

Hankook Racing Tire Technical Guide – Italy TCR

Ver. 20240229

Tire guideline

▶ Tire setup for safety as below

Camber Angle	Dry		Wet	Optimum Temp. window
	Cold Pressure	Hot Pressure	Hot Pressure	
Max -3.8°	Min 1.35 bar	Min 1.9 bar	Min 2.2 ~ 2.4 bar	80 ~ 100 °C Recommend not to exceed 125°C

- Hot air pressure on wet tires is recommended to be used at least 0.1 to 0.3 bar higher than Dry tires.

(Damp Condition → +0.1 bar, Full Wet Condition → +0.3 bar)

▶ Caution on curbs before 2~3 Laps

Hitting curbs when the tire is low pressure may causes initial construction damage

▶ For safety, when the track temperature is below 20°C, tire warm-up is recommended at 70% of max. performance during initial 2 laps

If the track temperature is more lower, 1 or 2 tire warm-up laps is needed additionally

▶ When tires are used in different terms and conditions from the guideline, it may cause tire damage

The team is responsible for use outside of the recommended values

▶ The setup guide and tire data in this guideline may be updated as required, depending on the monitoring results

Tech data - 260/660R18 C54H

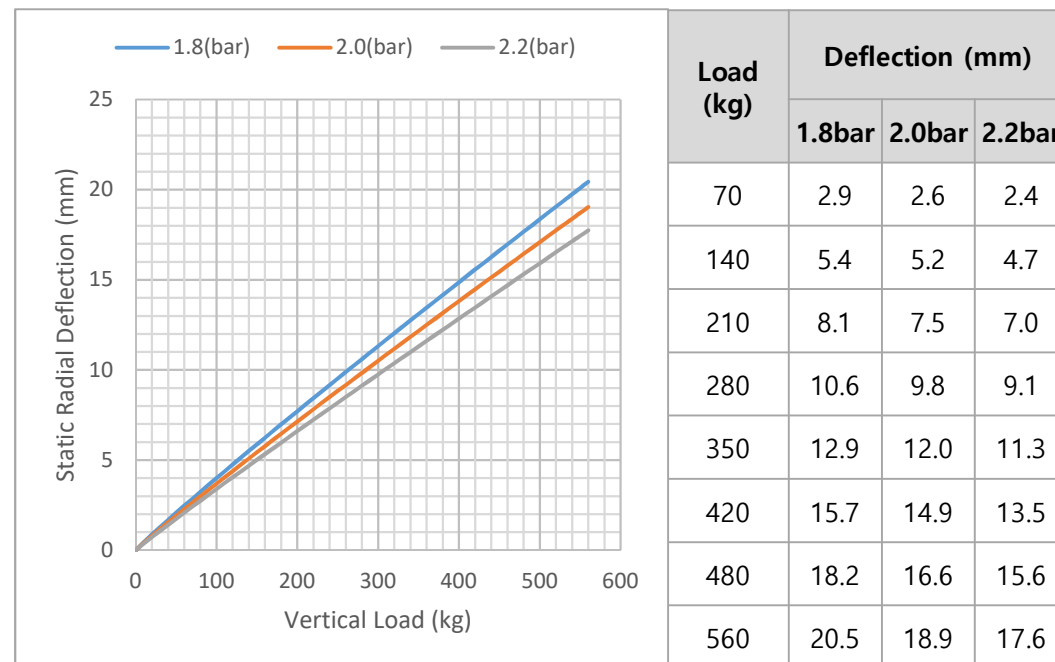
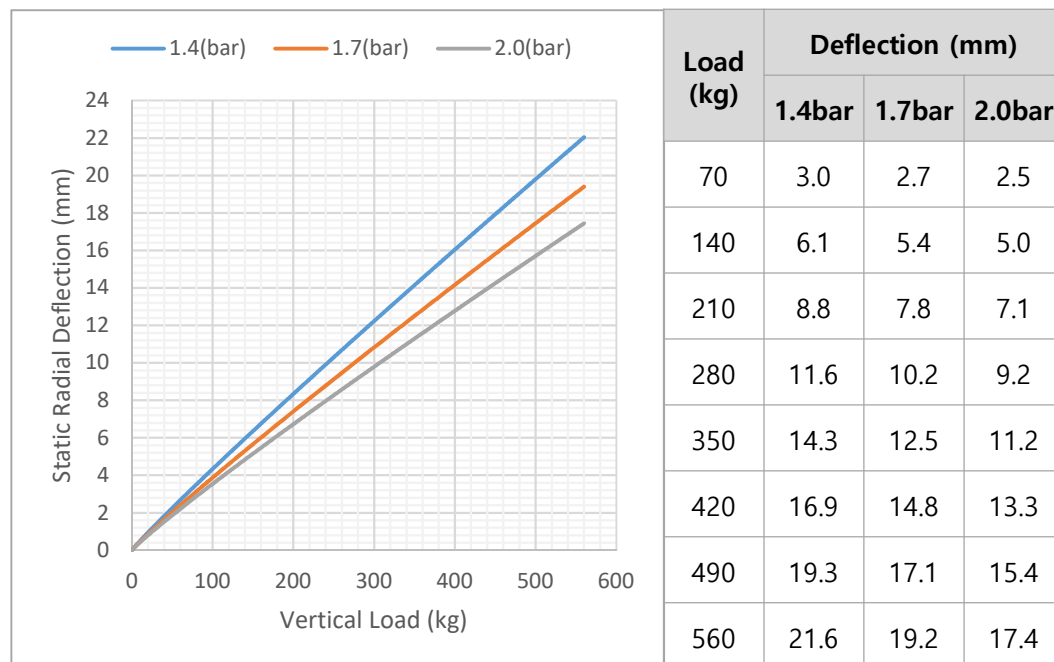


