



## TYRE DATA BOOKLET

**305/680-18 DH**

**305/680-18 DHB**

**305/680-18 WH**

**2020**

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# ***INTRODUCTION***

## **INTRODUCTION**

This document provides the user with technical information regarding several aspects of the tyre characteristics. The data was acquired using indoor testing methods on physical tyres.

For individual car fitments, usage guidelines and prescriptions for camber and pressure please refer to the relevant Pirelli Technical Booklet, which is included as part of this Pirelli Data Package.



## STATIC MEASUREMENTS

Slick Tyres				
Size & Fitment	Nominal Weight	Max Width (C)	Circumference ( $\pi D$ )	Tread Width (Cb)
	(kilograms)	(mm)	(mm)	(mm)
<b>305/680-18</b> <b>DH</b> <b>18"x11J</b>	11.8	305	2148	280
<b>305/680-18</b> <b>DHB</b> <b>18"x11.0J</b>	11.2	308	2148	283
<b>305/680-18</b> <b>DHB</b>	11.2	313	2146	283

Wet Tyres				
Size & Fitment	Nominal Weight	Max Width (C)	Circumference ( $\pi D$ )	Tread Width (Cb)
	(kilograms)	(mm)	(mm)	(mm)
<b>305/680-18</b> <b>WH</b> <b>18"x11.0J</b>	TBA	TBA	TBA	TBA



**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

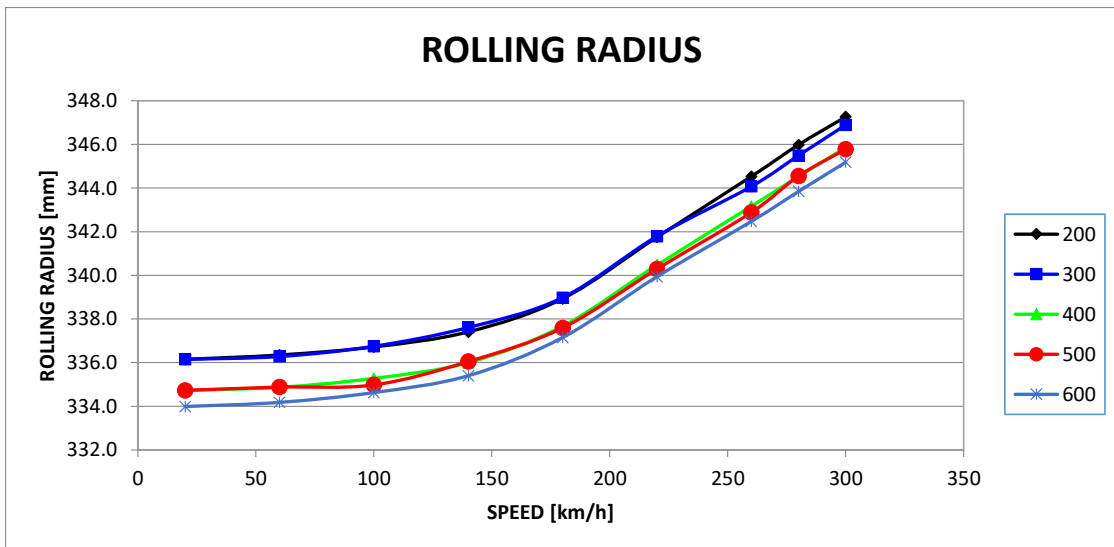
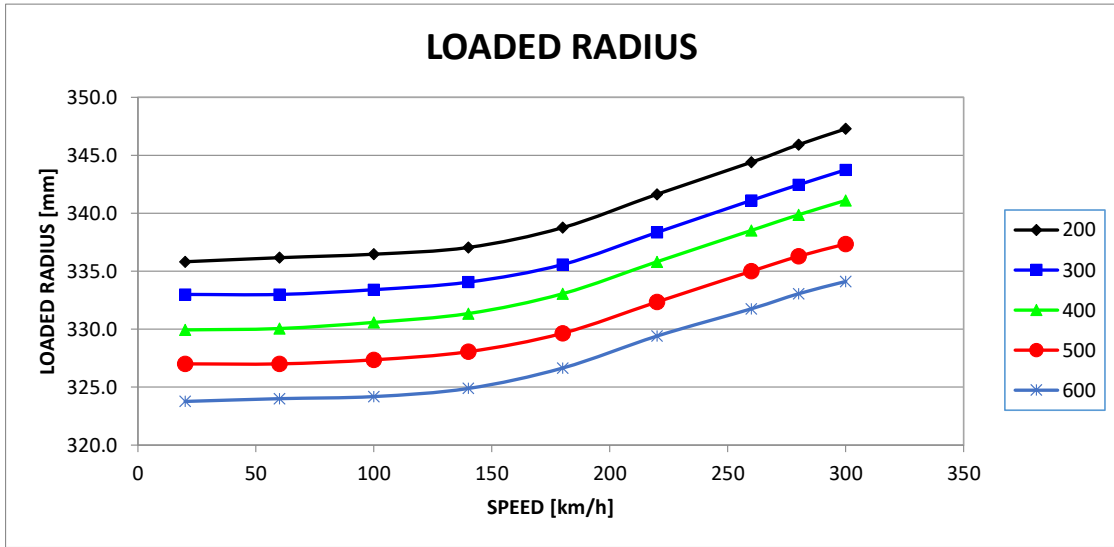
305/680-18x11.0J DH

**LOADED RADIUS**

		LOAD [kg]				
		200	300	400	500	600
SPEED [km/h]	20	335.8	333.0	329.9	327.0	323.8
	60	336.2	333.0	330.1	327.0	324.0
	100	336.5	333.4	330.6	327.4	324.2
	140	337.0	334.1	331.3	328.1	324.9
	180	338.8	335.6	333.1	329.6	326.6
	220	341.6	338.3	335.8	332.3	329.4
	260	344.4	341.1	338.5	335.0	331.8
	280	345.9	342.5	339.9	336.3	333.1
	300	347.3	343.7	341.1	337.3	334.1

**ROLLING RADIUS**

		LOAD [kg]				
		200	300	400	500	600
SPEED [km/h]	20	336.1	336.1	334.7	334.7	334.0
	60	336.4	336.3	334.9	334.9	334.2
	100	336.7	336.8	335.3	335.0	334.6
	140	337.4	337.6	336.0	336.0	335.4
	180	338.9	339.0	337.7	337.6	337.1
	220	341.8	341.8	340.5	340.3	339.9
	260	344.5	344.1	343.2	342.9	342.5
	280	346.0	345.5	344.5	344.5	343.8
	300	347.3	346.9	345.9	345.8	345.2





