



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Chief Resident Engineer
Osmani & Company (Pvt) Ltd
Swat Motorway Project

Reference # CED/TFL **34194** (Dr. Waseem Abbass)
Reference of the request letter # B 351/CRE/QAT/SMP/2019

Dated: 18-11-2019
Dated: 18-11-2019

Tension Test Report (Page – 1/4)

Date of Test 20-11-2019
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	775.0	792.0	18500	181.49	19600	192.28	198	<3.50 Not ok	298
2	12.70 (1/2")	775.0	788.0	18500	181.49	20100	197.18	199	>3.50	302
3	12.70 (1/2")	775.0	794.0	19000	186.39	20100	197.18	199	>3.50	305
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only three samples for Test										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratories
UET Lahore, Pakistan.

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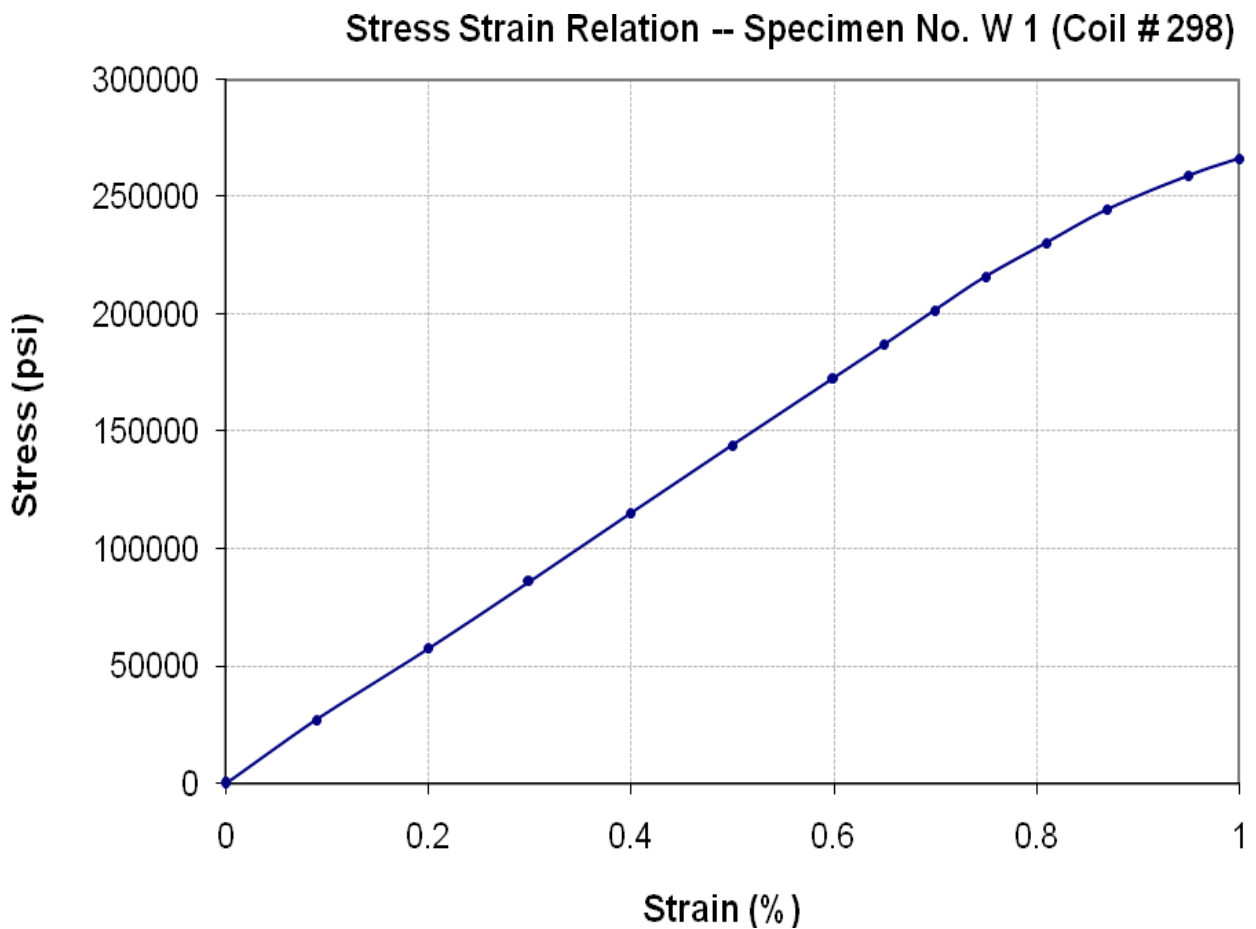
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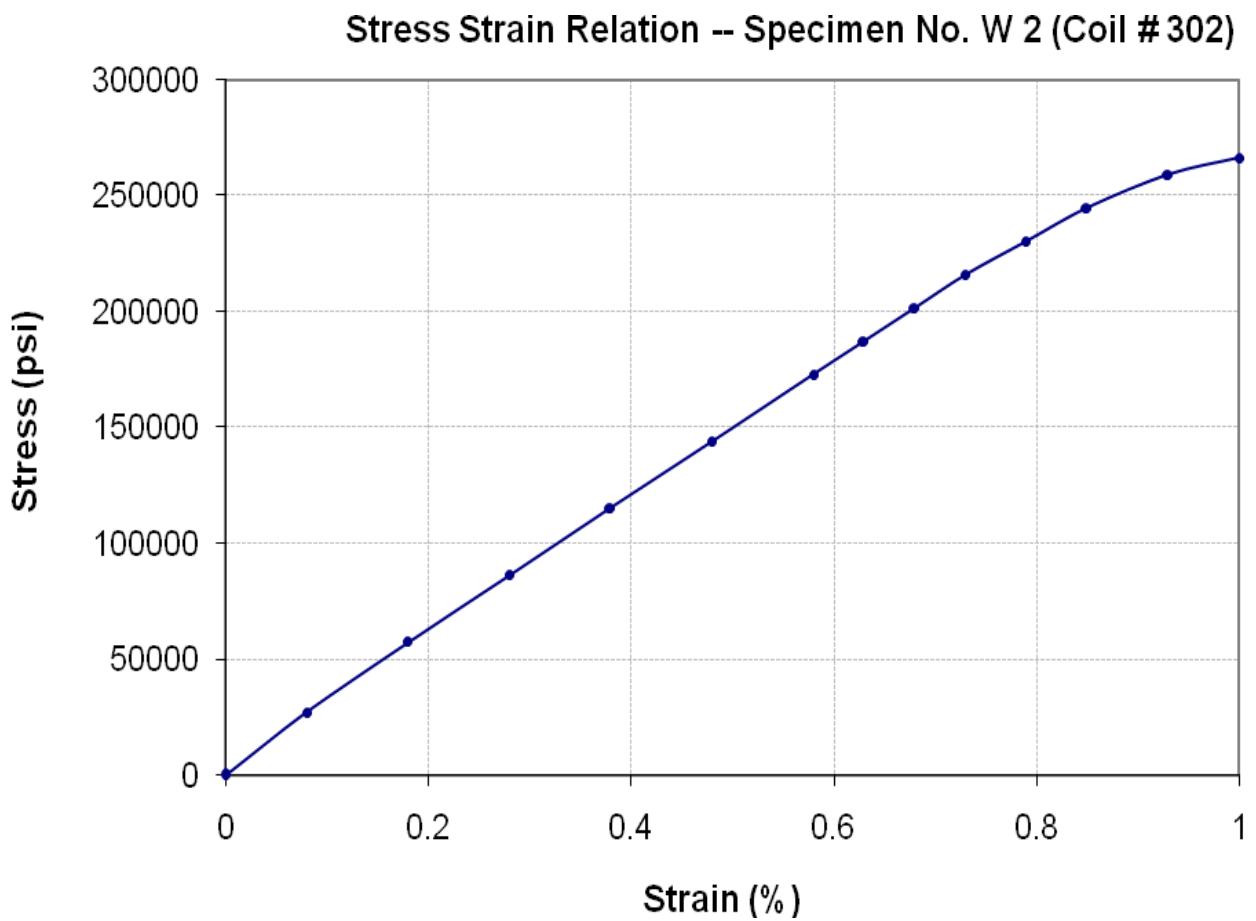
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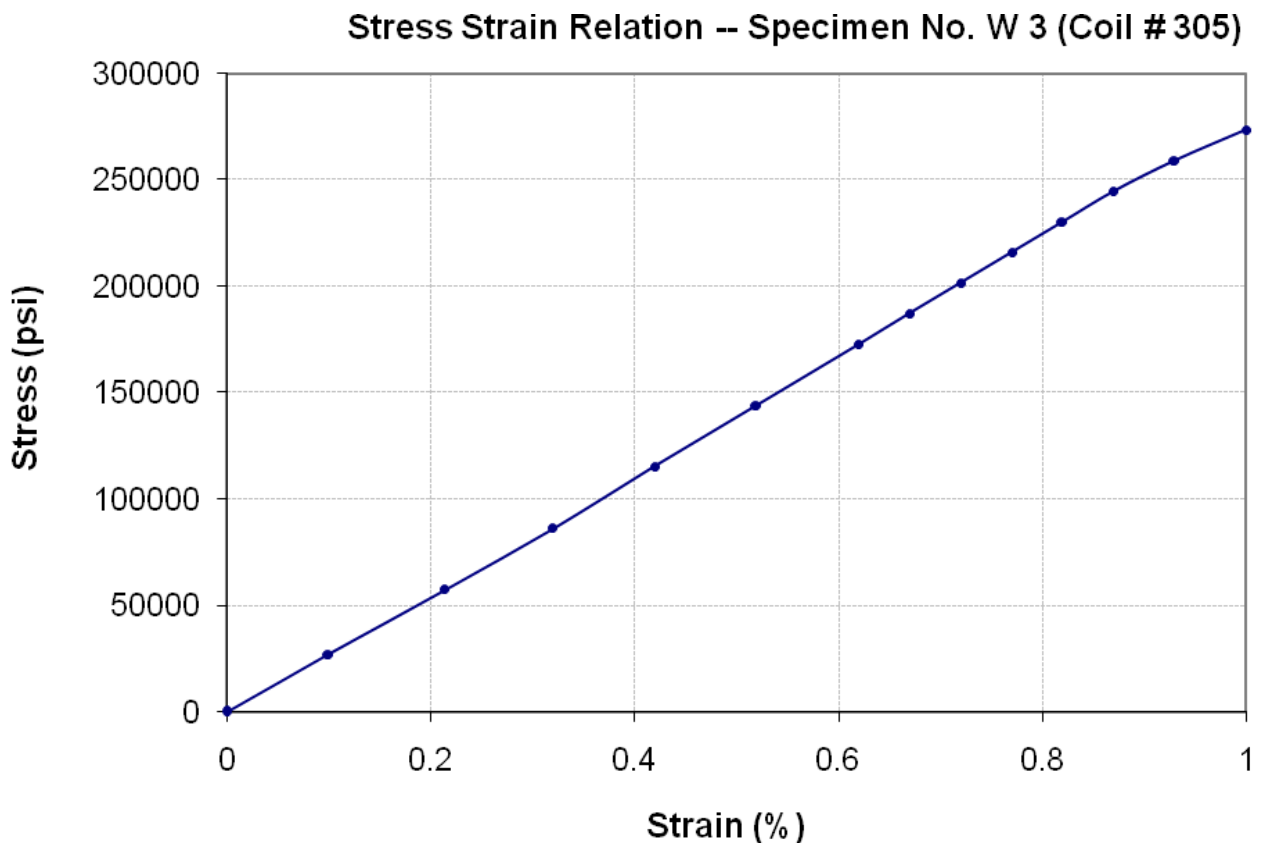