Size		Pattern	Measured		Rim Width		Overall Diameter	Section Width	Static Loaded Radius	Tread Width	Tread Depth
			Pressure	Load	Recommend	Optimum					
			[bar]	[kg]	[inch]	[inch]					
Dry_C54H	260/660R18	F200	2.0	350	9.5~10.5J	10.0J	665	275	321.3	260	3.5
Wet_W52	260/660R18	Z207	2.2	350	9.5~10.5J	10.0J	660	282	323.8	254	6.2

Static Radial Deflection (Vertical Stiffness) - Camber 0°

Pattern	F200
Test Rim Width	10.0 J

Pattern	Z207
Test Rim Width	10.0 J



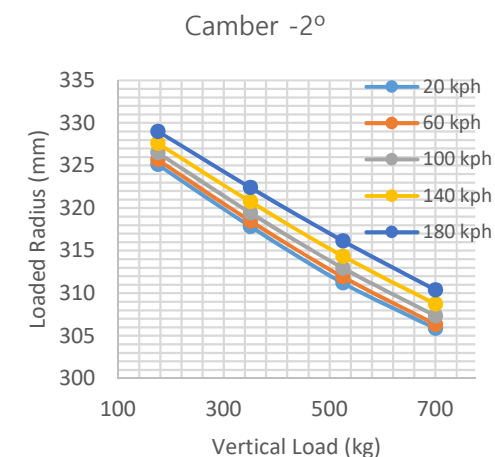
Tech data - 260/660R18 C54H



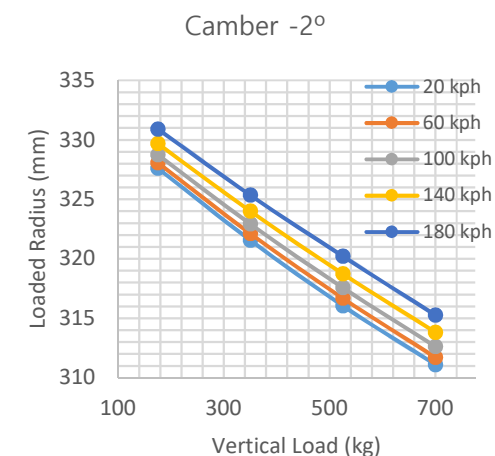
Dynamic Radial Deflection (Dynamic Loaded Radius)

Pattern	F200	Test Rim Width	10.0 J
---------	------	----------------	--------

Air Pressure 1.5 bar	Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
		700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	305.4	310.9	317.6	324.9	305.9	311.2	317.8	325.1	306.2	311.7	318.3	326.1	
40	305.6	311.2	317.9	325.1	306.0	311.5	318.1	325.4	306.3	311.9	318.5	326.2	
60	306.0	311.6	318.3	325.4	306.3	311.9	318.5	325.7	306.6	312.3	318.8	326.5	
80	306.4	312.1	318.8	325.8	306.8	312.4	318.9	326.1	307.1	312.8	319.3	326.9	
100	307.0	312.7	319.3	326.2	307.3	313.0	319.4	326.5	307.7	313.4	319.8	327.3	
120	307.7	313.3	320.0	326.8	308.0	313.6	320.1	327.0	308.3	314.0	320.4	327.8	
140	308.4	314.1	320.7	327.4	308.7	314.4	320.8	327.6	309.1	314.8	321.1	328.4	
160	309.2	315.0	321.5	328.1	309.5	315.2	321.5	328.3	309.9	315.6	321.9	329.1	
180	310.1	315.9	322.3	328.8	310.4	316.1	322.4	329.0	310.7	316.5	322.7	329.8	