**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

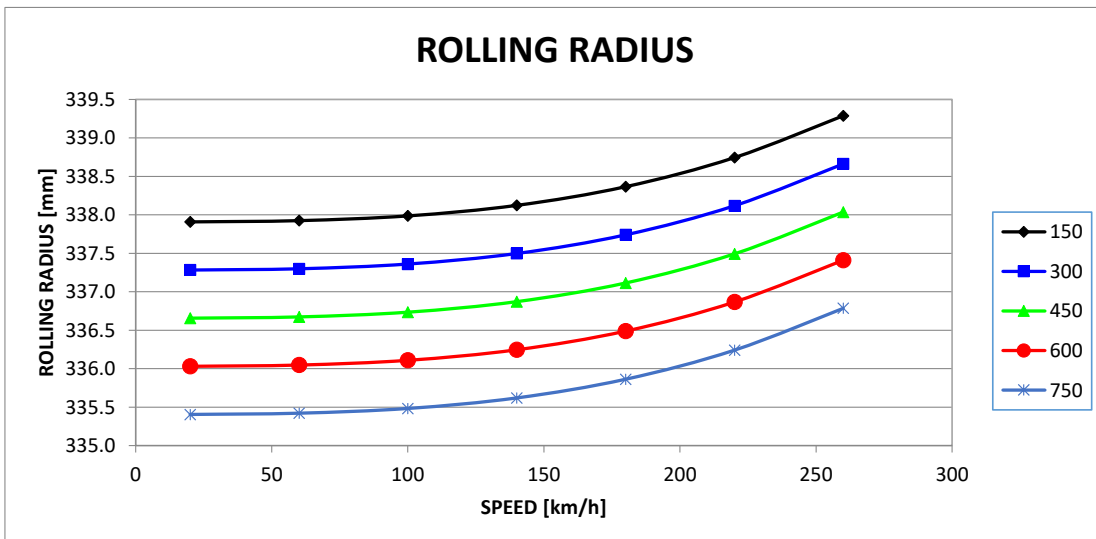
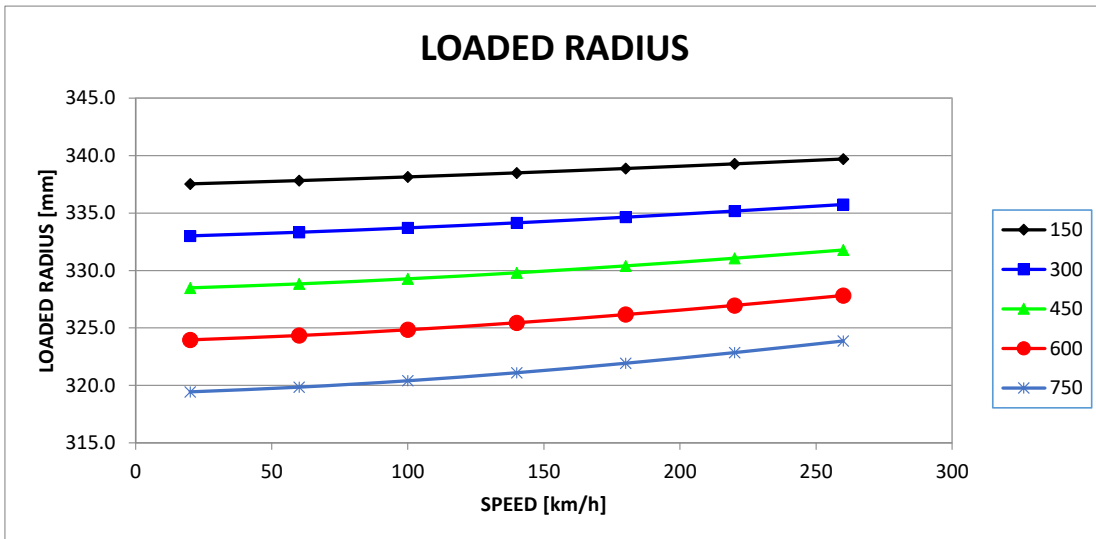
305/680-18x10.5J DHB

**LOADED RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	337.5	333.0	328.5	324.0	319.4
	60	337.8	333.3	328.8	324.3	319.8
	100	338.1	333.7	329.3	324.8	320.4
	140	338.5	334.1	329.8	325.5	321.1
	180	338.9	334.6	330.4	326.2	321.9
	220	339.3	335.2	331.1	327.0	322.9
	260	339.7	335.7	331.8	327.8	323.9
	280					
	300					

**ROLLING RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	337.9	337.3	336.7	336.0	335.4
	60	337.9	337.3	336.7	336.0	335.4
	100	338.0	337.4	336.7	336.1	335.5
	140	338.1	337.5	336.9	336.2	335.6
	180	338.4	337.7	337.1	336.5	335.9
	220	338.7	338.1	337.5	336.9	336.2
	260	339.3	338.7	338.0	337.4	336.8
	280					
	300					





**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

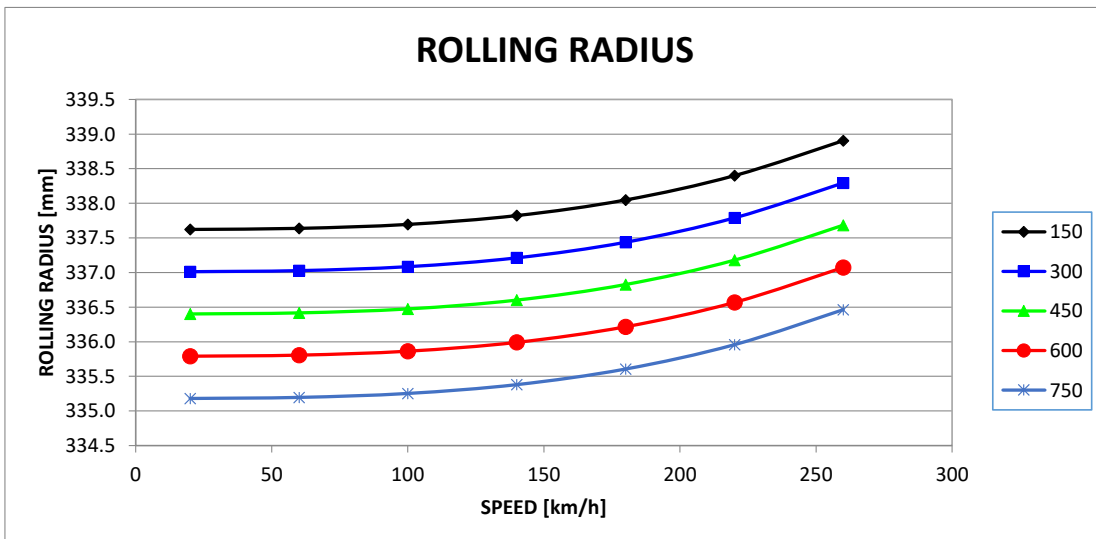
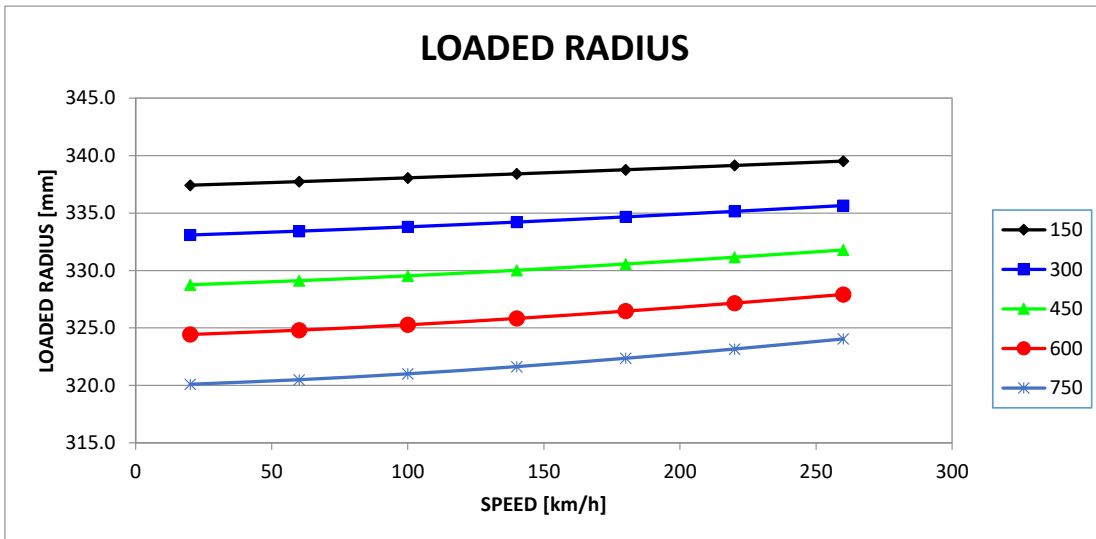
**305/680-18x11.0J DHB**

