

Section P Tow Couplings Fifth Wheel

National Code of Practice

HEAVY VEHICLE MODIFICATIONS

Section P

Version 2014

12. FIFTH WHEEL RATING

12.1 Fifth Wheel "D-Value"

In order to select a Fifth Wheel and design the attachment assembly with an appropriate strength rating, the required "D-Value" for the particular application must be calculated.

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The "D-Value" is an expression that quantifies the required tow coupling dynamic performance as a function of the separate masses of truck and trailer/s. Fifth Wheels must be rated by their manufacturer for a particular "D-Value" (in tonnes) and tested in accordance with the requirements of the applicable Australian Standard. Multiplying factors are applied to the "D-Value" to relate it to specific operating applications.

Formulae for calculating "D-Values" ratings for Fifth Wheels and King Pins are given in Australian Standard AS/NZS 4968.1:2003 and AS/NZS 4968.3:2011

Where components of different "D-Values" are connected in a vehicle combination, the component with the lower "D-Value" will determine the overall rating of the towing connection.

The capacity of all towing components must be at least equal to the "D-Value" rating requirement of the vehicle combination.

12.2 Minimum Ratings

All Fifth Wheel and King Pins must meet the minimum requirements of ADR 62/..

Fifth Wheels and King Pins for use in road train application must have a "D-Value" not less than 162kN (16.5t).

If a fifth wheel or king pin does not have a "D-Value" rating, then it should have a manufacturer's strength rating of not less than the maximum legal GCM for the vehicle combination.