

RELEASE NOTES

April 2008

MERLIN-DASH V.9.2 (WIN V.4.1)

PBEAM

1. The LRFR moment and stress ratings of PC bridges for all vehicles were verified and fixed.

LFD (Steel)

1. The overload stress over the pier in Table 1.2.22.21 did not report correctly. It has been fixed.

LRFD (Steel)

1. The strength category of cross section in Table 1.2.22.9 did not show up correctly. It has been fixed.
2. The program used Strength IV to check the constructability in Table 1.2.22.10 instead of Strength I.
3. The problem for Q/I in negative moment regions in Table 1.2.22.24 has been fixed.
4. In Table 1.2.5.3, the live load moments had un-symmetrical results for a symmetry bridge due to small tolerance. It has been corrected for this rare case.
5. Some depth ratios criteria did not suitable for the non-composite bridge in Table 1.2.22.4. It has been reported correctly now.
6. The C_b values in Tables 1.2.22.7.0 and 1.2.22.7B did not calculate correctly for non-composite bridges. It has been corrected.
7. For short span continuous bridges, the live load moments over the pier did not report correctly in Table 1.2.5.3. It has been fixed.
8. The LRFR moment and shear ratings of steel bridges for all vehicles were verified and fixed.
9. The LRFR moment and shear ratings of RC bridges for all vehicles were verified and fixed.

MERLIN-DASH V.9.1 (WIN V.4.1)

December 2007

PBEAM

1. The rating problem for state permit vehicle has been fixed.
2. In Table 3.2.6.1B, the calculation for prestress loss and the top stress in the concrete is incorrect. It has been corrected.

LFD (Steel)

1. The P1 and P2 values in Table 1.2.22.24A did not report correctly. It has been fixed.
2. The moments for non-composite bridges in Tables 2.2.5.2 and 2.2.5.3 did not calculate correctly. It has been corrected.
3. The wrong distribution factors for different girder spacing in continuous bridges were shown in Table 1.2.3.2. It has been fixed.
4. In Table 1.2.22.9A, the program reported different S_{xc} values for non-composite bridges. It has been fixed.

LRFD (Steel)

1. The rating factors in Table 1.2.32.3A did not show up correctly. It has been fixed.
2. The stresses for Service II in Table 1.2.9.5B did not add up precisely. It has been corrected.
3. The problem for operating factors of RC bridges has been fixed.
4. In Table 1.2.22.14, the output did not show up correctly for non-composite sections and the negative moment region. It has been corrected.
5. The reporting problem of rating factors for the HL and General Trucks in Table 1.2.32.3A has been fixed.
6. In Table 1.2.5.5, the moments for Strength II are shown incorrectly when the user input HL-93 and non-AASHTO Truck. It has been corrected.
7. The user inputting the distribution factors for both HL-93 and permit vehicle has been implemented into the program.
8. Table 1.2.22.7.0 has been added in for users to verify the C_b values easily.
9. The results were shown odd in Table 1.2.22.24C. It has been corrected.
10. The negative moments at the piers did not calculate correctly in Table 1.2.5.3. It has been fixed.
11. The F_{nc} values in Tables 1.2.22.7B, 1.2.22.10, and 1.2.22.14 did not match. It has been corrected.
12. The shear rating has been implemented into the program.
13. The program re-arranged the output in Table 1.2.22.24A and fixed the problem in Table 1.2.22.24B accordingly.

WSD/LFD/LRFD (Steel)

1. The program has been modified to calculate the superstructure quantities in Table 1.2.3.1 more precisely.
2. The user can input slab thickness as an indicator to place the lateral bracing for non-composite bridges.