

Introduction to Tank Car Integrated Database (TCID)

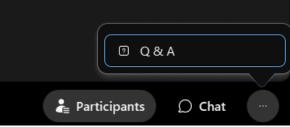
Presenter: Terry Caulfield Product Support Specialist II

November 2023

General Announcements



- Webinar Reminders
 - Attendees will be muted to reduce background noise
 - Submit any questions you have via the Q&A box
 - The presentation is expected to last 30 minutes
- Please complete the short survey at the end of presentation





Webinar Agenda

RAILING

- TCID Set Up
 - SSO User Roles and Permissions
 - User and Company Set Up
- TCID Application
 - Inspections
 - Batch Upload
 - Help & Documentation

Tank Car Integrated Database



- What is TCID?
 - The Tank Car Integrated Database (TCID) is an application that hosts tank car inspection results, repairs and modifications for tank car owners to comply with all AAR Tank Car Committee reporting requirements
 - It was designed to consolidate the information on the AAR forms R-1, R-2, and Stub Sill inspections
- TCID provides users the ability to create a new inspection, implement a batch upload, delete, edit, submit, or download an open inspection
- It also uses inspection templates to accurately report cracks found in the stubsill attachment welds
- TCID also allows users to run reports for their company

TCID User & Company Set Up: User SSO Roles RAILING



- TCID AAR Member
 - Tank Car Inspection AAR Member that can access web application across all company marks
 - This permission allows the user to view all submitted data, regardless of company or facility submission, but does not allow inputting data
 - This role is only for internal Railinc and AAR use
- TCID Company Administrator
 - This role is responsible for granting permissions
 - Company specific administrator granting users access to the web application on behalf of their company
 - This permission does not allow the user to input or view any data
 - This permission is typically included with Tank Car Owner Delegate permissions
- TCID Owner Delegate
 - Company specific Car Owner or Delegate user to access web application
 - This permission allows the user to input data and view all their company submissions
- TCID Facility User
 - Facility specific user to access the web application.
 - This permission allows the user to input data and view their own submissions

Launch Pad





Home

My Applications

FindUs.Rail

Single Sign On System

Tank Car Integrated Database (TCID)



Home Screen



Tank Car Integrated Database

Manage information on tank cars, specifically, inspection results, repairs and modifications. Car owners can use submissions to this system to comply with AAR Tank Car Committee requirements to report such information.

Help

The system allows:

- (a) AAR to monitor the tank car fleet for emerging problems
- (b) Car owners to comply with 49 CFR Part 180 requirements to monitor their fleets' conditions and modify inspection programs accordingly
- (c) Car owners to transfer car inspection history to buyers when selling cars

RAILING

Home

- Logging in
- Access to multiple companies with a Single SSO ID

User Mark Selection

AARX

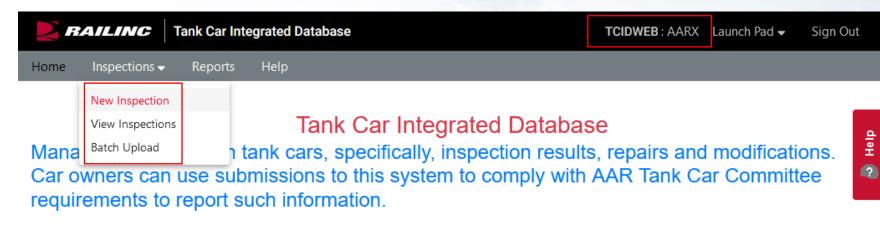
KLRX

RAIL



Inspections >

- New Inspections
- View Inspections
- Batch Upload



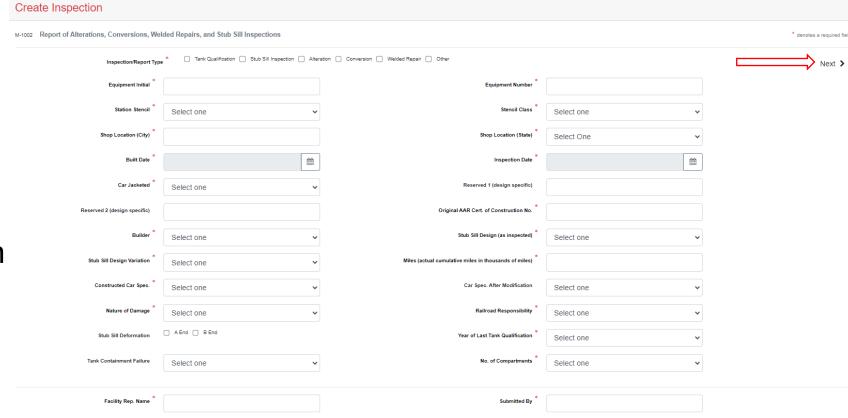
The system allows:

- (a) AAR to monitor the tank car fleet for emerging problems
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Inspections > New Inspection

- Enter required fields
 - Selecting 'Next' button validates data
 - If all data is valid the bottom three sections become visible







Create Inspection				
M-1002 Report of Alterations, Conversions, We	Ided Repairs, and Stub Sill Inspections			* denotes a required field
Inspection/Report Type	* Tank Qualification Stub Sill Inspection A	eration Conversion 💟 Welded Repair C Other		Next >
Equipment Initial *	AARX	Equipment Number *	0000008880	
Station Stencil *	AAST	Stencil Class *	103ALW ~	
Shop Location (City) *	Cary	Shop Location (State) *	North Carolina 🗸	
Built Date *	01/05/1999	Inspection Date *	10/01/2023	
Car Jacketed *	Yes	Reserved 1 (design specific)		
Reserved 2 (design specific)		Original AAR Cert. of Construction No. *	ABC123	
Builder *	TETX - TexanaTank	Stub Sill Design (as inspected) *	CNC002 ~	
Stub Sill Design Variation *	N/A	Miles (actual cumulative miles in thousands of miles) *	10	
Constructed Car Spec. *	105A100ALW	Car Spec. After Modification	105A100ALW ~	
Nature of Damage *	N/A	Railroad Responsibility *	No 🗸	
Stub Sill Deformation	☑ AEnd □ BEnd	Year of Last Tank Qualification *	2018	
Tank Containment Failure	No	No. of Compartments *	1 ~	
Facility Rep. Name *	TCID	Submitted By *	Webinar	

Next >

RAILING

Inspections > New Inspection

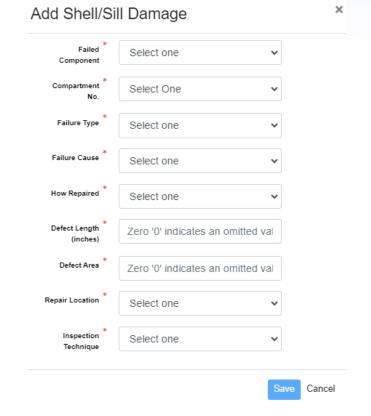
- 3 sections
 - Drawing Inspection
 - Weld Inspection
 - Shell/Sill Damage
- Actions available
 - Save Inspection
 - Submit Inspection

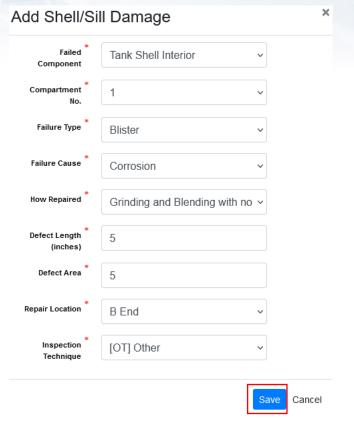
Nature of Damage *	N/A			~				Railroad Responsibility *	No			~				
Stub Sill Deformation	✓ A End ☐ B End	i					Year o	f Last Tank Qualification *	2018			~				
Tank Containment Failure	No			•				No. of Compartments *	1			~				
Add Drawing Inspection																
Alterations and Conversions	Compartment No.		Change	Category	1	Orawing No.		AAR Approval Reference No.			Comment	t	Actions			
	No drawings found	No drawings found														
Weld Inspection Results	Compartment No.	Inspection Results	Weld Code	Weld Location	Inspection Technique	No. of Defects	Max Defect Length (in.)		Defect Orien Code 2		Defect Orientat Code 3	ion How (Weld	Repaired d) Ad	ections		
dd Shell/Sill Damage																
Shell/Sill Inspection Results	Compartment No.	Failed Comp	onent	Failure Type	Failure Cause	How Repa	ired (Shell)	Defect Length (in.)	Defect Area	Repair L	ocation	Inspection Met	hod Actio	ons		
	No Inspection Found															