Air Pressure 2.0 bar	Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
		700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	310.8	315.8	321.5	327.2	311.1	316.0	321.6	327.6	311.6	316.5	322.1	328.7	
40	311.0	316.1	321.7	327.4	311.4	316.3	321.8	327.8	311.8	316.7	322.3	328.8	
60	311.4	316.5	322.1	327.6	311.7	316.7	322.1	328.1	312.2	317.0	322.6	329.0	
80	311.8	316.9	322.4	327.9	312.1	317.1	322.5	328.4	312.6	317.4	322.9	329.3	
100	312.3	317.4	322.9	328.3	312.6	317.6	322.9	328.8	313.1	317.9	323.3	329.7	
120	312.8	318.0	323.4	328.8	313.2	318.1	323.4	329.2	313.6	318.5	323.8	330.1	
140	313.5	318.6	324.0	329.3	313.8	318.7	324.0	329.7	314.3	319.1	324.4	330.6	
160	314.1	319.4	324.6	329.9	314.5	319.4	324.6	330.3	315.0	319.7	325.1	331.2	
180	314.9	320.1	325.3	330.5	315.3	320.2	325.4	330.9	315.7	320.4	325.8	331.8	



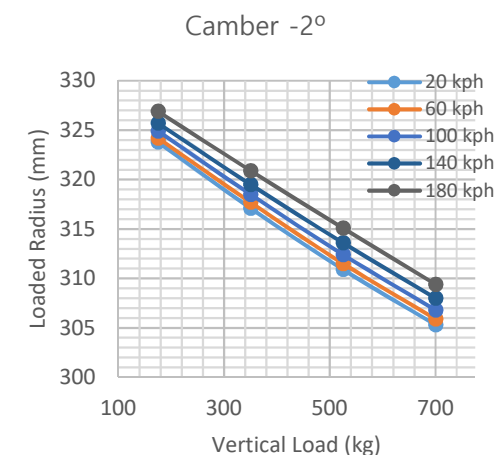
Tech data - 260/660R18



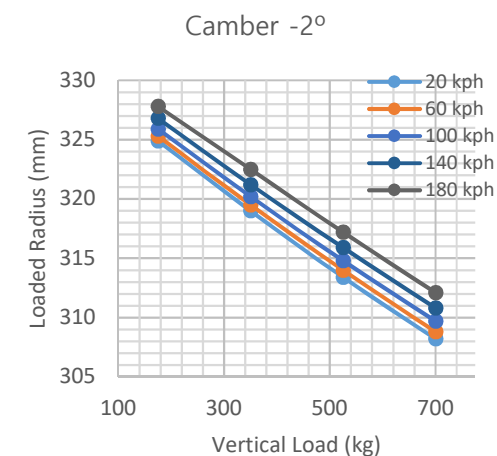
Dynamic Radial Deflection (Dynamic Loaded Radius)

Pattern	Z207	Test Rim Width	10.0 J
---------	------	----------------	--------

Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	305.3	310.8	316.9	323.2	305.3	310.9	317.1	323.8	305.3	311.1	317.7	324.9
40	305.6	311.1	317.2	323.5	305.5	311.2	317.4	324.0	305.5	311.3	317.9	325.1
60	305.9	311.4	317.5	323.8	305.9	311.5	317.7	324.2	305.9	311.7	318.2	325.3
80	306.3	311.8	317.8	324.0	306.3	311.9	318.0	324.5	306.3	312.1	318.6	325.6
100	306.8	312.3	318.3	324.4	306.8	312.4	318.5	324.9	306.8	312.6	319.0	326.0
120	307.3	312.8	318.7	324.8	307.4	313.0	319.0	325.3	307.4	313.2	319.5	326.4
140	307.9	313.4	319.3	325.2	308.0	313.6	319.5	325.7	308.0	313.8	320.1	326.9
160	308.5	314.1	319.9	325.8	308.7	314.3	320.2	326.3	308.8	314.5	320.7	327.4
180	309.3	314.8	320.6	326.4	309.4	315.1	320.9	326.9	309.5	315.3	321.4	328.0



Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	308.1	313.3	318.7	324.4	308.2	313.4	319.0	324.9	308.3	313.7	319.7	326.0
40	308.5	313.6	319.0	324.6	308.5	313.7	319.2	325.1	308.6	314.0	319.9	326.2
60	308.8	313.9	319.3	324.9	308.8	314.0	319.5	325.3	309.0	314.3	320.1	326.5
80	309.2	314.3	319.6	325.1	309.2	314.4	319.8	325.6	309.4	314.7	320.5	326.8
100	309.7	314.7	320.0	325.5	309.7	314.8	320.2	325.9	309.9	315.1	320.9	327.1
120	310.1	315.2	320.5	325.8	310.2	315.3	320.7	326.3	310.4	315.6	321.3	327.6
140	310.7	315.7	320.9	326.3	310.8	315.9	321.2	326.8	311.0	316.2	321.9	328.0
160	311.3	316.3	321.5	326.8	311.5	316.5	321.8	327.3	311.6	316.9	322.4	328.5
180	311.9	317.0	322.1	327.3	312.1	317.2	322.5	327.8	312.4	317.6	323.1	329.0



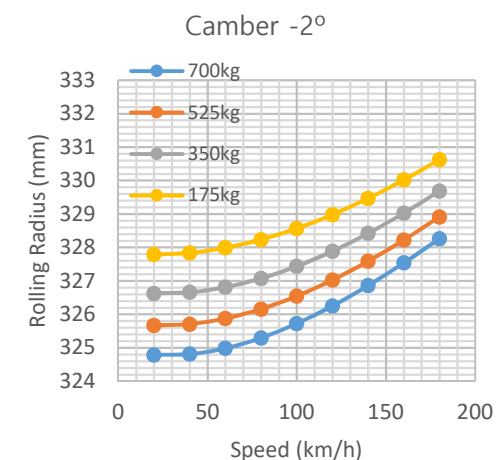
Tech data - 260/660R18 C54H



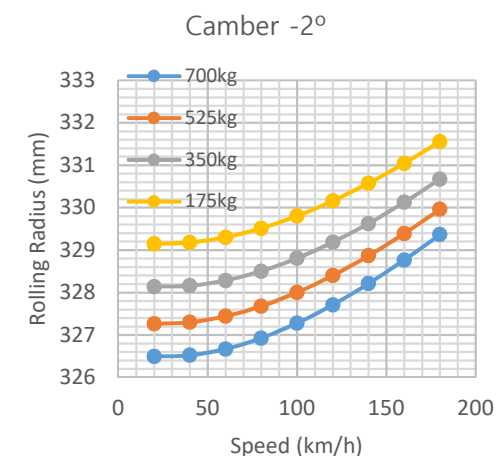
Effective Rolling Radius (Dynamic Rolling Radius)

Pattern	F200	Test Rim Width	10.0 J
---------	------	----------------	--------

Air Pressure 1.5 bar	Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
		700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	324.3	325.4	326.5	327.9	324.8	325.7	326.6	327.8	324.9	325.7	326.5	327.3	
40	324.3	325.5	326.6	327.9	324.8	325.7	326.7	327.8	324.9	325.7	326.6	327.3	
60	324.5	325.7	326.7	328.1	325.0	325.9	326.8	328.0	325.1	325.9	326.7	327.4	
80	324.8	325.9	327.0	328.3	325.3	326.2	327.1	328.2	325.4	326.2	327.0	327.7	
100	325.3	326.4	327.4	328.7	325.7	326.5	327.4	328.6	325.8	326.6	327.4	328.0	
120	325.8	326.9	327.8	329.1	326.3	327.0	327.9	329.0	326.3	327.1	327.8	328.4	
140	326.5	327.4	328.3	329.6	326.9	327.6	328.4	329.5	326.9	327.6	328.3	328.9	
160	327.2	328.1	329.0	330.2	327.5	328.2	329.0	330.0	327.6	328.3	328.9	329.5	
180	328.0	328.8	329.6	330.8	328.3	328.9	329.7	330.6	328.3	328.9	329.6	330.1	



Air Pressure 2.0 bar	Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
		700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	326.4	327.2	328.1	329.4	326.5	327.3	328.1	329.1	326.5	327.2	327.8	328.5	
40	326.4	327.2	328.1	329.4	326.5	327.3	328.2	329.2	326.5	327.2	327.8	328.5	
60	326.5	327.4	328.3	329.5	326.7	327.4	328.3	329.3	326.6	327.4	328.0	328.6	
80	326.8	327.6	328.5	329.7	326.9	327.7	328.5	329.5	326.9	327.6	328.2	328.8	
100	327.1	327.9	328.8	330.0	327.3	328.0	328.8	329.8	327.3	327.9	328.5	329.1	
120	327.6	328.3	329.2	330.4	327.7	328.4	329.2	330.2	327.7	328.3	328.9	329.4	
140	328.1	328.8	329.6	330.8	328.2	328.9	329.6	330.6	328.2	328.8	329.3	329.9	
160	328.7	329.4	330.1	331.3	328.8	329.4	330.1	331.0	328.8	329.3	329.8	330.4	
180	329.3	329.9	330.7	331.9	329.4	330.0	330.7	331.6	329.4	329.9	330.4	330.9	