**LOADED RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	337.4	333.1	328.8	324.4	320.1
	60	337.7	333.4	329.1	324.8	320.5
	100	338.1	333.8	329.5	325.3	321.0
	140	338.4	334.2	330.0	325.8	321.6
	180	338.8	334.7	330.6	326.5	322.4
	220	339.1	335.1	331.2	327.2	323.2
	260	339.5	335.7	331.8	327.9	324.0
	280					
	300					

**ROLLING RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	337.6	337.0	336.4	335.8	335.2
	60	337.6	337.0	336.4	335.8	335.2
	100	337.7	337.1	336.5	335.9	335.3
	140	337.8	337.2	336.6	336.0	335.4
	180	338.0	337.4	336.8	336.2	335.6
	220	338.4	337.8	337.2	336.6	336.0
	260	338.9	338.3	337.7	337.1	336.5
	280					
	300					





**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

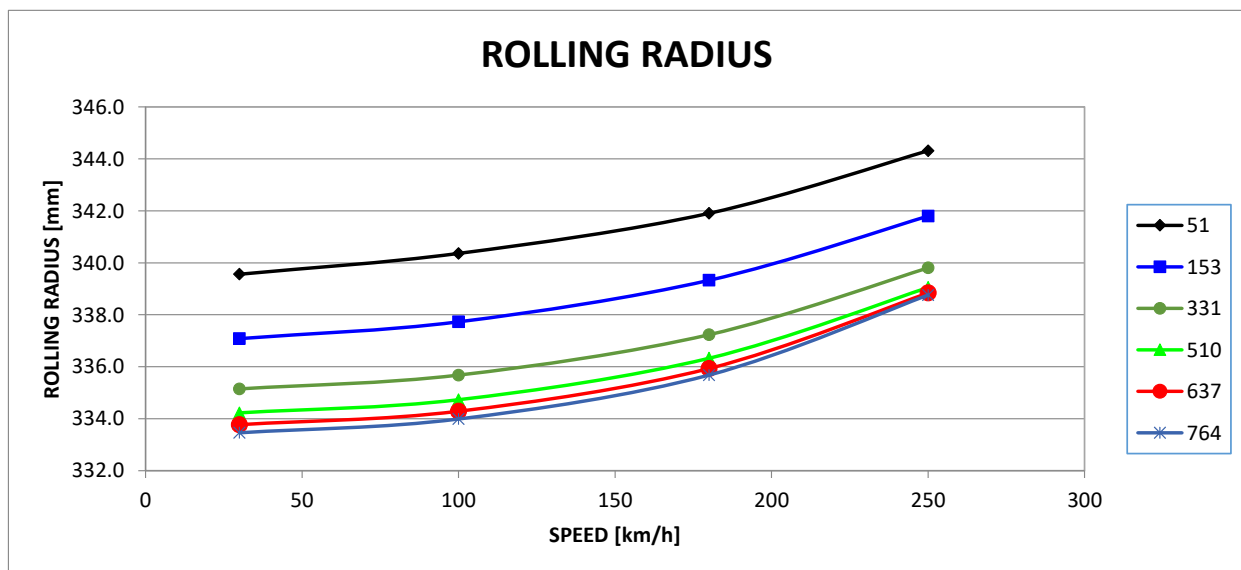
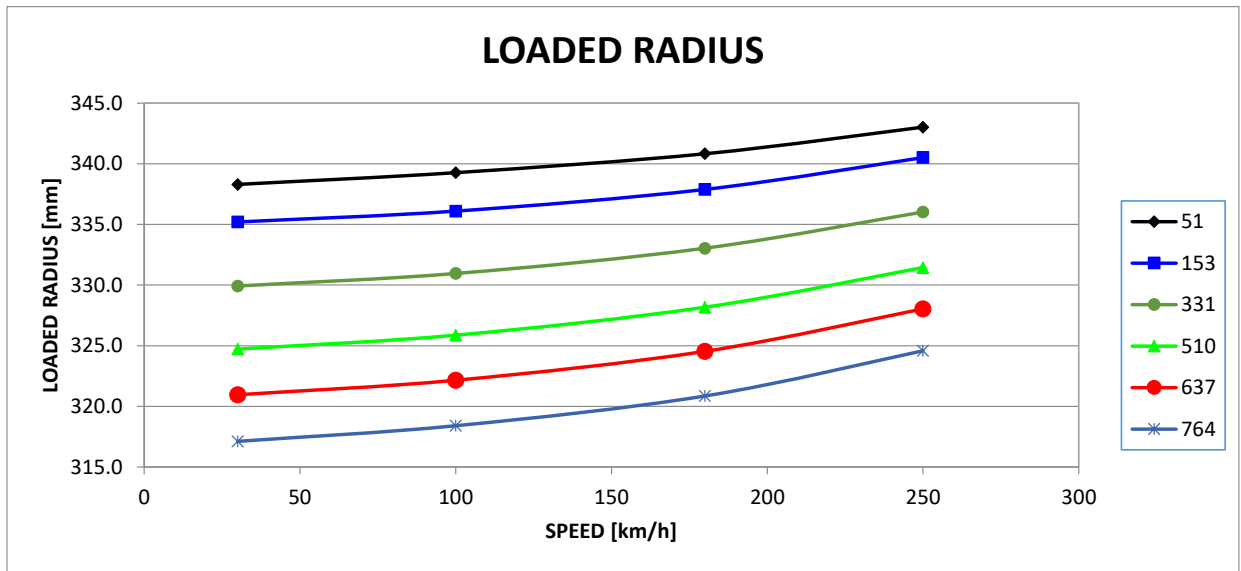
305/680-18x11.0J WH

