

## Can we help with European Type approval and VCA approval?

No matter what country a bogie is being registered in a large amount of paper work is required to give authorities the information they need on the bogie. Granning can provide the brake calculations, turning circle calculations, piping diagrams, axle certificates and more to help the approval process be as smooth as possible.

We have helped a number of companies gain approval for their vehicles around the world. Please contact Granning for more information.

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Prüfprotokoll-Nr. / test report / procès verbale	361-042-14
für Radbremse / on brake / pour frein	ID2-420x180
mit Achse / with axle / avec essieu	ID1-100/200/960 Series
Hersteller / manufacturer / fabricant	Granning Axles, Naas, Ireland

Prüfprotokoll nach Absatz 3.9. der Anlage 2 des Anhangs 11 der Regelung 13 einschließlich der Änderung 11 mit Ergänzung 9 /  
Test report form as prescribed in paragraph 3.9. of Appendix 2 to annex 11 of regulation 13 including amendment 11 with supplement 9 /  
Formule du procès-verbal d'essai mentionné au paragraphe 3.9 de l'appendice 2 à la annexe 11 du règlement No. 13 incluant la modification No. 11 avec complément 9.

Prüfprotokoll Nr. / Test report no. / Procès-verbal d'essai N°:

Hauptteil / Base par / Partie de base ID4- 361 042 14  
Suffix / Suffixe: 00

1. Allgemeines / General / Généralités

1.1. Achshersteller (Name und Anschrift) /  
Axle manufacturer (name and address) /  
Fabricant de l'essieu (nom et adresse): Granning Axles Naas  
Industrial Estate,  
Naas, Co Kildare,  
Ireland

1.1.1. Fabrikmarke des Achsherstellers /  
Make of axle manufacturer /  
Marque du fabricant de l'essieu

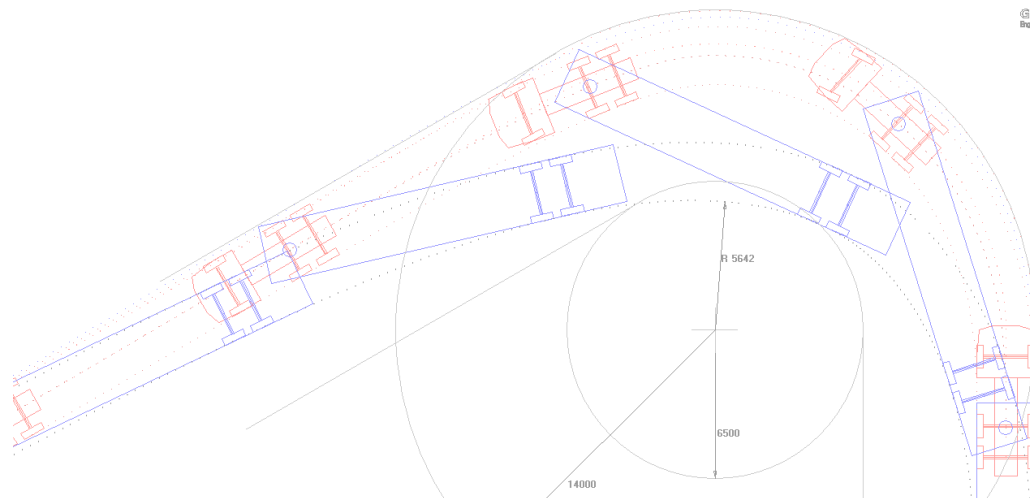
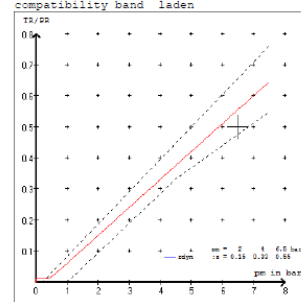
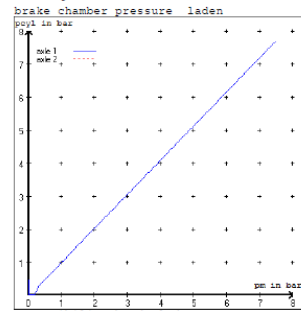


1.2. Bremshersteller (Name und Anschrift) /  
Brake manufacturer (name and address) /  
Fabricant de frein (nom et adresse): wie / as / comme 1.1.

1.2.1. Bremsidentifizierungsnummer /  
Brake identifier / Identificateur de frein ID2- 420x180

1.2.2. Selbstständige Nachstellung /  
Automatic brake adjustment device /  
Dispositif de réglage automatique de freins nicht integriert  
not integrated  
non intégré

Granning -brake calculation no: Gra 990722 date 02.04.2020 MC page 3 / 7



Granningaxles  
Engineering & service solutions