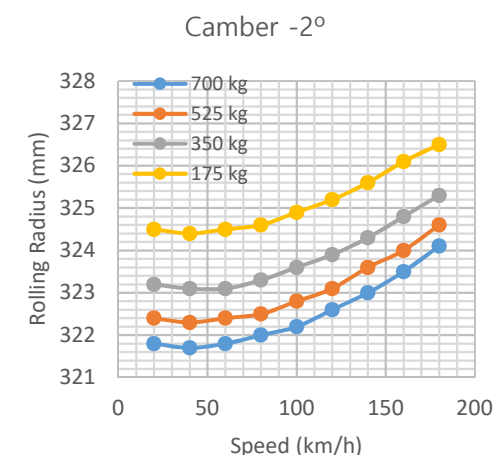
Tech data - 260/660R18



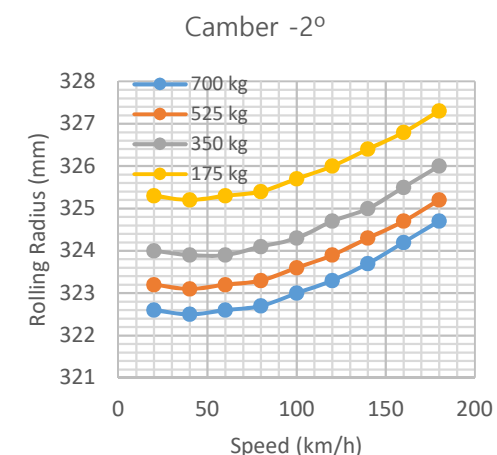
Effective Rolling Radius (Dynamic Rolling Radius)

Pattern	Z207	Test Rim Width	10.0 J
---------	------	----------------	--------

Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	321.6	322.3	323.2	324.8	321.8	322.4	323.2	324.5	321.8	322.3	322.9	323.6
40	321.5	322.2	323.1	324.7	321.7	322.3	323.1	324.4	321.8	322.3	322.8	323.6
60	321.6	322.3	323.1	324.8	321.8	322.4	323.1	324.5	321.8	322.4	322.9	323.6
80	321.8	322.4	323.3	324.9	322.0	322.5	323.3	324.6	322.0	322.5	323.0	323.8
100	322.0	322.6	323.5	325.2	322.2	322.8	323.6	324.9	322.3	322.8	323.3	324.0
120	322.4	323.0	323.9	325.5	322.6	323.1	323.9	325.2	322.7	323.2	323.6	324.4
140	322.8	323.4	324.3	325.9	323.0	323.6	324.3	325.6	323.1	323.6	324.1	324.8
160	323.2	323.9	324.7	326.4	323.5	324.0	324.8	326.1	323.6	324.1	324.5	325.3
180	323.8	324.4	325.2	326.9	324.1	324.6	325.3	326.5	324.2	324.6	325.1	325.8



Speed (kph)	Camber 0°				Camber -2°				Camber -4°			
	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg	700kg	525kg	350kg	175kg
20	322.4	323.2	324.1	325.6	322.6	323.2	324.0	325.3	322.5	323.0	323.5	324.3
40	322.4	323.1	324.0	325.6	322.5	323.1	323.9	325.2	322.5	323.0	323.5	324.2
60	322.4	323.1	324.0	325.7	322.6	323.2	323.9	325.3	322.6	323.0	323.5	324.3
80	322.6	323.3	324.2	325.8	322.7	323.3	324.1	325.4	322.7	323.2	323.7	324.4
100	322.9	323.5	324.4	326.1	323.0	323.6	324.3	325.7	323.0	323.5	323.9	324.7
120	323.2	323.8	324.7	326.4	323.3	323.9	324.7	326.0	323.3	323.8	324.3	325.0
140	323.6	324.2	325.1	326.7	323.7	324.3	325.0	326.4	323.8	324.2	324.7	325.4
160	324.1	324.7	325.5	327.2	324.2	324.7	325.5	326.8	324.2	324.7	325.1	325.9
180	324.6	325.2	326.0	327.6	324.7	325.2	326.0	327.3	324.8	325.2	325.6	326.3





Hankook Tire & Technology