

Release Notes for December 5, 2024 Umler System Release

The Umler system release scheduled for Thursday, December 5, 2024, includes functional enhancements to Umler which includes docket implementation work as directed by the Umler Committee to implement new elements, element changes/updates, as well as modifications to permissible values and business rules within the application.

Below are the complete details of this release.

Element Updates (New Elements/Element Changes & Removals)

- Head Protection Type (A118)
 - Equipment Group: TANK
 - o Presentation Group: Specification
 - Updated Element Definition:
 - Old: Indicates the construction design of head protection shield
 - New: Indicates the construction design of head protection or head shield
- Stub Sill Design Type (A251)
 - Equipment Group: TANK
 - o Presentation Group: Specification
 - Updated Element Definition:
 - Old: Identifies the equipment stub sill
 - New: Identifies the underframe type or stub sill design
- Tank Head Mat Spec (A254)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: The equipment material characteristics including specification and grade for the tank head
 - New: The material characteristics including specification and grade for the tank head
- Tank Lining Material (A315)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: Describes the construction material lining applied to the interior of the tank
 - New: Identifies the type of coating or lining material applied to the interior of the tank
- Bearing Shielded From HBD (B021)
 - o Equipment Group: BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC
 - o Presentation Group: Specification

- Updated Element Definition:
 - Old: Indicates the bearing is shielded from the hot box detector on the equipment
 - New: Indicates the wheel bearings are shielded from wayside hot box detectors
- Empty/Load Device Eqpd (B075)
 - Equipment Group: BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC, PSGR, STWH
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: Indicates a system that determines if the equipment is empty or loaded, and then varies the braking forces accordingly
 - New: Indicates that the air brake system includes a device to determine if the equipment is empty or loaded, and then varies the braking forces accordingly
- Bottom Outlet Count (B142)
 - Equipment Group: GOND, HOPP, TANK
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: The number of bottom unloading devices on the equipment
 - New: The number of bottom outlets or washouts on the equipment
- Remote Monitoring Device (B176)
 - Equipment Group: BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC, PSGR, STWH, LOCO, TRLR, CONT, CHSS
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: Indicates the equipment is equipped with a location monitoring device
 - New: Indicates the equipment has a device that transmits a signal or records data
- Wheel Bearing Type (B191)
 - Equipment Group: BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC, PSGR, STWH, LOCO
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: Indicates the wheel bearing code for the equipment
 - New: Indicates the wheel bearing journal design for the equipment
- Coils Exterior/Interior (X109)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Updated Element Definition:
 - Old: Indicates the coils are built to the interior or exterior of the tank
 - New: Indicates the type of heater system that the tank is equipped with

Permissible Value/Range Updates - Updates/Removals/New Values

- Air Brake Model Number (ABMD)
 - Equipment Group: LOCO
 - Presentation Group: Specification
 - Added Permissible Value:
 - CCB2E CCB2 (Enhanced)

Umler Data Specification Manual - Updates/Removals/New Values

- Head Protection Type (A118)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Updated Element Note 4:
 - Old: Permissible value C is a performance based head puncture-resistance system meeting 49 CFR 179.16(a).
 - New: Permissible value C is a performance based head puncture resistance system meeting 49 CFR 179.16(a). The common 11 gauge jacket alone does not meet this requirement but may be used as part of a system including the tank car tank proven by testing.
 - Added Element Note:
 - Permissible value U is for non-insulated cars, or cars with a jacket (typically 11 gauge) that is solely used to cover the insulation and is not C, F, H, or T.
- Bottom Fitting Protection Type (A153)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Added Element Notes:
 - Level A protection means that:
 - at time of retrofit, the bottom service equipment or sump extended more than one inch below the bottom of the tank envelope. This applies to tank cars built prior to May 1982 and that were retrofitted with bottom fittings protection prior to July 2006.
 - at time of construction no portion of the bottom service equipment/sump extended more than one inch below the tank envelope, or the bottom service equipment/sump was within the envelope of the safety system or continuous center-sill. This applies to tank cars built new after May 1982 with bottom fittings protection per M-1002 Appendix E.
 - Level B protection means that:
 - at time of retrofit, the bottom service equipment or sump met conditions for bottom fittings protection. Refer to M-1002 Appendix E 9.1.5.2 (Version 2014). This applies to tank cars built prior to May 1982 and that were retrofitted with Bottom Fittings Protection prior to July 2006.
 - Level C protection means that:

- at time of retrofit, the bottom service equipment or sump extended more than five inches below the bottom of the tank envelope. This applies to tank cars built prior to May 1982 and that were retrofitted with bottom fittings protection prior to July 2006.
- Level E is intended for bottom safety systems conforming to specification M-1002 Appendix E 8.0 (Version 2023).
- Operating Brakes (A182)
 - o Equipment Group: TANK, BOXC, GOND, HOPP, FLAT, IFLT, VFLT, MISC, PSGR
 - Presentation Group: Specification
 - Added Element Note:
 - Excludes empty/load device, number 8 vent valve, and proportion valve
- Tank Head Thickness (A255)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Added Element Note:
 - For Stenciled Shipping Specifications beginning with 113 or 115, this element represents the material thickness of the inner tank.
- Tank Shell Thickness (A258)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Added Element Note:
 - For Stenciled Shipping Specifications beginning with 113, 115, 204, or 206 this element represents the material thickness of the inner tank.
- Remote Monitoring Device (B176)
 - Equipment Group: TANK, BOXC, GOND, HOPP, FLAT, IFLT, VFLT, MISC, PSGR, STWH, LOCO, TRLR, CONT, CHSS
 - Presentation Group: Specification
 - Added Element Note:
 - Per AAR S-2045, This may be data related to ride quality, geographic location, temperature/condition of the load, load/empty status, etc.
- Stub Sill Variation (B526)
 - Equipment Group: TANK
 - o Presentation Group: Specification
 - Updated Element Note 2d:
 - Old: and if Coils Exterior/Interior (X109) = any value except 'E'
 - New: and if Heater System Type (X109) = any value except 'E'
- Restricted under TC-PD-34 (B527)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Updated Element Note 2d:
 - Old: and if Coils Exterior/Interior (X109) = any value except 'E'
 - New: and if Heater System Type (X109) = any value except 'E'

- Jacket Thickness (B541)
 - Equipment Group: TANK
 - Presentation Group: Specification
 - Added Element Note:
 - For Stenciled Shipping Specifications beginning with 113, 115, 204, or 206 this element represents the material thickness of the outer jacket (shell).
- Coils Exterior/Interior (X109)
 - Equipment Group: TANK
 - o Presentation Group: Specification
 - Added Element Note:
 - If Combination Ext/Int Heater System is reported, then the Coil Material is of the exterior coil.

Got Questions? Get Answers.

If you have any questions about Railinc's Umler system or this release, contact the Railinc Customer Success Center by email at or by phone at 877-724-5462.