Guidance for the Visual Inspection of Foreign Steel

In accordance with Standard Specification Article 1.05.09, Inspectors are authorized to inspect all work and materials furnished for Project construction. In addition, the inspector is not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract work, or to issue instructions contrary to the Contract.

All Contracts issued and administered by the Department include Standard Specification Article 1.06.01, that states “All permanently incorporated steel and iron used in the construction of the Project must have been produced and fabricated in the United States.” As this requirement directly impacts project funding, it is imperative that inspectors are aware and verify the source of steel and iron materials prior to the Contractor permanently incorporating them into the Project.

Cast-in-place concrete structures that contain steel reinforcing are applications where the Department is especially vulnerable because of the difficulty and expense of correcting nonconformities. In order to minimize risk to the Department, inspectors are advised to visually inspect all reinforcing steel prior to use by the Contractor, and to prohibit the use of any questionable material until the issue is resolved by the Engineer. The attached MAT-330 has been developed to assist inspectors in this effort. Please note, this visual inspection does not relieve the sampling and testing requirements included in the “Minimum Schedule for Acceptance Testing.”

For any questions or clarifications regarding the guidelines please contact Division of Materials Testing staff: John Giannini, john.giannini@ct.gov or (860)258-0324; Daniel Guzzo, Daniel.guzzo@ct.gov (860)258-0339; or Mark Brothwell, mark.brothwell@ct.gov or (860)258-0378
Guideline for the Visual Inspection of Reinforcing Steel

CONNECTICUT DEPARTMENT OF TRANSPORTATION

Guideline for the Visual Inspection of Reinforcing Steel

MAT-330    January 2017

Division of Materials Testing    280 West Street, Rocky Hill   CT 06067-3502

Connecticut Department of Transportation Standard Specifications Section 1.06 Control of Materials requires that, “All permanently incorporated steel and iron used in the construction of the project must have been produced and fabricated in the United States.” This restriction applies to reinforcing steel used in all permanent construction for the project, both on and off the project site.

Producers of reinforcing steel are required to identify their products by rolling into the surface of the bar using designated letters, numbers and/or symbols for the mill, bar size, type of steel, and in some cases the grade of steel. To assist project inspectors in interpreting the markings, the following figures are provided.

Typical Markings for Domestic Rebar in this area

- Producing Mill: N, NJ, (Nucor), (Gerdau AmeriSteel)
- Bar Sizes: #3, #4, #5, #6, #7, #8, #9, #10
- Type of Steel: S=Billet, W=Weldable
- Grade of Steel: Grades, 300(40), 4 or 420(60), 520(75)

Alternatively, Grades may be designated with marks as indicated below.

- No Grade Marks
  - Grade 300 (Grade 40)
- One Grade Mark
  - Grade 420 (Grade 60)
- Two Grade Marks
  - Grade 520 (Grade 75)