Inspections > New Inspection

- 3 sections
 - Drawing Inspection
 - Weld Inspection
 - Shell/Sill Damage
- Actions available
 - Save Inspection
 - Submit Inspection









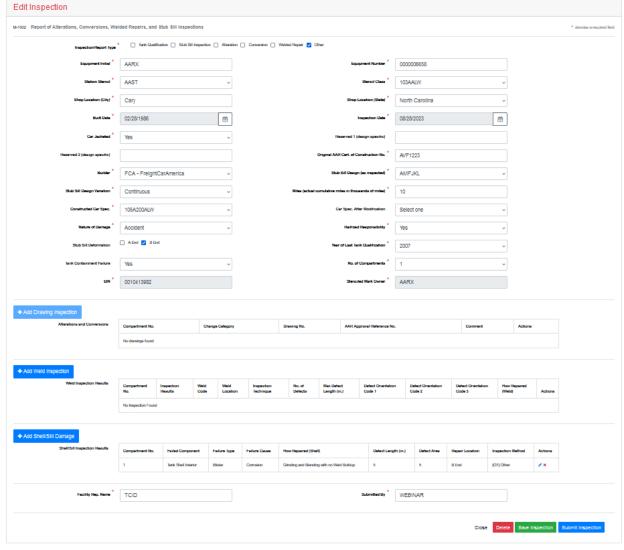
ts	Compartment No.	Failed Component	Failure Type	Failure Cause	How Repaired (Shell)	Defect Length (in.)	efect Length (in.) Defect Area		Inspection Method	Actions
	1	Tank Shell Interior	Blister	Corrosion	Grinding and Blending with no Weld Buildup	10	10	A End	[AE] Acoustical Emission	≠ ×

