



Product Type Approval Certificate

Full / ~~Provisional~~ / ~~Restricted~~

This certificate is issued to:


Supplier name and address:	Voestalpine SIGNALING Siershahn GmbH Unit 14, 160 Hartley Rd, Smeaton Grange, NSW 2567
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In respect of:

Manufacturer:	Tenconi SA
Place of manufacture:	Via della Stazione 50, 6780 Airolo, Switzerland
Product description:	Voestalpine - Hollow Steel Sleeper , 4 th Generation
Use approved for:	Approved for use across TfNSW Heavy Rail Infrastructure
Conditions of approval:	<ol style="list-style-type: none">1. Installation shall be compatible with the manufacturer's manual, Voestalpine Phoenix MB – Installation Manual for the Sleeper – Rev 01.1 Document Number 057-enXX-000-113312. Shall not to be installed under an insulated rail joint, dipped weld or corrugated rail3. The hollow steel sleeper shall be installed as a housing for the Voestalpine SIGNALING Siershahn GmbH Phonix MB Wayside Detection System and associated cables for the specific location.4. Installation shall not be within a level crossing, poor track drainage area, turnouts, with hollow bearers or half sleepers.5. Technical Maintenance Plan information shall refer to the Steel Sleeper Maintenance Manual Revision 01.2, Document Number 057-enAU-000-108836. The supplier or manufacturer must advise ASA, TfNSW of any changes made to the product or system to enable review and revision of this approval.
Limitations:	<ol style="list-style-type: none">1. These hollow steel sleepers are compatible with approved track configuration as required by ESC 200. Installation of these sleepers within other than approved track

	<p>configuration shall require an additional type approval.</p> <ol style="list-style-type: none">2. Additional cables may be installed in Voestalpine - Hollow Steel Sleeper , 4th Generation with approval of the RIM3. Existing 3rd GEN hollow steel sleeper in track will be maintained as per previous requirements and will be replaced by 4th GEN when replacement is required.
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Evaluating rail transport operator

Name:	John McLeod
Position:	Director, Corridor Infrastructure & Engineering
Signature:	
Date:	7/06/2021

Product approval pack reference number: qA796575

Annexure 1 Schedule of Certifications

Title	Registration Number	Valid till	Issuing Authority	Status
Certification of Registration Quality Management System ISO 9001:2008	H42941	26.06.2021	Certification of Registration Quality Management System ISO 9001:2008	Current
Certification of Registration Environmental Management System ISO 14001:2004	H42941	26.06.2021	Certification of Registration Quality Management System ISO 9001:2008	Current

Annexure 2 Supporting Documentations

Title	Issuing Authority	Author	Report Number	Status
hollow steel sleeper assessment of dynamic strength	Schmidt winter engineering	-	FEM-report-4 2020-10-30	Current

Title	Issuing Authority	Author	Report Number	Status
Phonix MDS Hollow Steel Sleeper – Installation Manual	Voestalpine	Markus Gerner	Rev 01.1 057-enXX-000-11331	Current
Phonix MDS Hollow Steel Sleeper – Maintenance Manual	vaSIG Australia	Daniel Crisp vaSIG Australia	Revision 01.2 057-enAU-000-10883	Current
Drawing - rail fixation MDS sleeper for AS60 1:20	Voestalpine	D.Kessler	ZZ05550000-058 V01.0	Current
Drawing – 4 th Gen BBT Sleeper	Tenconi	vf	601.0283/3	Current