ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L213391 - RAIL WELD

Learning Legacy Document

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Contents

1 Introduction 4
1.1 Asset Details 4
1.2 Description 4
1.3 Related Functions 4
2 Asset Tag Identification Rules 5
2.1 Example Images 5
3 Attributes 7
3.1 Generic Attributes 7
3.2 Class Specific Attributes 7
4 Performance Data 9
5 Labelling 9
6 Other Information 9
7 Reference Material 9
8 Crossrail Technical Approvals 10

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1 Introduction

1.1 Asset Details

Class Code:	L213391
Class Name:	Rail Weld
Class Lineage:	Construction Products>Complete construction entities and components >Civil engineering works products>Railway products>Rails> Connections >Rail Welds

1.2 Description

A rail weld refers to the use of molten metal to connect two sections of rail together. There are two types of rail weld commonly in use, Flash Butt welds and Aluminothermic (thermic) Welds.

1.3 Related Functions

All information on the configuration of asset classes (L-Class) to functions is contained within the latest revision of the Asset Data Dictionary Master Configuration document (eB ref: CRL1-XRL-Z3-ADDSD-CR001-50186)

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2 Asset Tag Identification Rules

Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031) in the following format:

<LCS Code>-<Function Code>-<Incremental number to ensure uniqueness>

e.g. CR076-TRK-12345 for a plain line track asset located in the Kensal Green to Paddington Section.

The Asset Name contains specific information relating to the asset as follows:

The Asset Name defines both the asset type and its instance (i.e. installed location). The information captured will depend on whether the asset is a linear or point asset.

To accommodate both linear and point assets the Asset Name for Track Assets will provide details for each asset class in the format:

<Function>, <Asset Classification name>, <LCS Code(s)>, <ELR>, <Tunnel (E/B or W/B)>, <Start metres> - <End metres >

As these are considered point asset the <Start metres> and <End metres> will be equal and will be defined by the east bound extent of the asset.

2.1 Example Images

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3 Attributes

3.1 Generic Attributes

All Classes of assets will have a set of Generic Attributes for which data is collected without exception. Full details relating to these assets can be found at:

AD4 – Generic Attributes CRL1-XRL-Z3-ADDSD-CR001-50069

3.2 Class Specific Attributes

Below is a table of the further specific attributes which are associated with this asset class.

Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
Weld Method		PD		Aluminothermic Flashbutt Manual Arc Welding Hand Weld Repairs	The method used to create the weld
Weld Type		CH			Type of weld e.g. skV-E
Width (Millimetres)	Millimetres	NU	0		The width of the weld
Name of Welder		CH			Name of the person installing the weld
Welder Stamp Number (#)	#	NU	0		Unique stamp number associated with the welder
Tapping Time (Seconds)	Seconds	NU	0		The time limit at which the thermit steel is tapped
Rail Side		PD		L/H R/H	The side of rail is located based on the normal direction of traffic, e.g. left hand rail or right hand rail

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Attribute Name	Base Unit or Formula	Value Type (See Below)	Decimal Places (nu Only)	Defined Values List (pd only)	Description
LRS Code		PD		C.EB C.EB.CRW5 C.EB.CR1 C.EB.CR7 C.EB.TBC C.WB C.WB.CRW9 C.WB.CRW6 C.WB.CR2 C.WB.CR5 C.WB.TBA C.WB.TBB CNE.EB CNE.WB CSE.EB CSE.EB.CR11 CSE.WB CSE.EB.CR13 CSE.WB.CR15 Non Track	The Crossrail Linear Referencing Standard code (CRL1-XRL-O6-STD-CR001-00026) where the asset is located. When the asset is not located on track then non track should be selected. The LRS codes are as follows: C.EB - Central Section Eastbound C.EB.CRW5 - Crossover between W5 and W4 Points C.EB.CR1 - Crossover between C1 and C4 Points C.EB.CR7 - Crossover between C7 and C8 Points C.EB.TBC - Turnback C C.WB - Central Section Westbound C.WB.CRW9 - Crossover between W9 and W8 Points C.WB.CRW6 - Crossover between W6 and W3 Points C.WB.CR2 - Crossover between C2 and C3 Points C.WB.CR5 - Crossover between C5 and C6 Points C.WB.TBA - Turnback A C.WB.TBB - Turnback B CNE.EB - Central Section North East Spur Eastbound CNE.WB - Central Section North East Spur Westbound CSE.EB - Central Section South East Spur Eastbound CSE.EB.CR11 - Crossover between C11 and C12 Points CSE.WB - Central Section South East Spur Westbound CSE.EB.CR13 - Crossover between C13 and C14 Points CSE.WB.CR15 - Crossover between C15 and C16 Points Non Track - Non Track Assets
From Meterage (Metres)	Metres	NU	1		The location of the start of the asset based on overall meterage. (For points asset this will be the same as the “To” Meterage)
To Meterage (Metres)	Metres	NU	1		The location of the end of the asset based on overall meterage (For points asset this will be the same as the “From” Meterage)

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)
da = Date (dd-mm-yyyy)
me = Memo (Free text 1GB Limit)

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4 Performance Data

This section is to be used to specify the performance data gathered from this Class of asset when in operation. This section will be populated once performance measures have been agreed with Infrastructure Managers.

5 Labelling

Information and guidance on the standard labelling convention for all asset classes is contained within the latest revision of the Asset Naming and Labelling Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

6 Other Information

Not Applicable

7 Reference Material

- Asset Data Dictionary Master Configuration - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069

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8 Crossrail Technical Approvals

Name	Role	Date
Mark Maher	Track	19-Sep-2014

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