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3	12.70 (1/2")	775.0	784.0	19000	186.39	20300	199.14	199	>3.50	296
-	-	-	-	-	-	-	-	-	-	-
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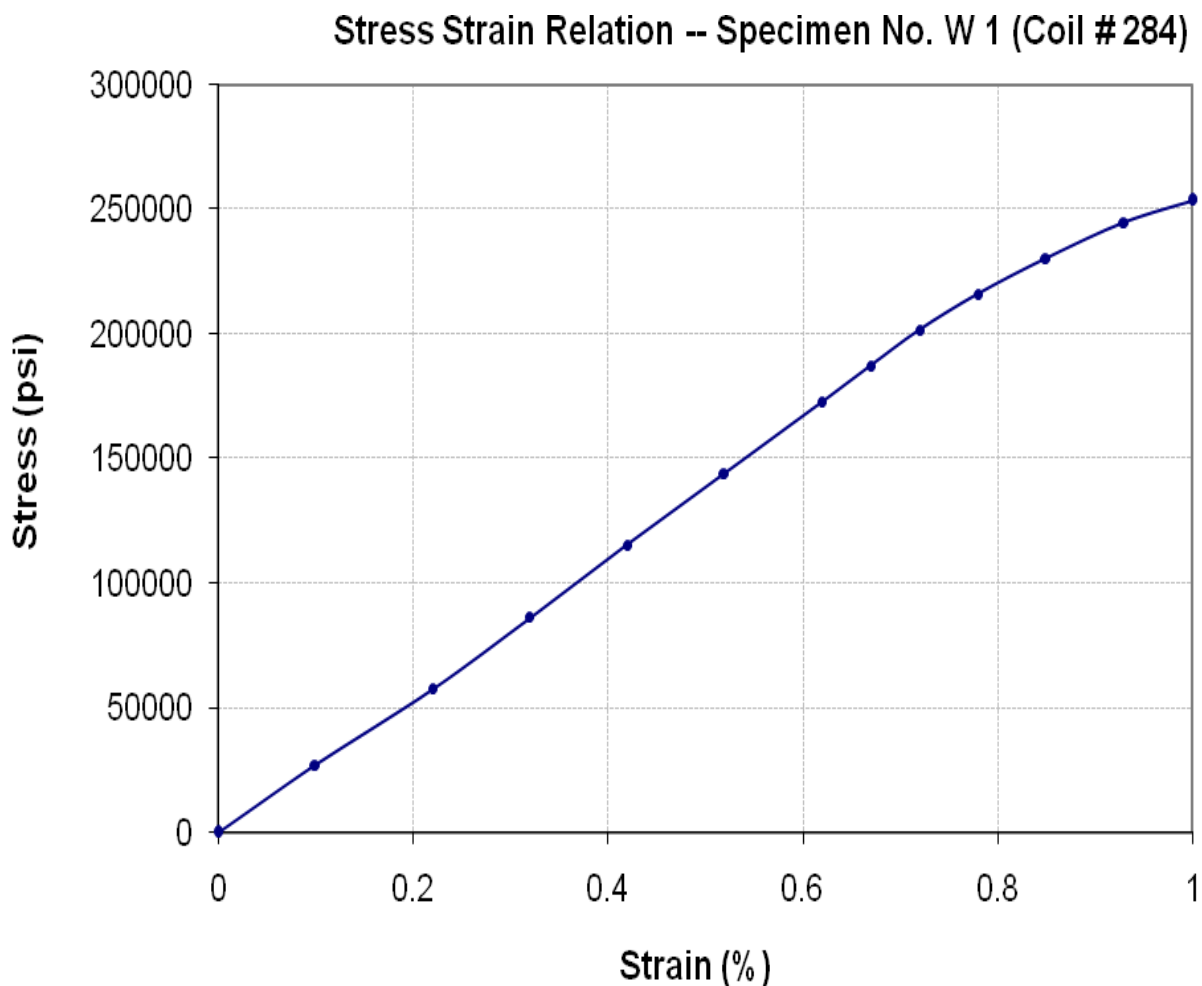