Inspections >

New Inspection

- Save Inspection
- Submit Inspection



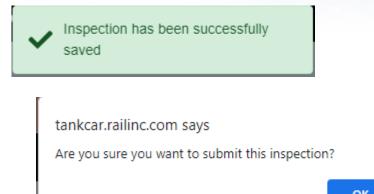


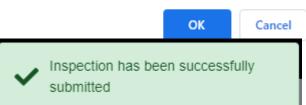
Inspections >

New Inspection

- Save Inspection
- Submit Inspection

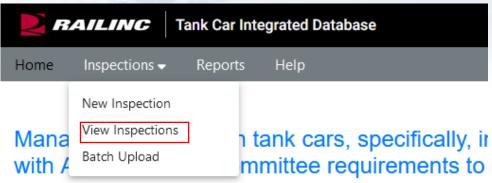


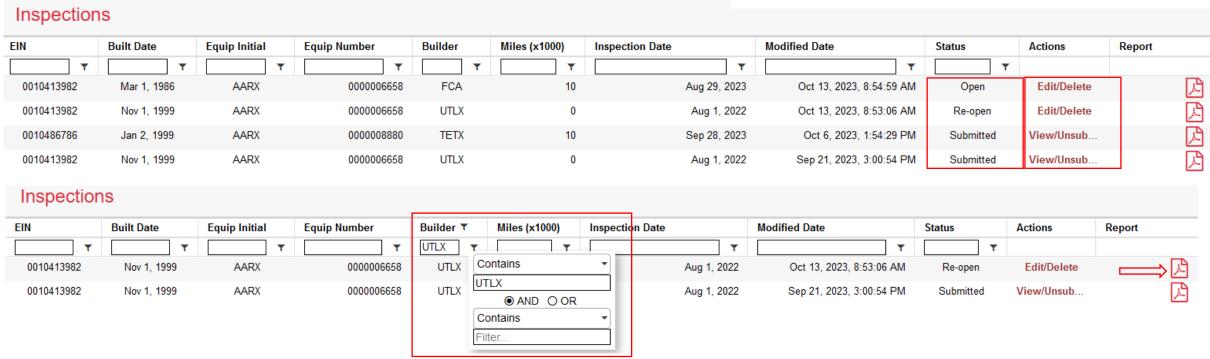




Inspections > View Inspections



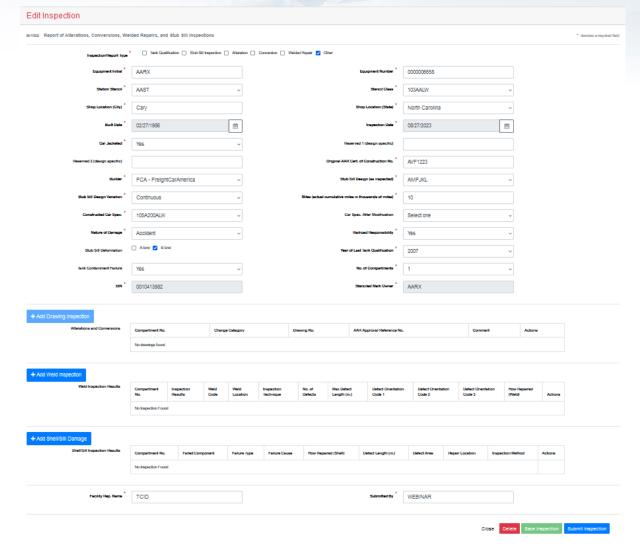




Inspections > View Inspections

- Edit/Delete Inspection
- Add Drawings







Common Questions

Q: I am a Repair Shop. What access do I need to submit an inspection on behalf of my customer?

A: The TCID Company Admin may grant the Shop the role of TCID Facility User under the Car Owner Mark. This will allow the shop to submit an inspection on their behalf. This role will only allow the Shop to see the inspections they have submitted for that Mark. They will not be able to see any other inspections for that same mark.



Common Questions

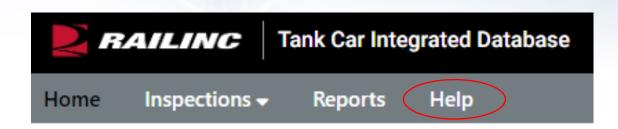
Q: Does Railinc have any rules that follow entry submissions into TCID by a 3rd party?

A: No, there are no rules around the entry for the "submitted by name" field. However, when transcribing a New Inspection Form for a shop into TCID, the 'submitted by name' must be the name that is listed on the paper form or the name of the submitter that is manually transcribing the paper form into the electronic portal. In general, the intention of TCID is to be a digital copy of the paper form, so when in doubt the customer should be entering what is on the paper form.

RAILING

Inspections > Batch Upload

- Reduces time by allowing multiple inspections at once
- Validated certain fields against Umler equipment data
- Must be in .csv format
- File Size must be less than 1MB



Tank Car Integrated Database

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Tank Car Integrated Database uses inspection templates to accurately report cracks found in the stubsill attachment welds.

- Tank Car Templates
- TCID Frequently Asked Questions

TCID Notice of Implementation

Related Support Documents

TCID User Guide

Access SSO and Railinc Applications

Ouick Guide

TCID Data Specification Manua

AAR Form TCID

TCID Data Dependencies Matrix and Appendices

Sill Design Template Mapping

Tank Car Location Chart

TCID Batch File Example

Inspections > Batch Upload

- TCID Data Specification Manual
- The types of fields are described in the Data Rules column:
 - Required
 - Optional
 - Conditional



	Batch Field Name	Interface Field Name	Description	Data Rules
1	INSP_INDICATOR		This field allows you to bulk add or bulk delete inspections via CSV upload.	A or blank = Add D = Delete
2	INSP_ID		Unique inspection ID, assigned by submitting party for each event, for batch upload files only	(•) Alpha-Numeric, 12 characters max
3	INSPREASON	Inspection/Report Type	Reason for Inspection	() Numeric, 2 digit max from 1 to 63 corresponding to the bitwise or one of these six options. When two reasons are applicable, enter the total value (e.g., Conversion and Alteration value [1+2] is 3): Conversion: 1 Alteration: 2 Stub Sill Inspection: 4 Tank Qualification: 8 Other: 16 Welded Repair: 32 Select appropriate checkbox(es) for this field.
4	CARMARK	Equipment Initial	The reporting mark stenciled on the car	(•) Alpha-Numeric, 4 characters max; If an additional mark is needed, contact the company administrator. See App C for details.
5	CARNUM	Equipment Number	The equipment number stenciled on the car	(•) Numeric, 6 digit max
6	CLASS	Stencil Class	Current car specification, as stenciled, prior to any R1 modifications	(•) Alpha-Numeric, 11 characters max; Select entry for this field from a drop-down list. See App A for details.
7	SHOPCOMP	Station Stencil	Station stencil of inspecting company or facility	(•) Alpha-Numeric, 7 characters max; Select entry for this field from a drop-down list. See App P for details.



