

711-B-190 PEENING WELDS BY MEANS OF ULTRASONIC IMPACT TREATMENT, UIT

(Adopted 09-15-11)

The Standard Specifications are revised as follows:

SECTION 711, LINE 400, DELETE AND INSERT AS FOLLOWS:

**711.31 Blank Peening Welds by Means of Ultrasonic Impact Treatment, UIT**

*This work shall consist of removing existing paint, repairing existing cracked welds, peening existing and repaired welds, and painting in accordance with 105.03.*

*Equipment operators shall be American Society for Nondestructive Testing, ASNT, Level II technicians, trained in the use of the equipment for peening by ultrasonic impact methods. Proof of certification shall be furnished 2 weeks prior to commencing work.*

*All welding shall be in accordance with the applicable section of the ANSI/AASHTO/AWS D1.5M/D1.5 Bridge Welding Code, hereinafter referred to as the Bridge Welding Code. All welding shall be performed by AWS certified welders. Weld repair shall be in accordance with Bridge Welding Code section 3.7.*

*Paint removal shall be in accordance with 619.08(b) and 619.08(h). However, pressure washing will not be required. Painting shall be in accordance with 619.09 and 619.10.*

*Prior to beginning the peening process, all welds shall be inspected with a 10x magnifying glass and with either ultrasonic or magnetic particle non-destructive testing equipment. Welds needing repair shall be ground and repaired in accordance with the Bridge Welding Code. Peening using ultrasonic impact treatment methods shall be applied to all repaired welds in addition to the welds shown on the plans.*

*UIT shall be performed along the toe of the weld to cause the center of the treatment groove to be at the weld toe. UIT shall be performed to result in a uniform groove with a bright, metallic surface. All non-uniform areas shall be retreated.*

SECTION 711, AFTER LINE 1133, INSERT AS FOLLOWS:

*Peening will be measured by the linear inch (mm) of peened weld. The length of weld peened will be measured once per weld regardless of the number of passes necessary to complete the work as specified.*

*Repair welds will be measured by the linear inch (mm) of repaired weld.*

SECTION 711, AFTER LINE 1158, INSERT AS FOLLOWS:

*The accepted quantities of peened weld will be paid for at the contract unit price per inch (mm). The accepted quantities of repaired weld will be paid for at the contract unit price per inch (mm).*

SECTION 711, AFTER LINE 1219, INSERT AS FOLLOWS:

<i>Peening Weld, UIT</i> .....	<i>INCH (mm)</i>
<i>Repair Weld</i> .....	<i>INCH (mm)</i>

SECTION 711, BEGIN LINE 1225, INSERT AS FOLLOWS:

*The cost of paint removal, painting, non-destructive testing, equipment, labor, materials, access, permits, and necessary incidentals shall be included in the cost of peening weld, UIT.*

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