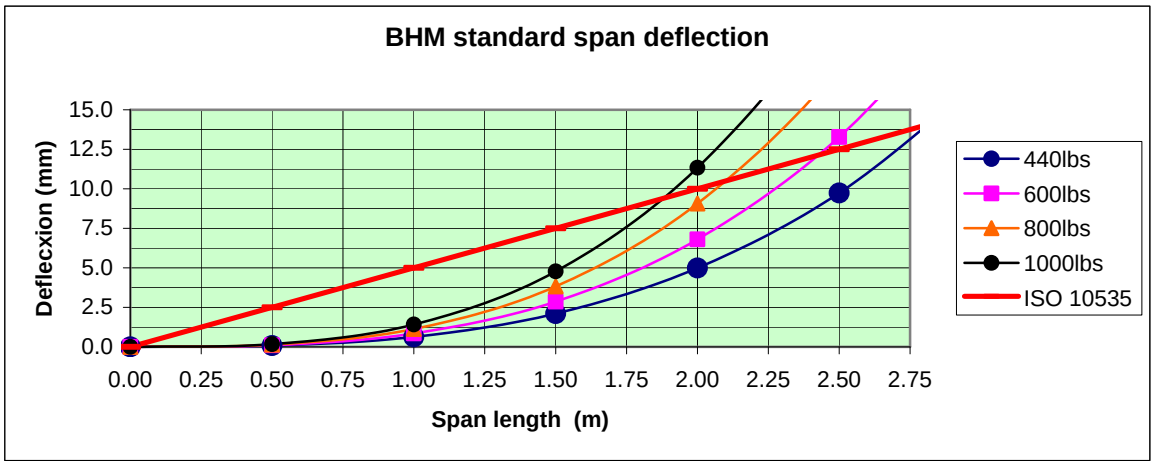
1.2 Rail safety

The safety factor indicates the number of times that it would be necessary to multiply the maximum device loading before the rail becomes unsafe and damaged.

Maximum span for BHM rails			
		BHM standard span	BHM long span
Device capacity :		**Minimum safety factor***	
440 lbs	200 kg	3.3	4.1
600 lbs	270 kg	2.8	3.5
800 lbs	360 kg	2.5	3.0
1000 lbs	455 kg	2.2	2.7

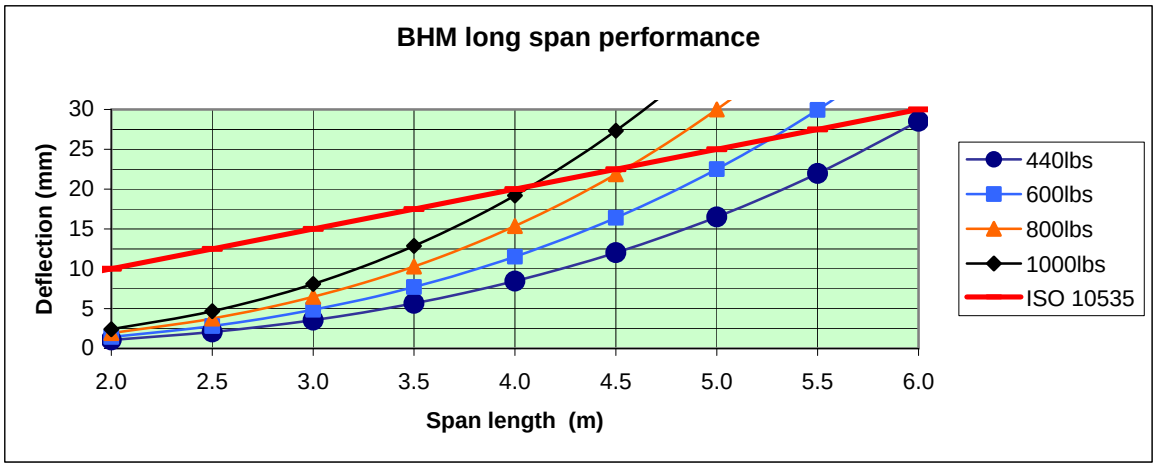
* If installed in accordance with the allowable maximum span between two supports.

1.3 Rail performance



The table above represents the rail deflection according to the span for various device capacities:

- the straight line represents the deflection limit according to the standard ISO 10535.
- The span scale indicates the normal span of installation, that at a maximum of 0 to 2.75m between the supports.
- the curves capacities and the straight line jonction corresponds to the maximum span for this rail and this device, for example 2.75m for an 440lbs device.
- the curves makes it possible to envisage the performance. Thus an 600 lbs devices will cause an 3mm deflection with a 1.5m span (installation standard).



The table above represents the rail deflection according to the span for various device capacities:

- the straight line represents the deflection limit according to the standard ISO 10535.
- The span scale indicates the normal span of installation, that at a maximum of 2 to 6m between the supports.
- the curves capacities and the straight line jonction corresponds to the maximum span for this rail and this device, for example 5.25m for an 600lbs device.
- the curves makes it possible to envisage the performance. Thus an 800 lbs devices will cause an 7mm deflection with a 3m span (installation standard).