Inspections > Batch Upload

- Batch Field Name must be included in the first row of all batch file submissions
- Must be in .csv format
- File Size must be less than 1MB

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. TCID Notice of Implementation

Tank Car Integrated Database uses inspection templates to accurately report cracks found in the stubsill attachment welds.

- Tank Car Templates
- TCID Frequently Asked Questions

ly report cracks found in the stubsill attachment

Access SSO and Railinc Applications
Quick Guide

Quick Guide

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TCID Data Specification Manual

Related Support Documents

AAR Form TCID

TCID Data Dependencies Matrix and Appendices

Sill Design Template Mapping

Tank Car Location Chart

TCID Batch File Example

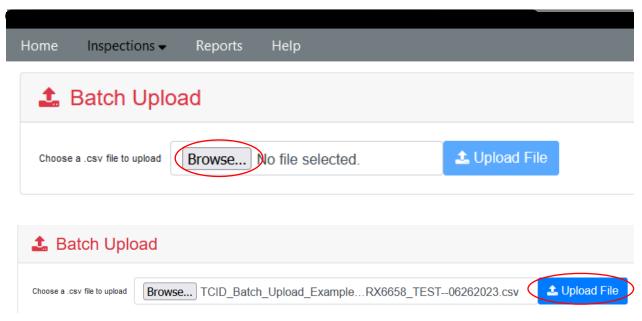
A	—	В	C	D	E	F	G	Н		J	K
1 (INSP IND	DICATOR	INSP ID	INSPREASON	CARMARK	CARNUM	CLASS	SHOPCOMP	SHOPCITY	SHOPSTATE	BUILTDATE	INSPDATE
2 4		1007750	2				UTCO	AARV	TV	19991101	
2 A		1007750	2	AARX	8600	112J340W	UICO	AARX	1X	19991101	20220801



Inspections > Batch Upload



- Click Batch Upload
- Click Browse to choose a file
- Click Upload to submit file to TCID



Inspections > Batch Upload

- File upload status
 - Blue = In Progress
 - Green = Success





'TCID_Batch_Upload_Example_AAR X6658_TEST--06262023.csv' uploaded successfully.

Uploading



Batch Upload >

TCID Batch File Submission Report

Accepted – Submitted

Submission Details

- File Name
- Date Submitted

Inspections

- <u>Total</u> = Total Submitted
- <u>Accepted</u> = Total Accepted
- <u>Rejected</u> = Total Rejected



TCID Batch File Submission Report: TCID_Batch_Upload_Example_AARX6658_TEST--06262023.csv



TCID Batch File Submission Report
FileName: TCID_Batch_Upload_Example_AARX6658_TEST--06262023.csv
Date Submitted: 2023-10-20 11:40:53

Inspections: Total = 1, Added = 1, Deleted = 0, Rejected = 0.

Below errors/warnings were found within the file:

Inspection ID : 1007750

Field Name: Builder [BUILDER]

Field Value: UTLX

Error Type : WARNING

Error Msg: BUILDER Value does not match Umler Value: TRIN

25

Batch Upload >
TCID Batch File Submission
Report

Rejected – Not Submitted

Submission Details

- File Name
- Date Submitted

Inspections

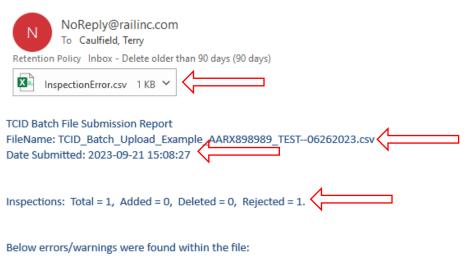
- Total = Total Submitted
- Accepted = Total Accepted
- Rejected = Total Rejected

Error Details

- Field Name: Listed in TCID & File
- Field Value: Data Submitted
- Error Type: Error (reject)
- Error Message: Description