**LOADED RADIUS**

		LOAD [kg]					
		51	153	331	510	637	764
SPEED [km/h]	30	338.3	335.2	329.9	324.7	321.0	317.1
	100	339.3	336.1	331.0	325.9	322.2	318.4
	180	340.8	337.9	333.0	328.2	324.5	320.9
	250	343.0	340.5	336.0	331.4	328.0	324.6

**ROLLING RADIUS**

		LOAD [kg]					
		51	153	331	510	637	764
SPEED [km/h]	30	339.6	337.1	335.1	334.2	333.8	333.5
	100	340.4	337.7	335.7	334.7	334.3	334.0
	180	341.9	339.3	337.2	336.3	335.9	335.7
	250	344.3	341.8	339.8	339.0	338.8	338.8





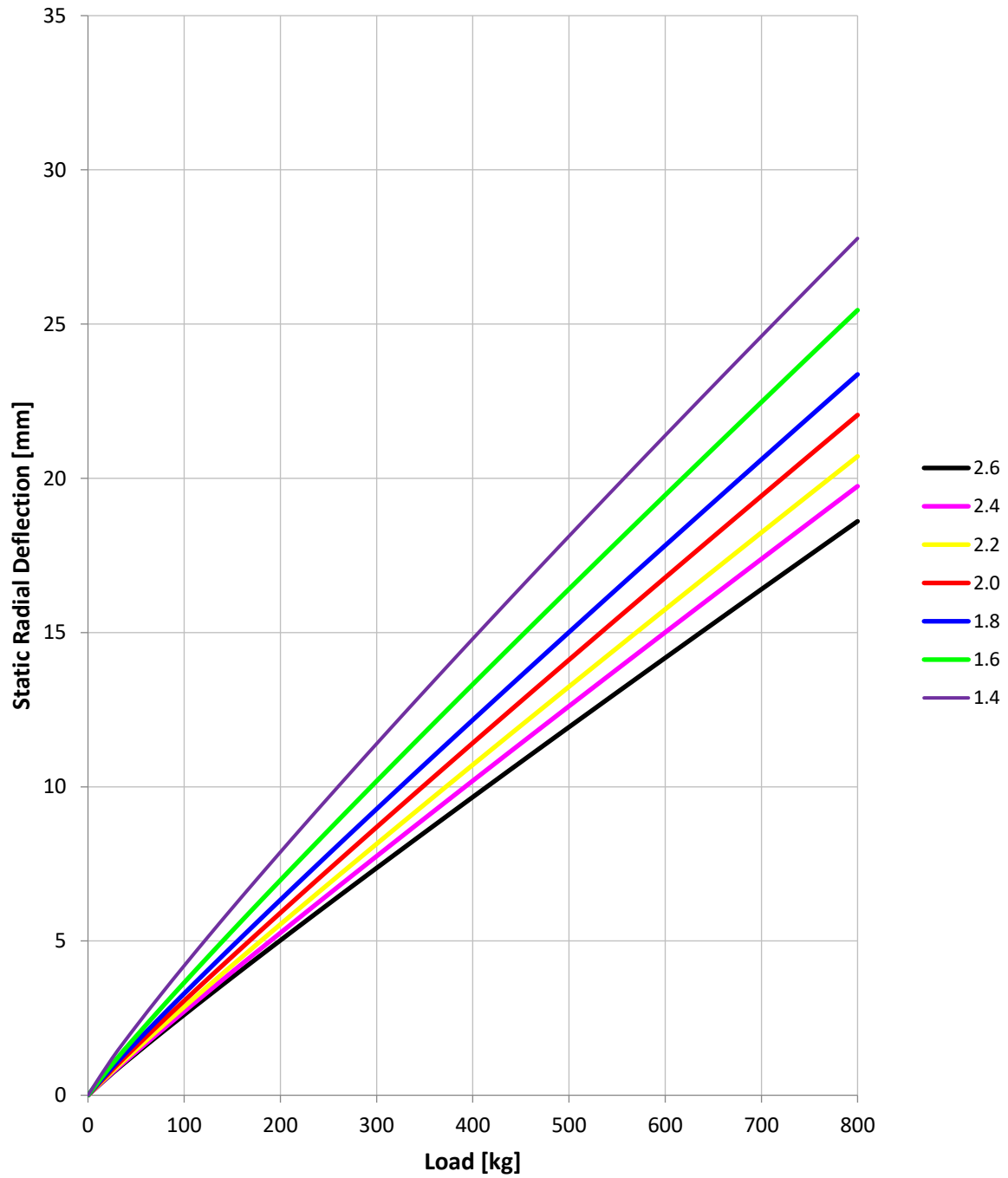
**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0 ° DH**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.7	0.7	0.8	0.8	0.9	1.0	1.2
50	1.4	1.4	1.5	1.6	1.7	1.9	2.2
75	2.0	2.1	2.2	2.3	2.5	2.8	3.2
100	2.6	2.7	2.9	3.1	3.3	3.6	4.2
125	3.2	3.4	3.5	3.8	4.1	4.5	5.1
150	3.8	4.0	4.2	4.5	4.8	5.3	6.1
175	4.4	4.6	4.9	5.2	5.6	6.2	7.0
200	5.0	5.3	5.5	5.9	6.3	7.0	7.9
225	5.6	5.9	6.2	6.6	7.1	7.8	8.8
250	6.2	6.5	6.8	7.3	7.8	8.6	9.7
275	6.8	7.1	7.5	8.0	8.5	9.4	10.5
300	7.4	7.7	8.1	8.7	9.3	10.2	11.4
325	7.9	8.4	8.8	9.4	10.0	11.0	12.3
350	8.5	9.0	9.4	10.1	10.7	11.8	13.1
375	9.1	9.6	10.1	10.7	11.4	12.5	14.0
400	9.7	10.2	10.7	11.4	12.2	13.3	14.8
425	10.2	10.8	11.3	12.1	12.9	14.1	15.6
450	10.8	11.4	12.0	12.8	13.6	14.9	16.5
475	11.4	12.0	12.6	13.4	14.3	15.6	17.3
500	11.9	12.6	13.2	14.1	15.0	16.4	18.1
525	12.5	13.2	13.9	14.8	15.7	17.2	18.9
550	13.1	13.8	14.5	15.5	16.4	17.9	19.8
575	13.6	14.4	15.1	16.1	17.1	18.7	20.6
600	14.2	15.0	15.8	16.8	17.8	19.5	21.4
625	14.7	15.6	16.4	17.4	18.5	20.2	22.2
650	15.3	16.2	17.0	18.1	19.2	21.0	23.0
675	15.8	16.8	17.6	18.8	19.9	21.7	23.8
700	16.4	17.4	18.2	19.4	20.6	22.5	24.6
725	17.0	18.0	18.9	20.1	21.3	23.2	25.4
750	17.5	18.6	19.5	20.7	22.0	24.0	26.2
775	18.1	19.2	20.1	21.4	22.7	24.7	27.0
800	18.6	19.7	20.7	22.1	23.4	25.5	27.8





STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0° DH



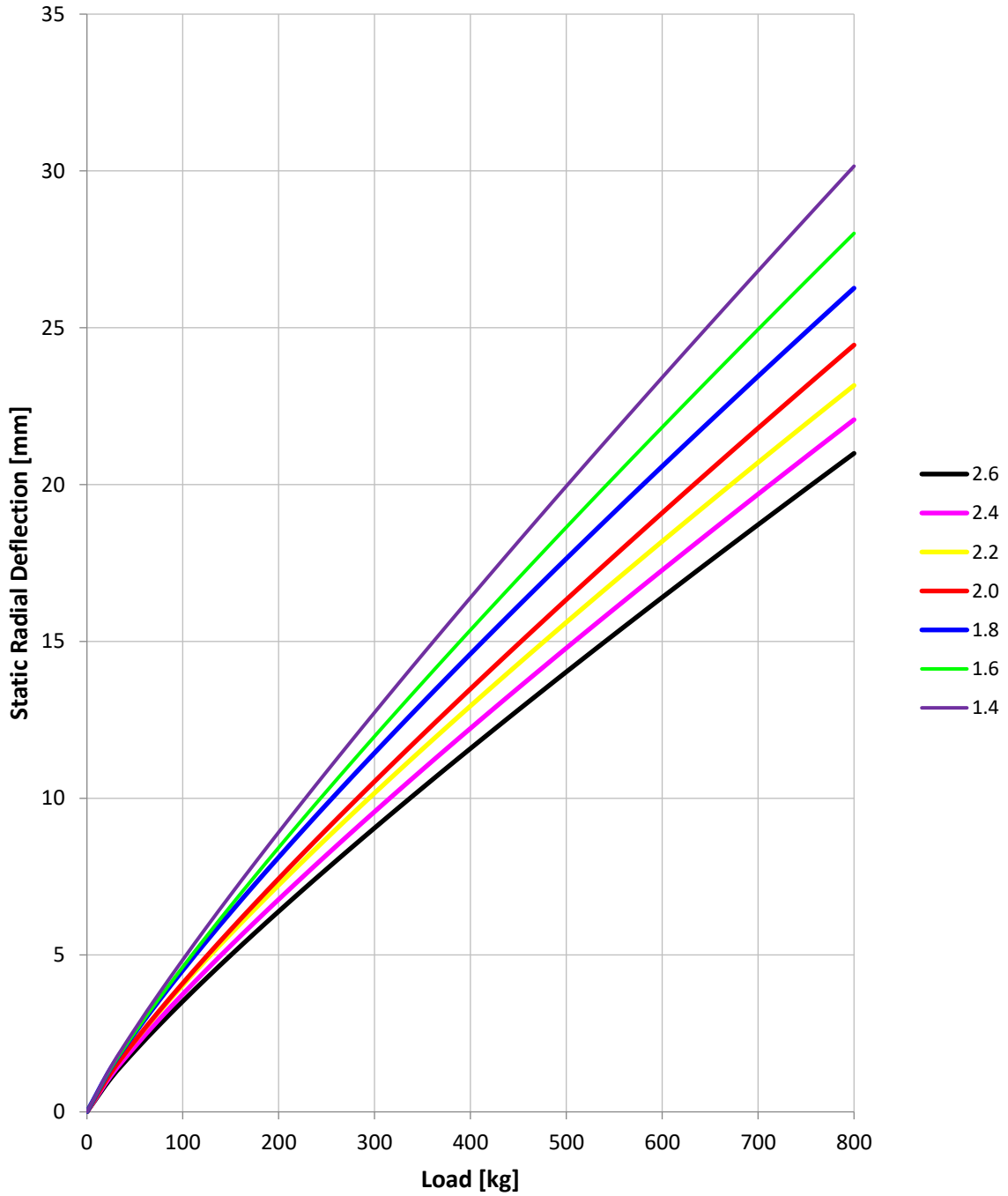


**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0 ° DH**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.1	1.2	1.3	1.2	1.4	1.4	1.4
50	1.9	2.1	2.3	2.3	2.5	2.5	2.6
75	2.8	2.9	3.2	3.2	3.5	3.6	3.8
100	3.5	3.8	4.0	4.1	4.5	4.6	4.9
125	4.3	4.5	4.9	5.0	5.5	5.6	5.9
150	5.0	5.3	5.7	5.8	6.4	6.6	6.9
175	5.7	6.0	6.5	6.6	7.3	7.5	7.9
200	6.4	6.8	7.2	7.4	8.1	8.4	8.9
225	7.1	7.5	8.0	8.2	9.0	9.3	9.9
250	7.7	8.2	8.7	9.0	9.8	10.2	10.9
275	8.4	8.9	9.4	9.8	10.6	11.1	11.8
300	9.1	9.6	10.2	10.5	11.4	12.0	12.7
325	9.7	10.2	10.9	11.3	12.2	12.8	13.7
350	10.3	10.9	11.6	12.0	13.0	13.7	14.6
375	11.0	11.6	12.3	12.8	13.8	14.5	15.5
400	11.6	12.2	12.9	13.5	14.6	15.4	16.4
425	12.2	12.9	13.6	14.2	15.4	16.2	17.3
450	12.8	13.5	14.3	14.9	16.1	17.0	18.2
475	13.4	14.2	15.0	15.6	16.9	17.8	19.1
500	14.0	14.8	15.6	16.3	17.6	18.6	20.0
525	14.6	15.4	16.3	17.0	18.4	19.4	20.8
550	15.2	16.0	16.9	17.7	19.1	20.2	21.7
575	15.8	16.7	17.6	18.4	19.9	21.0	22.6
600	16.4	17.3	18.2	19.1	20.6	21.8	23.4
625	17.0	17.9	18.8	19.8	21.3	22.6	24.3
650	17.6	18.5	19.5	20.5	22.0	23.4	25.1
675	18.1	19.1	20.1	21.1	22.7	24.2	26.0
700	18.7	19.7	20.7	21.8	23.5	24.9	26.8
725	19.3	20.3	21.3	22.5	24.2	25.7	27.7
750	19.9	20.9	21.9	23.1	24.9	26.5	28.5
775	20.4	21.5	22.6	23.8	25.6	27.2	29.3
800	21.0	22.1	23.2	24.4	26.3	28.0	30.2



