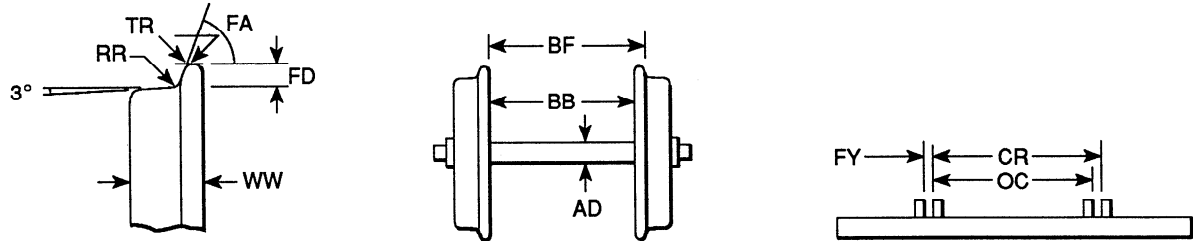


## Dimensions and Compatibility with Standard Tracks of Locomotive Wheelsets in Current Production

This Data Sheet lists the compatibility with standard tracks of locomotive 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 wheelsets 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	Euro pean 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
<b>Wheelset Dimensions</b>											
A.G.H. BB 29.20	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 1.1 RR 0.6: TR 0.25: Coning 1 in 20: FA 70°: AD Driving wheels 4.76 (3/16in), Others 3.97 (5/32) See Note 1.											
GIBSON BB 29.00	c	c	c	c	c	c	c	x	c	c	c
32mm gauge BF 29.90	c	x	x	x	c	x	c	c	x	x	c
Fine Standard WW 3.50	c	x	x	x	c	x	c	c	c	c	x
Compatibility	***	*	NC	NC	***	NC	***	NC	*	*	*
Other data: FD 1.03 RR 0.52: TR 0.26: Coning 1 in 20: FA 70°: AD 4.76 (3/16in) See Note 1.											

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

**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  
 AL = Axle length                      JF = Length over journal faces                      JD = Journal 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
<b>Wheelset Dimensions</b>												
GIBSON	BB 29.0	c	c	c	c	c	c	c	x	c	c	c
32mm gauge	BF 29.9	c	x	x	x	c	x	c	c	x	c	c
Fine Standard	WW 3.5	c	x	x	x	c	x	c	c	c	c	x
Compatibility		***	*	NC	NC	***	NC	***	NC	*	***	*
Other data: FD 1.03: RR 0.52: TR 0.26: Coning 1 in 20: FA 70°: AL 46.0: JF 39.0: JD 1.5: parallel bearings Note: The flange depth is below the specified minimum for all 32mm gauge standards except Guild Fine.												
PECO	BB 29.21	c	c	c	c	c	c	c	x	c	c	c
32mm gauge	BF 29.72	c	c	x	x	c	x	c	c	c	c	c
Fine Standard	WW 3.45	x	x	x	x	x	x	c	c	c	c	x
Compatibility		*	*	NC	NC	*	NC	***	NC	***	***	*
Other data: FD 1.0: RR 0.76: TR 0.25: Coning 1 in 28: AL 48.4: JF 39.57: JD 1.65: pinpoint bearings The flange depth is below the specified minimum for all 32mm gauge standards except Guild Fine. As fitted to PECO Wagons.												
PEMBERTON	BB 29.0	c	c	c	c	c	c	c	x	c	c	c
32mm gauge	BF 30.0	c	c	x	x	c	x	c	c	c	c	c
Fine Standard	WW 3.7	c	x	x	x	c	x	c	c	c	c	x
Compatibility		***	*	NC	NC	***	NC	***	NC	***	***	*
Other data: FD 1.24: RR 0.50: TR 0.50: Coning 1 in 20: FA 80°: AL 45.0: JF 37.4: JD 1.3: parallel bearings												
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 3.41	x	x	x	x	x	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°. These wheelsets comply with the Guild Universal Standard except that they are below the minimum flange depth. The flange depth is also below the specified minimum for all 32mm gauge standards except Guild Fine.												
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 and are below the minimum flange depth. The flange depth is also below the specified minimum for all 32mm gauge standards except Guild Fine.												