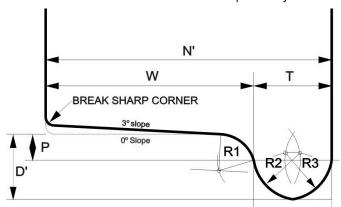
## NMRA RECOMMENDED PRACTICES WHEEL CONTOUR RP - 25 July 2009

Designed by Olesen, Mortimer and Bradley Updated by D. A. Voss

This wheel contour is specified for optimum track holding ability and most prototypical appearance within the Interchange limits of **NMRA** standards **S-4.2** 

Wheels of this contour will perform at their best on track conforming to the limits of NMRA STANDARD S-3.2 and consistent with RP-10, RP-11 and R-12.



CODE	TIRE WIDTH N'	FLANGE WIDTH T	TREAD WIDTH W	FLANGE DEPTH D'	GAGING POINT P	FILLET RADIUS R1	INNER RADIUS R2	OUTER RADIUS R3
175	.175	.048	.127	.045	.015	.025	.028	.028
145	.145	.039	.106	.036	.013	.021	.023	.023
126	.126	.036	.090	.028	.012	.018	.021	.021
116	.116	.031	.085	.026	.011	.014	.018	.018
110	.110	.030	.080	.025	.010	.014	.018	.018
93	.093	.026	.067	.020	.009	.009	.017	.017
88	.088	.025	.063	.023	.009	.012	.015	.015
79	.079	.023	.056	.020	.008	.011	.014	.014
72	.072	.020	.052	.020	.008	.010	.012	.012
54	.054	.014	.040	.016	.007	.008	.009	.009

## NOTES:

- 1. Wheels listed above provide a selection meeting the interchange requirements of standards S-4.2
- 2. **N'** and **D'** are Nominal design dimensions providing reasonable tolerance within the limits specified by **N** and **D** of standards **S-4.2.**
- 3. **T** and **W** are measured at the Gaging Point **P** which is the point of tangency between **R1** and **R2** and the point of crossing of **R2** with the inside of the wheel.
- 4. Radii at the edge of the flange should be as large as possible within prescribed limits to reduce side friction against the railhead to protect Frog Points by decreasing effective Wheel Check Gage and to guide the flange through Flangeways and past other obstructions.
- 5. Tread Taper is not required, but 1 degree and 3 degree mold release draft is allowed. Note that new prototype wheels include a taper in anticipation of wear. Worn wheels show a reverse taper. A taper will also help center the wheels on the track.
- 6. LS (Large Scale) wheels (code 256) follow G1MRA profile and are not presently covered under RP-25.