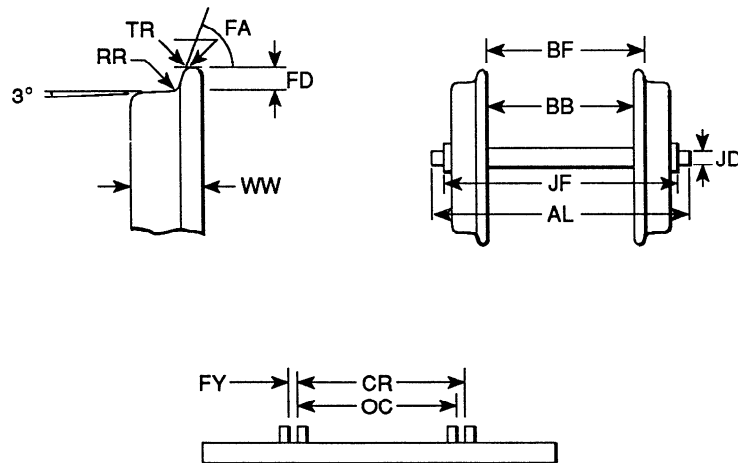




Dimensions and Compatibility with Standard Tracks of Carriage and Wagon Wheelsets in Current Production

This Data Sheet lists the compatibility with standard tracks of carriage and wagon wheelsets in production at the date of issue. It has been compiled from data provided by suppliers and will be added to as further information is received. The dimensions of wheelsets not listed should be obtained directly from the suppliers.

The dimensional requirements for full compatibility of a wheelset with the track are as follows:-



The minimum back to back (BB) dimension must be greater than the maximum dimension over the check rails (OC).

The maximum back to flange face dimension (BF) must be equal to or less than the minimum check rail to opposite rail face dimension (CR).

The minimum wheel width (WW) must be equal to or greater than twice the minimum flangeway (2FY).

The Track Standards do not specify a minimum dimension from the running surface to the top of the chairs or other type of rail support. A minimum dimension of 1.6mm will ensure clearance to the flanges of any of the wheels listed in this Data Sheet.

Key to the table.

c = Fully compatible with the track standard. x = Not compatible with the track standard.

Overall compatibility

*** = These wheelsets are fully compatible with this track.

* = Although slightly outside the requirements for full compatibility, which are based on both the track and wheelset being at the extremes of their respective tolerances and the flange being square, these wheelsets will run satisfactorily on this track.

NC = These wheelsets are not compatible with this track.

FD = Flange depth RR = Root radius TR = Tip radius FA = Face angle AD = axle diameter

Track Standard

Track Dimensions	Guild		Greenly (1935)		BRMSB			Scale	NMRA	AMRA	European NEM
	Fine	Coarse	Ordinary	Special	Fine	Coarse	Unified	Seven			
Over check rails OC	28.5	27.6	25.5	27.0	28.5	27.0	28.0	30.94	28.27	28.13	28.0
Check to opp. face CR	30.25	29.8	28.0	29.5	30.0	29.5	30.0	31.99	29.77	29.87	30.0
Twice flangeway 2FY	3.5	4.4	6.5	5.0	3.5	5.0	3.2	1.94	3.0	3.28	4.2
Wheelset Dimensions											
LEAKEY BB 29.00	c	c	c	c	c	c	c	x	c	c	c
32mm gauge BF 30.00	c	x	x	x	c	x	c	c	x	x	c
Fine Standard WW 3.75	c	x	x	x	c	x	c	c	c	c	x
Compatibility	***	*	NC	NC	***	NC	***	NC	*	*	*
Other data: FD 1.25 RR 0.7: TR 0.3: Coning 1 in 20: FA 75°											
LEAKEY BB 28.00	x	c	c	c	x	c	x	x	x	x	x
32mm gauge BF 29.50	c	c	x	c	c	c	c	c	c	c	c
Coarse Standard WW 5.00	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	***	NC	***	NC	***	NC	NC	NC	NC	NC
Other data: FD 1.5: RR 0.7: TR 0.5: Coning 1 in 20: FA 75°.											
PEMBERTON BB 29.00	c	c	c	c	c	c	c	x	c	c	c
32mm gauge BF 30.00	c	c	x	x	c	x	c	c	c	c	c
Fine Standard WW 3.70	c	x	x	x	c	x	c	c	c	c	x
Compatibility	***	*	NC	NC	***	NC	***	NC	***	***	*
Other data: FD 1.24: RR 0.5: TR 0.5: Coning 1 in 20: FA 80°: AD 4.76 (3/16).											
RAVENSCALE BB 29.00	c	c	c	c	c	c	c	x	c	c	c
32mm gauge BF 30.00	c	x	x	x	c	x	c	c	x	x	c
Fine Standard WW 3.75	c	x	x	x	c	x	c	c	c	c	x
Compatibility	***	*	NC	NC	***	NC	***	NC	*	*	*
Other data: FD 1.0: RR 0.5: TR 0.25: Coning 1 in 20: FA 70°: AD 4.76 (3/16in). See Note 1.											
RAVENSCALE BB 28.00	x	c	c	c	x	c	x	x	x	x	x
32mm gauge BF 29.50	c	c	x	c	c	c	c	c	c	c	c
Coarse Standard WW 5.00	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	***	NC	***	NC	***	NC	NC	NC	NC	NC
Other data: FD 1.5: RR 0.5: TR 0.25: Coning 1 in 20: FA 70°: AD 4.76 (3/16in) Note: Ravenscale wheelsets can be supplied to any standard and with various types of insulation and axle. The wheel diameter is normally made 0.5mm less than the true scale dimension.											
SLATERS BB 29.20	c	c	c	c	c	c	c	x	c	c	c
32mm gauge BF 29.95	c	x	x	x	c	x	c	c	x	x	c
Fine Standard WW 3.81	c	x	x	x	c	x	c	c	c	c	x
Compatibility	***	*	NC	NC	***	NC	***	NC	*	*	*
Other data: FD 1.02: RR 0.5: TR 1.09/0.36: Coning 1 in 20: FA 79°. See Note 1.											
SLATERS BB 29.00	c	c	c	c	c	c	c	x	c	c	c
32mm gauge BF 29.75	c	c	x	x	c	x	c	c	c	c	c
Coarse Standard WW 5.00	c	c	x	c	c	c	c	c	c	c	c
Compatibility	***	***	NC	*	***	*	***	NC	***	***	***
Other data: FD 1.02: RR 0.5: TR 1.09/0.36: Coning 1 in 20: FA 79°. These wheelsets comply with the Guild Universal Standard except that they exceed the maximum 4.75 width. See Note 1.											

Note 1 The flange depth is below the specified minimum for all 32mm gauge standards except Guild Fine.