**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0° DH**



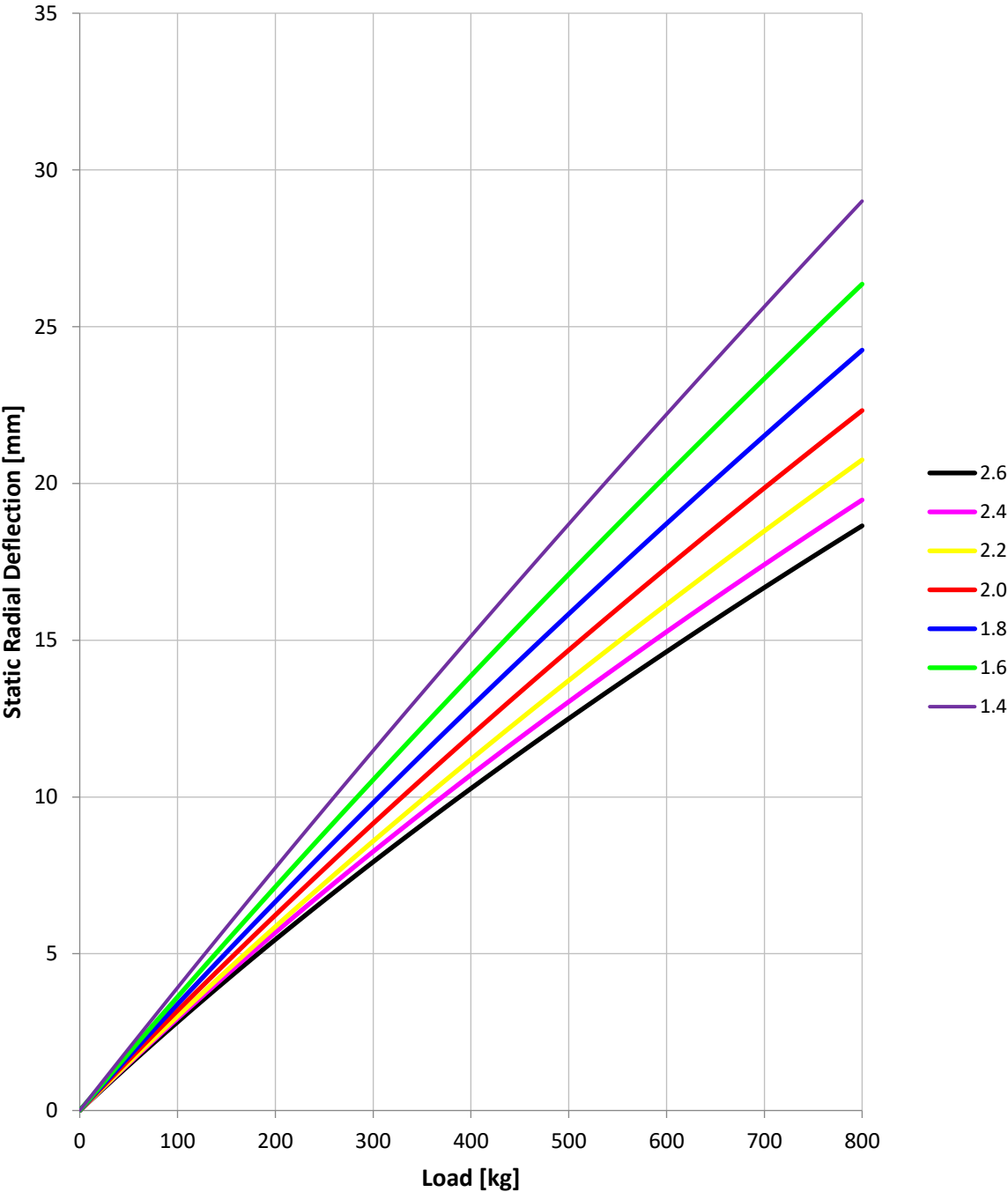


**STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA 0.0 ° DHB**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.7	0.8	0.8	0.8	0.9	0.9	1.0
50	1.4	1.5	1.5	1.6	1.7	1.8	2.0
75	2.1	2.2	2.3	2.4	2.6	2.7	2.9
100	2.8	2.9	3.0	3.2	3.4	3.6	3.9
125	3.5	3.6	3.7	4.0	4.2	4.5	4.9
150	4.2	4.3	4.5	4.7	5.0	5.4	5.8
175	4.8	5.0	5.2	5.5	5.9	6.3	6.8
200	5.5	5.7	5.9	6.2	6.7	7.1	7.7
225	6.1	6.3	6.6	7.0	7.5	8.0	8.7
250	6.7	7.0	7.2	7.7	8.3	8.9	9.6
275	7.3	7.6	7.9	8.4	9.0	9.7	10.6
300	7.9	8.3	8.6	9.2	9.8	10.5	11.5
325	8.5	8.9	9.3	9.9	10.6	11.4	12.4
350	9.1	9.5	9.9	10.6	11.4	12.2	13.3
375	9.7	10.1	10.6	11.3	12.1	13.0	14.2
400	10.3	10.7	11.2	12.0	12.9	13.9	15.1
425	10.8	11.3	11.8	12.7	13.6	14.7	16.0
450	11.4	11.9	12.5	13.3	14.4	15.5	16.9
475	12.0	12.5	13.1	14.0	15.1	16.3	17.8
500	12.5	13.0	13.7	14.7	15.8	17.1	18.7
525	13.0	13.6	14.3	15.3	16.6	17.9	19.6
550	13.6	14.2	14.9	16.0	17.3	18.7	20.5
575	14.1	14.7	15.5	16.7	18.0	19.5	21.3
600	14.6	15.3	16.1	17.3	18.7	20.3	22.2
625	15.2	15.8	16.7	18.0	19.4	21.0	23.1
650	15.7	16.4	17.3	18.6	20.1	21.8	23.9
675	16.2	16.9	17.9	19.2	20.8	22.6	24.8
700	16.7	17.4	18.5	19.9	21.5	23.3	25.6
725	17.2	17.9	19.1	20.5	22.2	24.1	26.5
750	17.7	18.5	19.6	21.1	22.9	24.9	27.3
775	18.2	19.0	20.2	21.7	23.6	25.6	28.2
800	18.7	19.5	20.8	22.3	24.3	26.4	29.0



STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA 0.0° DHB



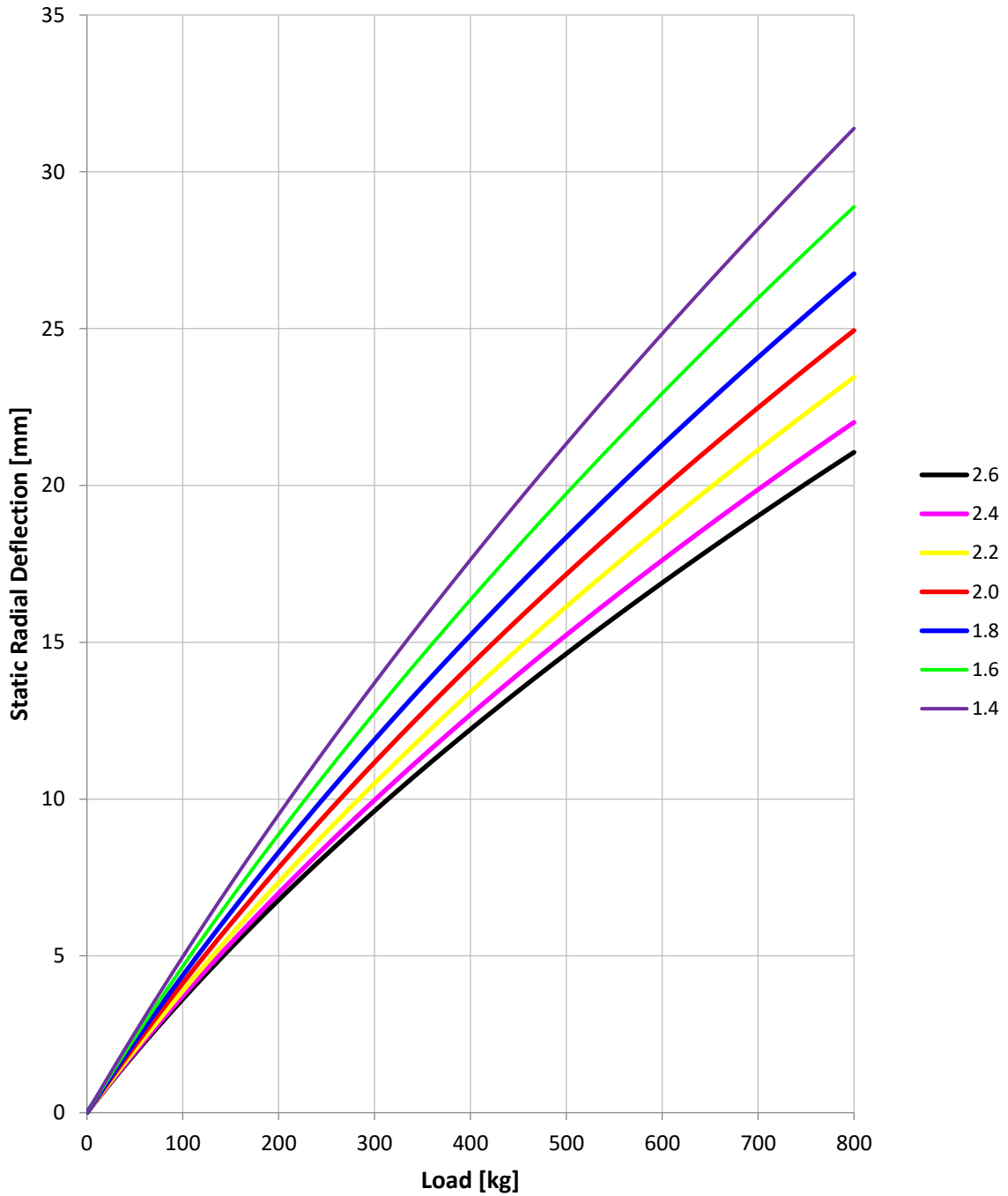


**STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA -3.0 ° DHB**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.0	1.0	1.0	1.1	1.1	1.2	1.3
50	1.9	1.9	2.0	2.1	2.3	2.4	2.5
75	2.8	2.8	3.0	3.2	3.3	3.5	3.8
100	3.6	3.7	3.9	4.1	4.4	4.7	5.0
125	4.4	4.6	4.8	5.1	5.4	5.8	6.1
150	5.3	5.4	5.7	6.0	6.4	6.8	7.3
175	6.0	6.2	6.5	6.9	7.4	7.9	8.4
200	6.8	7.0	7.3	7.8	8.3	8.9	9.5
225	7.5	7.8	8.2	8.7	9.2	9.9	10.6
250	8.2	8.5	9.0	9.5	10.1	10.9	11.6
275	8.9	9.3	9.7	10.4	11.0	11.8	12.7
300	9.6	10.0	10.5	11.2	11.9	12.8	13.7
325	10.3	10.7	11.3	12.0	12.8	13.7	14.7
350	10.9	11.4	12.0	12.8	13.6	14.6	15.7
375	11.6	12.0	12.7	13.5	14.4	15.5	16.7
400	12.2	12.7	13.4	14.3	15.2	16.4	17.6
425	12.8	13.3	14.1	15.0	16.0	17.2	18.6
450	13.5	14.0	14.8	15.7	16.8	18.1	19.5
475	14.0	14.6	15.5	16.5	17.6	18.9	20.4
500	14.6	15.2	16.1	17.2	18.3	19.7	21.3
525	15.2	15.8	16.8	17.9	19.1	20.6	22.2
550	15.8	16.4	17.4	18.6	19.8	21.4	23.1
575	16.3	17.0	18.1	19.2	20.6	22.2	24.0
600	16.9	17.6	18.7	19.9	21.3	22.9	24.8
625	17.4	18.2	19.3	20.6	22.0	23.7	25.7
650	18.0	18.8	19.9	21.2	22.7	24.5	26.5
675	18.5	19.3	20.5	21.8	23.4	25.2	27.4
700	19.0	19.9	21.1	22.5	24.1	26.0	28.2
725	19.5	20.4	21.7	23.1	24.8	26.7	29.0
750	20.1	21.0	22.3	23.7	25.4	27.4	29.8
775	20.6	21.5	22.9	24.3	26.1	28.2	30.6
800	21.1	22.0	23.4	24.9	26.7	28.9	31.4



STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA -3.0° DHB





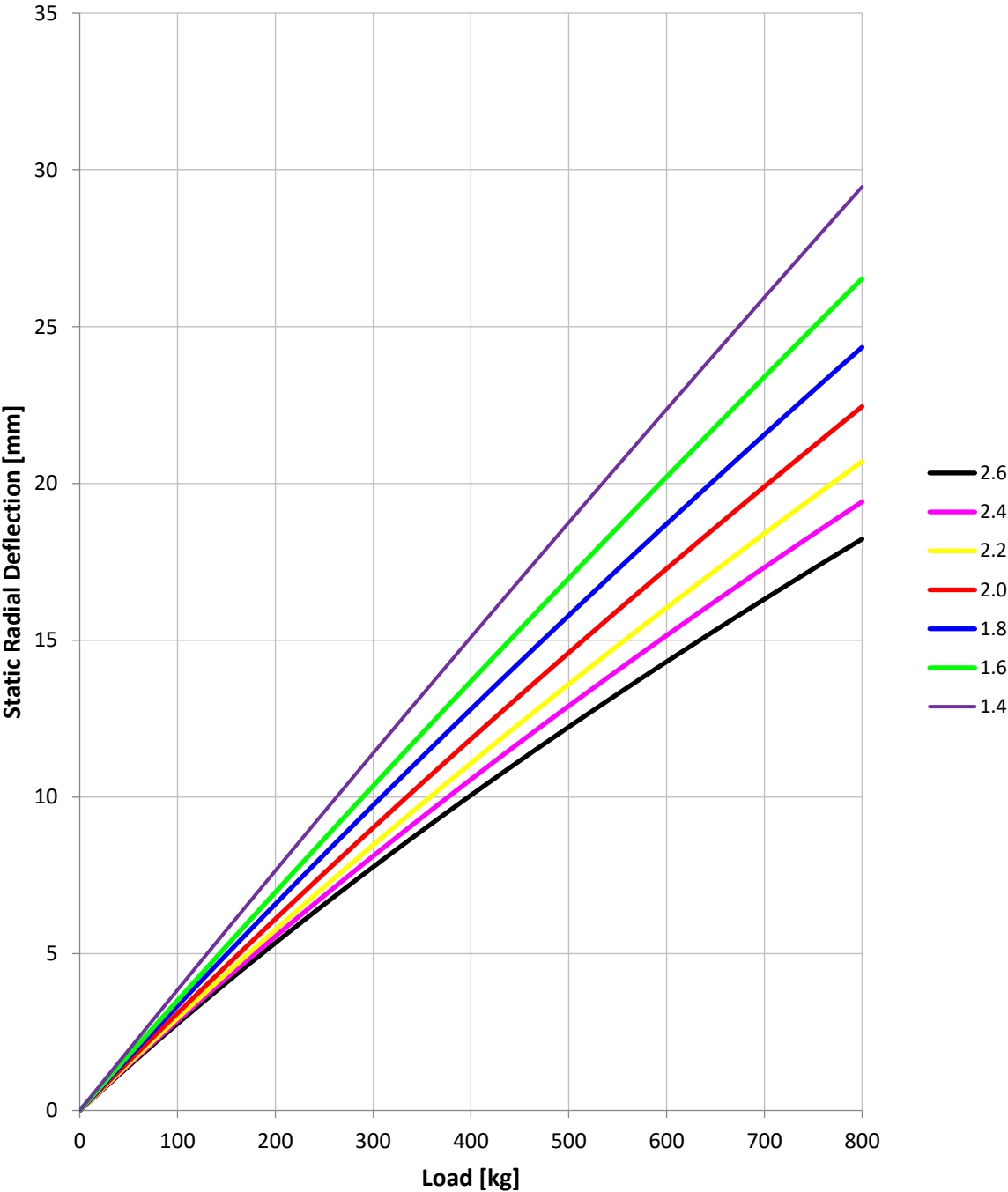
**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0 ° DHB**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.7	0.7	0.7	0.8	0.8	0.9	1.0
50	1.4	1.5	1.5	1.6	1.7	1.8	1.9
75	2.1	2.2	2.2	2.3	2.5	2.6	2.9
100	2.8	2.9	2.9	3.1	3.3	3.5	3.8
125	3.4	3.5	3.7	3.9	4.2	4.4	4.8
150	4.1	4.2	4.4	4.6	5.0	5.2	5.8
175	4.7	4.9	5.1	5.4	5.8	6.1	6.7
200	5.3	5.6	5.8	6.1	6.6	7.0	7.6
225	6.0	6.2	6.4	6.8	7.4	7.8	8.6
250	6.6	6.9	7.1	7.6	8.2	8.7	9.5
275	7.2	7.5	7.8	8.3	9.0	9.5	10.5
300	7.8	8.1	8.5	9.0	9.7	10.4	11.4
325	8.4	8.7	9.1	9.7	10.5	11.2	12.3
350	8.9	9.4	9.8	10.4	11.3	12.0	13.3
375	9.5	10.0	10.4	11.1	12.0	12.9	14.2
400	10.1	10.6	11.1	11.8	12.8	13.7	15.1
425	10.6	11.2	11.7	12.5	13.6	14.5	16.0
450	11.2	11.7	12.3	13.2	14.3	15.3	16.9
475	11.7	12.3	13.0	13.9	15.0	16.2	17.8
500	12.2	12.9	13.6	14.6	15.8	17.0	18.8
525	12.8	13.5	14.2	15.3	16.5	17.8	19.7
550	13.3	14.0	14.8	15.9	17.3	18.6	20.6
575	13.8	14.6	15.4	16.6	18.0	19.4	21.5
600	14.3	15.2	16.0	17.3	18.7	20.2	22.4
625	14.8	15.7	16.6	17.9	19.4	21.0	23.3
650	15.3	16.2	17.2	18.6	20.1	21.8	24.2
675	15.8	16.8	17.8	19.3	20.9	22.6	25.0
700	16.3	17.3	18.4	19.9	21.6	23.4	25.9
725	16.8	17.9	19.0	20.5	22.3	24.2	26.8
750	17.3	18.4	19.6	21.2	23.0	25.0	27.7
775	17.8	18.9	20.1	21.8	23.7	25.8	28.6
800	18.2	19.4	20.7	22.5	24.3	26.5	29.5





STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0° DHB





**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0 ° DHB**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.9	1.0	1.0	1.0	1.1	1.1	1.2
50	1.7	1.9	1.9	2.0	2.1	2.2	2.4
75	2.6	2.8	2.9	3.0	3.1	3.3	3.5
100	3.4	3.6	3.7	3.9	4.1	4.4	4.6
125	4.2	4.4	4.6	4.8	5.1	5.4	5.8
150	4.9	5.2	5.5	5.7	6.1	6.4	6.8
175	5.7	6.0	6.3	6.6	7.0	7.4	7.9
200	6.4	6.8	7.1	7.4	7.9	8.4	9.0
225	7.1	7.5	7.9	8.2	8.8	9.3	10.0
250	7.8	8.3	8.6	9.0	9.7	10.3	11.1
275	8.5	9.0	9.4	9.8	10.5	11.2	12.1
300	9.2	9.7	10.1	10.6	11.4	12.1	13.1
325	9.9	10.3	10.8	11.4	12.2	13.0	14.1
350	10.5	11.0	11.5	12.1	13.0	13.9	15.0
375	11.2	11.7	12.2	12.9	13.8	14.8	16.0
400	11.8	12.3	12.9	13.6	14.6	15.6	16.9
425	12.4	12.9	13.6	14.3	15.4	16.5	17.9
450	13.0	13.6	14.3	15.0	16.2	17.3	18.8
475	13.6	14.2	14.9	15.7	16.9	18.2	19.7
500	14.2	14.8	15.5	16.4	17.7	19.0	20.6
525	14.8	15.4	16.2	17.1	18.4	19.8	21.5
550	15.4	15.9	16.8	17.8	19.1	20.6	22.4
575	15.9	16.5	17.4	18.4	19.8	21.4	23.3
600	16.5	17.1	18.0	19.1	20.6	22.1	24.2
625	17.1	17.6	18.6	19.7	21.3	22.9	25.0
650	17.6	18.2	19.2	20.3	22.0	23.7	25.9
675	18.2	18.7	19.8	21.0	22.6	24.4	26.7
700	18.7	19.3	20.3	21.6	23.3	25.1	27.6
725	19.2	19.8	20.9	22.2	24.0	25.9	28.4
750	19.7	20.3	21.5	22.8	24.7	26.6	29.2
775	20.3	20.8	22.0	23.4	25.3	27.3	30.0
800	20.8	21.3	22.6	24.0	26.0	28.0	30.8



STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0° DHB