TCID Batch File Submission Report: TCID_Batch_Upload_Example_AARX898989_TEST--06262023.csv



Inspection ID: 1007750

Field Name: Stub Sill Deformation (A End) [STUBSILLDEFA]

Field Value: NULL

Error Type: WARNING

Error Msg: Value was not a non-decimal number

Inspection ID: 1007750

Field Name: Stub Sill Deformation (B End) [STUBSILLDEFB]

Field Value: NULL

Error Type: WARNING

Error Msg: Value was not a non-decimal number

Inspection ID: 1007750

Field Name: Equipment Initial Number [CARMARK] [CARNUM]

Field Value: AARX000@898989

Error Type : ERROR Error Msg : Invalid Equipment Initial or Equipment Number provided.

FTP Set Up, FindUs.Rail (FUR)

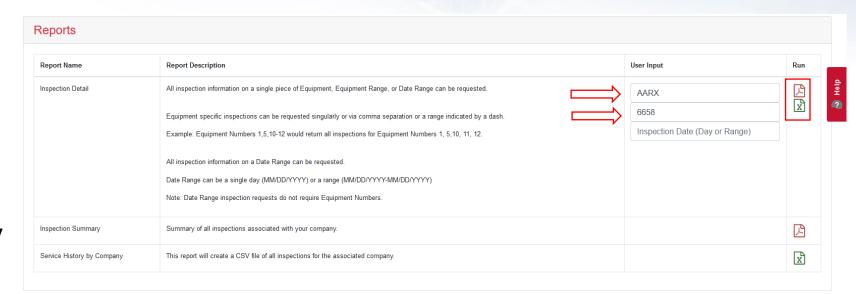


- FTP set up
 - Companies with an existing mailbox can add TCID subscription to their current setup
 - Companies without an existing mailbox will need to contact the Railinc Customer Success team for assistance with creating one
- FindUs.Rail (FUR)
 - Contact details must be added to receive email notifications on FTP submissions
 - Users with FUR access may update their contact record include the TCID category



Reports >

- Inspection Detail
- Inspection Summary
- Service History by Company





Reports >

- Inspection Detail
- PDF
- Excel



RAILING

TCID Tank Car Inspection Detail: AARX0000006658

Report of Alterations, Conversions, Welded Repairs, and Stub Sill Inspections

Date of Entry: 09/21/2023

 Equip. Initial/No.:
 AARX0000006658
 Station Stencil:
 UTCO

 Stencil Class:
 112J340W
 Shop Location:
 AARX, TX

 Built Date:
 11/01/1999
 Inspection Date:
 08/01/2022

 Car Jacketed:
 0
 Reserved 1 (design specific):

 Reserved 2 (design specific):
 Original AAR Cert. No.:
 F997064

 Builder:
 UTLX
 Stub Sill Design (as inspected):
 UTLZBH

Stub Sill Design Variation: CONTINUOUS Miles (x1000): 0

Constructed Car Spec.: 112J340W Car Spec. After Mod.: 112J340W

Inspect/Report Type: Alteration Nature of Damage: N/A
Railroad Responsibility: 0 Stub Sill Deformation (A End): 0
Stub Sill Deformation (B End): 0 Last Tank Qual Year: 2009

Tank Contain. Failure: 0 No. of Compartments: 1

Facility Rep. Name: TROY GAWD Submitted By: UNION TANK CAR COMPANY

EIN: 0010413982 Stencil Mark AARX

Alterations and Conversions

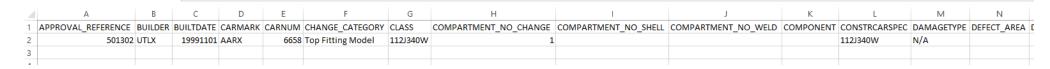
Compartment No.	Change Category	Drawing Number	AAR Approval Ref. No.	Drawing Comments
1	Top Fitting Model	KR-TFA-2001- 056		ANGLE VALVES MIDLAND, A720, SER #S FA- 843-RA,3V-593-RA,FA-841-RA

Weld Inspection Results

	spection Results	Compartment No. (weld)	Weld Code	Weld Location	Inspection Technique	No. of Defects	Max Defect Length	Defect Orientation Code 1	Defect Orientation Code 2	Defect Orientation Code 3	How Repaired (weld)	
--	---------------------	---------------------------	--------------	------------------	-------------------------	-------------------	-------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------	--