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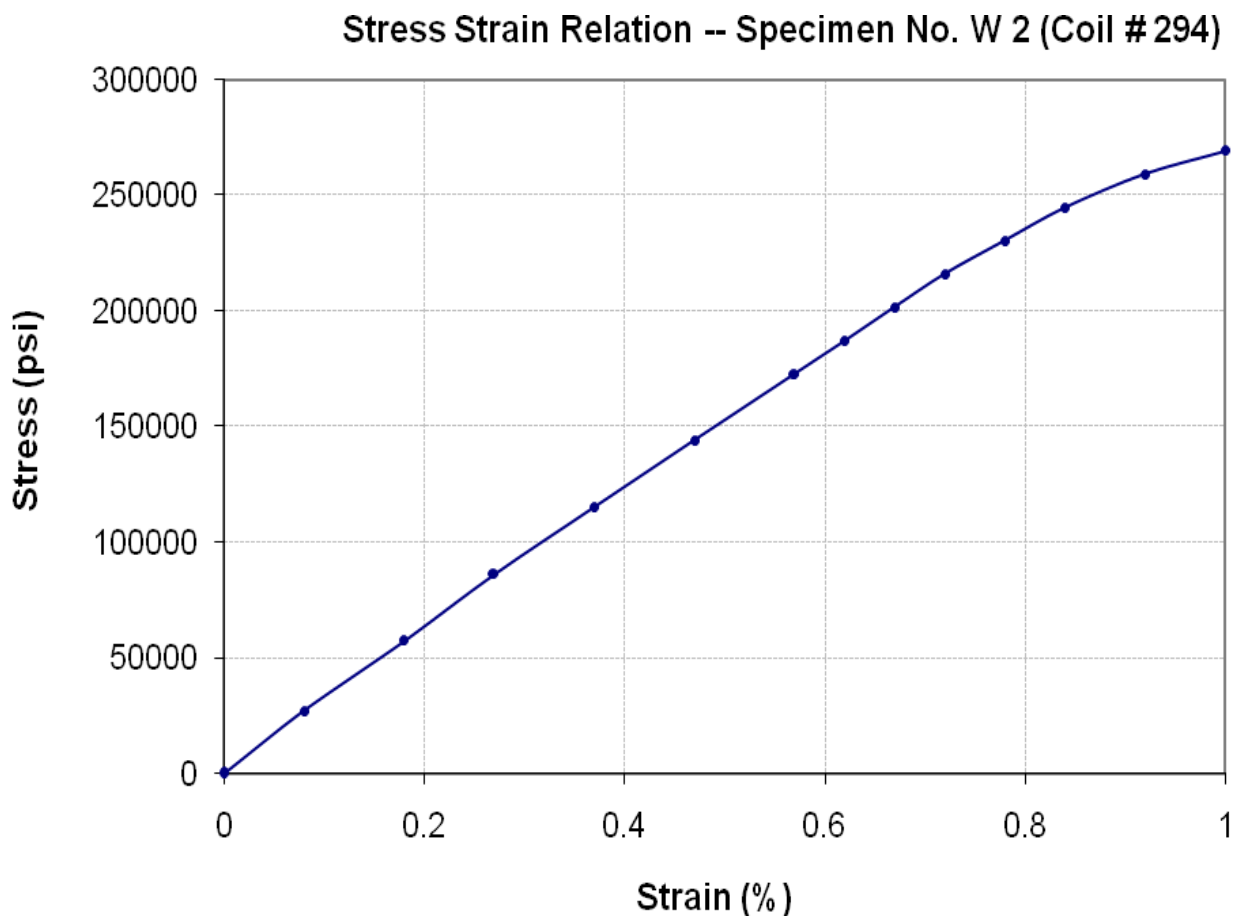
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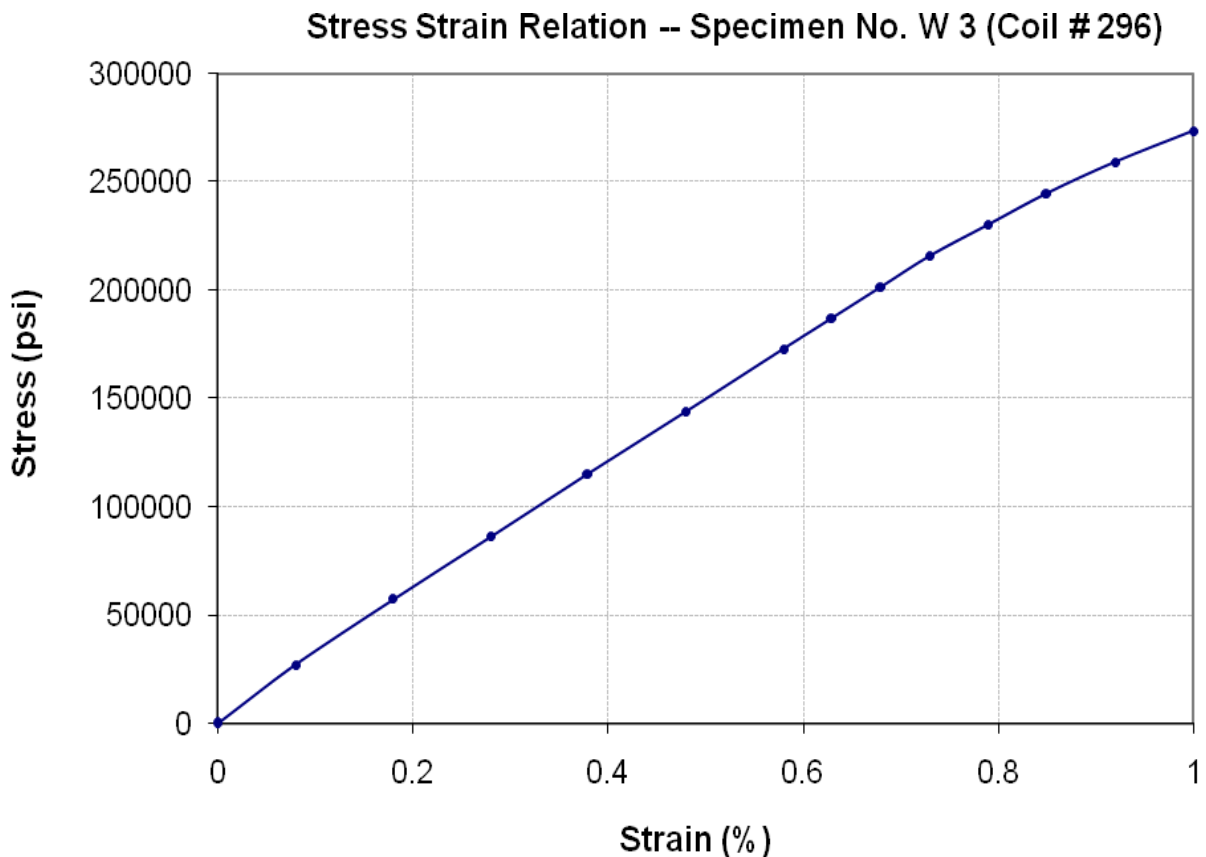
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