

38800 Country Club Drive
Farmington Hills, MI 48331
Telephone: (248) 848-3180
Fax: (248) 848-3181
www.post-tensioning.org

October 20, 2022

Memo: PTI Unbonded Tendon Plant Certification Clarifications from October 6, 2022 CRT-20 Meeting.

The following clarifications of **PTI-CRT20 G1-1121** were made at the latest CRT-20 Unbonded Tendon Plant Certification Meeting. Please take note that future inspections will comply with these clarifications.

1. Section 2.1.1 Receiving and Inspection of Strand

2.1.1 Receiving and Inspection of Strand

Maintain receiving log and/or database according to Section 4.2.1.

Maintain non-conforming material log according to Section 4.3

(a) Ensure that material certifications and low-relaxation test results for strand are received prior to use. Relaxation tests shall be performed at least annually and if there is any change in the type of raw material or manufacturing. The relaxation test shall be performed as a full 1000-hour test at initial production and every third year thereafter. Interim annual 200-hour. relaxation tests are acceptable provided that the results, when extrapolated to 1,000-hours, compares consistently to previous satisfactory full 1000-hour. test results.

Questions	Weight (out of 1000 pts)	IA	IB	IC	IIA	IIB	IIC	III
2.1.1 (a) Strand Certifications								
Are mill certificates on file?								
(a) If mill certificates are on file, the grade score is 100.	25.00							
(b) If mill certificates are not on file, but strand is clearly marked and segregated, the grade score is 100.								
(c) If mill certificates are not on file and strand is not clearly marked and segregated, the grade score is 70.		✓	✓	✓	✓	✓	✓	✓
(d) If mill certificates are not on file and the strand is used in extrusion or fabrication, the grade score is 0.								
Are current low relaxation test results on file?								
(a) If current low relaxation test reports are on file, the grade score is 100.	25.00							
(b) If low relaxation test results are not on file but strand is clearly marked and segregated, the grade score is 100.								
(c) If low relaxation test results are not on file and strand is not clearly marked and segregated, the grade score is 70.		✓	✓	✓	✓	✓	✓	✓
(d) If low relaxation test reports are not on file and the strand is used in extrusion or fabrication, the grade score is 0.								

The question was raised: There seems to be much confusion regarding the frequency of full 1000 hr. and 200 hr. test results. Is there another way to state this in the text?

CRT-20 Clarification: Confirm the definition of the word “annually” means once in a calendar year. For example, during an inspection in the calendar year 2022, the plant needs a testing report from 2021 at the latest.

38800 Country Club Drive
 Farmington Hills, MI 48331
 Telephone: (248) 848-3180
 Fax: (248) 848-3181
 www.post-tensioning.org

2. Section 4.4 EXTRUSION LOG

Sheathing Thickness Measurement Frequency: Record sheathing thickness in the extrusion log at the beginning of each shift on each extrusion line and any time a change is made to the sheathing thickness, in extrusion materials or after repairs or adjustments are made to the extrusion equipment using a digital, dial, or Vernier caliper.

For fabrication only plants, measure and record sheathing thickness at the beginning of each shift on each fabrication line, and any time tendons from a coil of another sheathing thickness are being fabricated (during the same shift and cutting line), using a digital, dial, or Vernier caliper

Questions	Weight (out of 1000 pts)	IA	IB	IC	IIA	IIB	IIC	III
4.4 Extrusion Log								
Are the following items recorded on the extrusion log?								
a) Strand								
Coil identity (coil and heat number)?	0.59	✓	✓	✓	✓	✓	✓	✓
Surface grades at time of extrusion for each coil?	0.59	✓	✓	✓	✓	✓	✓	✓
Strand manufacturer?	0.59	✓	✓	✓	✓	✓	✓	✓
b) PT Coating								
Batch numbers?	0.59	✓	✓	✓	✓	✓	✓	✓
PT Coating application quantity?	0.59	✓	✓	✓	✓	✓	✓	✓
c) Sheathing								
Date of extrusion?	0.59	✓	✓	✓	✓	✓	✓	✓
Sheathing thickness (4 measurements)?	0.59	✓	✓	✓	✓	✓	✓	✓
Source and batch number?	0.59	✓	✓	✓	✓	✓	✓	✓
UV stabilizer manufacturer's suggested application rate to achieve the minimum protection for 90 days?	0.59	✓	✓	✓	✓	✓	✓	✓
Are sheathing thickness measurements recorded per frequency requirements of Section 4.4?	0.59	✓	✓	✓	✓	✓	✓	✓

The question was raised: Does a Fabrication Only Plant (IIA, IIB, or IIC) need to maintain sheathing thickness records taken during extrusion?

CRT-20 Clarification: For a Fabrication Only Plant (IIA, IIB, or IIC), the extrusion log sent from the Certified Extrusion Plant must include 4 sheathing thickness measurements taken at the time of extrusion.