Shell/Sill Inspection Results

Failed Component	Compartment No. (shell)	Failure Type	Failure Cause	How Repaired (shell)	Defect Length (in)	Defect Area	Repair Location	Inspection Method
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RAILING

Reports >

- Inspection Summary
 - All submitted inspections
 - Owner Delegate can view all company inspections
 - Facility can only view their inspections

Reports

Report Name	Report Description	User Input	Run
Inspection Detail	All inspection information on a single piece of Equipment, Equipment Range, or Date Range can be requested. Equipment specific inspections can be requested singularly or via comma separation or a range indicated by a	Equipment Initial Equipment Number	Z X
	dash. Example: Equipment Numbers 1,5,10-12 would return all inspections for Equipment Numbers 1, 5,10, 11, 12.	Inspection Date (Day or Ra	
	All inspection information on a Date Range can be requested.		
	Date Range can be a single day (MM/DD/YYYY) or a range (MM/DD/YYYY-MM/DD/YYYY) Note: Date Range inspection requests do not require Equipment Numbers.		
Inspection Summary	Summary of all inspections associated with your company.		凸



RAILING

- Reports > Inspection Summary
 - PDF download



TCID Inspections Summary: AARX

Equip Initial	Equip No.	Submitted By	Last Modified	Inspection Status
AARX	0000006658	TCIDWEB	10/23/2023	Submitted
AARX	0000006658	TCIDWEB	10/20/2023	Submitted
AARX	0000008880	TCIDWEB	10/06/2023	Submitted

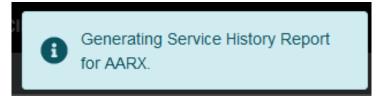
RAILING

Reports >

- Service History by Company
 - All submitted inspections
 - Owner Delegate can view all company inspections
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Reports

Report Name	Report Description	User Input	Run
Inspection Detail	All inspection information on a single piece of Equipment, Equipment Range, or Date Range can be requested.	Equipment Initial	Z X
	Equipment specific inspections can be requested singularly or via comma separation or a range indicated by a dash.	Equipment Number	x
	Example: Equipment Numbers 1,5,10-12 would return all inspections for Equipment Numbers 1, 5,10, 11, 12.	Inspection Date (Day or Range)	
	All inspection information on a Date Range can be requested. Date Range can be a single day (MM/DD/YYYY) or a range (MM/DD/YYYY-MM/DD/YYYY) Note: Date Range inspection requests do not require Equipment Numbers.		
Inspection Summary	Summary of all inspections associated with your company.		凸
Service History by Company	This report will create a CSV file of all inspections for the associated company.	$\qquad \qquad \Longrightarrow \qquad$	X





Reports > Service History by Company

4	Α	В	С	D	E	F G	Н	1	J	K	L	M	N	0	P	Q	R	S	T U	V	W	X	Y	Z	AA	AB AC	
1 A	PROVA	BUILDER	BUILTDATI	CARMARI	CARNUM	CHANGE_CLASS	COMP	ART COMP	ART COMPART	COMPON	I CONSTRC	DAMAGET	DEFECT_A D	EFECT_LE	DEFECT_C	DEFECT_	O DEFECT_C	DRAWING	DRAWING FAILURE	_(FAILURE_	THOW_RE	P HOW_RE	PINSPDATE	INSPECTIC	INSPECTIO	INSPECTIC INSPRE	AS IN
2	501302	UTLX	19991031	AARX	6658	Top Fitting 112J3	0W	1			112J340W	N/A						ANGLE VA	KR-TFA-2001-056				20220731				2
3	501302	UTLX	19991101	AARX	6658	Top Fittin 112J3	0W	1			112J340W	N/A						ANGLE VA	KR-TFA-2001-056				20220801				2 1
4		TETX	19990102	AARX	8880	103AL	N		1		105A100A	N/A			WFF	WFF	WFF					Grinding	a 20230928		Defect(s)	[AE] Acou	32
5																											



Reminders

- Batch Upload
 - The file must be in a .csv format with a file size less than 1MB
 - Files with warnings will be accepted
- Reports
 - Tank Car Inspection Owner Delegate can run reports and see inspections for that company
 - Facility User can only see the data they have submitted and run reports only on that data

