

Release Notes for July 12, 2021 Umler System Release

The Umler system release scheduled for Monday, July 12, 2021, 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)**
 - DP Remote Dynamic Brake Holding During PCS (B591) *
 - Equipment Group: LOCO
 - New Element
 - Element Description:
 - The Distributed Power system is capable of remote DB Holding During PCS
 - Presentation Group: Specification
 - Permissible Value(s):
 - Y - Yes
 - N - No
 - Validation Rule(s):
 - DP System Type (B578) must be reported if Distributed Power Eqpd (B070) is Y
 - Note(s):
 - DP Feature ID: F05
 - The pneumatic control switch (PCS) on a Distributed Power Remote opens upon penalty and emergency air brake applications and certain system faults. Currently, Distributed Power's response to PCS open is to immediately transition the Remote to throttle Idle. This holding feature allows the Distributed Power Remote to maintain Dynamic Braking when PCS opens to help stop a moving train more quickly or prevent a stopped train from accelerating.
 - To use this functionality, all Distributed Power units on the train must be equipped with this feature.
 - ABT Due Date (Repair Track) (DU13)
 - Equipment Group(s): BOXC, GOND, HOPP, FLAT, IFLT, VFLT, TANK, MISC, PSGR, STWH
 - Updated Element Name
 - From: ABT Due Date
 - To: ABT Due Date (Repair Track)
 - Updated Element Label
 - From: ABT Due Date
 - To: ABT Due Date (Repair Trk)

- ABT 5/8 Year Due Date (DU58)
 - Equipment Group(s): BOXC, GOND, HOPP, FLAT, IFLT, VFLT, TANK, MISC, PSGR, STWH
 - Updated Element Description
 - From: The 5/8 year due date for the air brake test (ABT) after the 12 month due date
 - To: The 5/8 year due date for the air brake test (ABT) after the ABT Due Date (Repair Track)
- **Permissible Value/Range Updates - Updates/Removals/New Values**
 - Remote Monitoring Device (B176)
 - Equipment Group(s): BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC, LOCO
 - Added Permissible Value:
 - N - No
 - Horsepower (A123)
 - Equipment Group: LOCO
 - Increased Maximum Range Value:
 - From: 6600
 - To: 8046
 - Plate Code (A046)
 - Equipment Group: BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, LOCO, PSGR
 - Added Permissible Value:
 - N - Plate Code N
 - Design Shipping Spec (A072)
 - Equipment Group: TANK
 - Removed Permissible Value(s):
 - 113A175W
 - 113B60W
 - 113C60W
 - 113D60W
 - Added Permissible Value(s):
 - 113C120W9 - DOT 113C120W9
 - Stenciled Shipping Spec (A237)
 - Equipment Group: TANK
 - Removed Permissible Value(s):
 - 105J500H
 - 105J600H
 - 112J500H
 - 112S500H
 - 112S600H

- 113A175W
 - 113B60W
 - 113C60W
 - 113D60W
- Added Permissible Value(s):
 - 105H500W - Major Class 84 - DOT 105H500W
 - 105H600W - Major Class 85 - DOT 105H600W
 - 112H500W - Major Class 84 - DOT 112H500W
 - 112H600W - Major Class 85 - DOT 112H600W
 - 113C120W9 - Major Class 67 - DOT 113C120W9
- Stub Sill Design Type (A251)
 - Equipment Group: TANK
 - New Permissible Value(s):
 - FCA001 - FCA001 Stub Sill Design Type
 - GBR001 - GBR001 Stub Sill Design Type
- **Business Rule Changes - New/Changed or Updated/Removed Rules**
 - Center of Gravity Empty (A045)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, FLAT, IFLT
 - Updated Rule:
 - This rule was updated so that equipment with Plate Code N exceeds Plate Code C.
 - All cars that exceed Plate Code C (A046) must report Empty Car Center of Gravity except cars with Equipment Type Code (UMET) of J _ _ _
 - Outside Extreme Height (A185)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, LOCO, PSGR
 - New Rule:
 - Outside Extreme Height for Plate Code N must be less than or equal to 17 feet 1 inch
 - Outside Extreme Width (A186)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, LOCO, PSGR
 - Updated Rule:
 - **Old:** Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, or F.
 - **New:** Outside Extreme Width must not exceed 10 feet 8 inches for Plate Codes B, C, E, F, or N.
 - Outside Height Extreme Width (A187)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, PSGR
 - New Rule(s):

- Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 8 inches if Outside Height Extreme Width (A187) is 16 feet 9 inches or less
 - Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 6 inches if Outside Height Extreme Width (A187) is 16 feet 10 inches
 - Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 4 inches if Outside Height Extreme Width (A187) is 16 feet 11 inches
 - Outside Extreme Width (A186) for Plate Code N must not exceed 10 feet 2 inches if Outside Height Extreme Width (A187) is 17 feet 0 inches
 - Outside Extreme Width (A186) for Plate Code N must not exceed 9 feet 11 inches if Outside Height Extreme Width (A187) is 17 feet 1 inch
- Outside Lower Eaves Height (A189)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, PSGR
 - New Rule(s):
 - Outside Lower Eaves Height for Plate Code N must not exceed 17 feet 1 inch
- Outside Lower Eaves Width (A190)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, PSGR
 - New Rule(s):
 - Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Lower Eaves Height (A189) is 16 feet 9 inches or less
 - Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Lower Eaves Height (A189) is 16 feet 10 inches
 - Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Lower Eaves Height (A189) is 16 feet 11 inches
 - Outside Lower Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Lower Eaves Height (A189) is 17 feet 0 inches
 - Outside Lower Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Lower Eaves Height (A189) is 17 feet 1 inch
- Outside Upper Eaves Height (A193)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, PSGR
 - New Rule(s):
 - Outside Upper Eaves Height for Plate Code N must not exceed 17 feet 1 inch
- Outside Upper Eaves Width (A194)
 - Equipment Group(s): BOXC, GOND, HOPP, MISC, PSGR
 - New Rule(s):

- Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 8 inches if Outside Upper Eaves Height (A193) is 16 feet 9 inches or less
 - Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 6 inches if Outside Upper Eaves Height (A193) is 16 feet 10 inches
 - Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 4 inches if Outside Upper Eaves Height (A193) is 16 feet 11 inches
 - Outside Upper Eaves Width for Plate Code N must not exceed 10 feet 2 inches if Outside Upper Eaves Height (A193) is 17 feet 0 inches
 - Outside Upper Eaves Width for Plate Code N must not exceed 9 feet 11 inches if Outside Upper Eaves Height (A193) is 17 feet 1 inch
- Remote Monitoring Device (B176)
 - Equipment Group(s): TANK
 - New Rule:
 - Remote Monitoring Device (B176) is mandatory for all tank cars on or after August 1, 2021
- Horsepower (A123)
 - Equipment Group: LOCO
 - New Rule:
 - Locomotives must have an Equipment Descriptor of 'DE-All Electric' to have Horsepower greater than 6600
- Tank Major Class (B207)
 - Equipment Group: TANK
 - Updated Rule(s):
 - Tank Major Class (B207) of 67 can only have a Stenciled Shipping Spec (A237) equal to 113A60W or 113C120W or 113D120W or 113C120W9
 - Tank Major Class (B207) of 84 can only have a Stenciled Shipping Spec (A237) equal to 112S500I or 105J500I or 105H500W or 112J500I or 112H500W
 - Tank Major Class (B207) of 85 can only have a Stenciled Shipping Spec (A237) equal to 105J600I or 105H600W or 112S600I or 112H600W
 - Updated Appendix N HM-246 Matrix
 - Minimum requirements for DOT105J500I, DOT105J600I, DOT112J500I, DOT112S600I, DOT112S500I, DOT105H500W, DOT105H600W, DOT112H500W, and DOT112H600W per 49 CFR §179.101 with additional requirements found in 179.102-3, 173.244, and 173.314.

A237	Stenciled Shipping Spec	DOT105J500I, DOT105H500W	DOT105J600I, DOT105H600W	DOT112J500I	DOT112S600I, DOT112H600W	DOT112S500I	DOT112H500W
B207	Tank Major Class	84	85	84	85	84	84
B204	Jacket Material Category	Must not be U	Must not be U	Must not be U	N or S or U	N or S or U	N or S or U
B541	Jacket Thickness >=	0.1196	0.1196	0.1196	0.1196 (if N or S) or Blank (if U)	0.1196 (if N or S) or Blank (if U)	0.1196 (if N or S) or Blank (if U)
A257	Tank Shell Material Spec =	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L
A258	Tank Shell Thickness >=	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)
B208	Tank Shell Material Norm	Y	Y	Y	Y	Y	Y
A254	Tank Head Material Spec =	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L
A255	Tank Head Thickness >=	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)
B203	Tank Head Material Norm	Y	Y	Y	Y	Y	Y
A118	Head Protection Type	F	F	F	F	F	F
B105	Head Protection Thickness >=	0.5	0.5	0.5	0.5	0.5	0.5
A264	Top Fittings Protection	R or S	R or S	R or S	R or S	R or S	R or S
A230	Safety Relief Device Type	C or V	C or V	C or V	C or V	C or V	C or V

*Indicates this is a new element.

- **Documentation Changes - Element Updates in Umler Data Specification Manual**

- Plate Code (A046)
 - Add Note:
 - Report N: If clearance is greater than Plates B, C, E, and F, but does not exceed Plate N.
 - Update Note:
 - Report G: If clearance exceeds Plates B, C, E, F, and N.
 - Remove Note(s):
 - C, E, and F must agree with stenciling on the side of equipment.
 - G must agree with stenciling on the side of equipment that exceeds Plate F.
 - Added a diagram of Plate N into Appendix J.
- Appendix N
 - Updated Heading
 - **From:** Tank Major Class and DOT117/HM-246 Requirements
 - **To:** Major Tank Class and Validation Matrices for DOT117 and HM-246
 - Updated DOT Classifications for 84 and 85 Major Class:

84 Major Class (DOT) – PRESSURE TANK FOR TIH (HM-246)
105J500I, 112J500I, 112S500I, 105J500H 105H500W , 112J500H 112H500W , 112S500H
85 Major Class (DOT) – PRESSURE TANK FOR TIH (HM-246)
105J600I, 112S600I, 105J600H 105H600W , 112S600H 112H600W

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 csc@railinc.com or by phone at 877-724-5462.