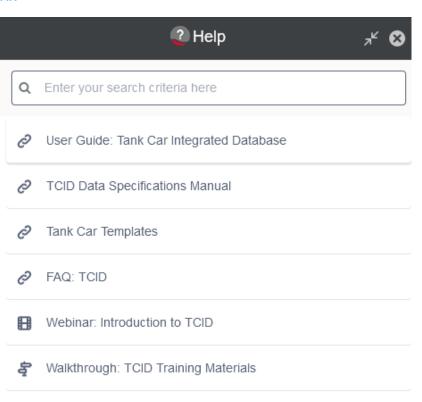
Help





Tank Car Integrated Database

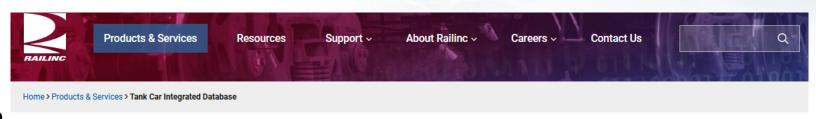
Manage information on tank cars, specifically, inspection results, repairs and modifications. Car owners can use submissions to this system to comply with AAR Tank Car Committee requirements to report such information.





Help >

- TCID User Guide
- TCID Data Specification Manual
- Tank Car Templates
- TCID Notices of Implementation
- Batch File Example
- TCID Data
 Dependencies Matrix



Tank Car Integrated Database

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<u>★</u> More On This Page:

Tank Car Templates

TCID Frequently Asked Questions

TCID Notice of Implementation

Related Support Documents

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Access SSO and Railinc Applications
Quick Guide

TCID Data Specification Manual

AAR Form TCID

TCID Data Dependencies Matrix and
Appendices

Sill Design Template Mapping

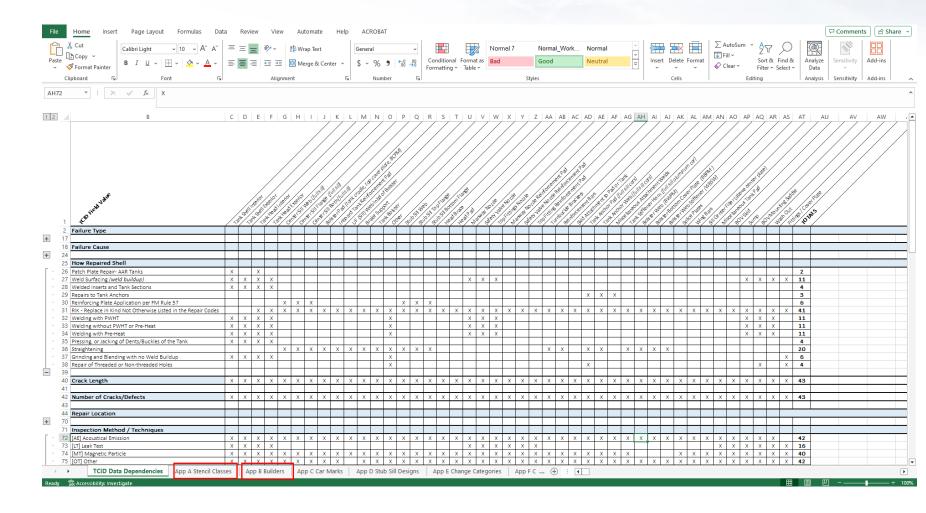
Tank Car Location Chart

TCID Batch File Example



Help >

TCID Data
 Dependencies
 Matrix





Scenario

Company A owns AARX 1234 from its construction and can view all inspections it has submitted for the car

Company A sells AARX 1234 to Company B. Company A can still view all inspections it has submitted while owning AARX 1234 up until the transfer of ownership to Company B

Company B can see all inspections that Company A created for AARX 1234, while also being able to see the inspections they have created for the car

Company B sells AARX 1234 to Company C

Company A can still see all inspections it submitted while owning the car

Company B can still see all inspections it submitted while owning the car up to the point of sale to Company C

Company C can see ALL inspections created for AARX 1234

Let Us Know Your Thoughts



Railinc Customer Success Center

csc@railinc.com 877-724-5462











