STRUCTURAL ENGINEERING DIVISION

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

Ref: CED/TFL/05/36413 Dated: 03-05-2021

Date of Test: 05-05-2021

To,
Manager Monitoring & Coordination
Shajar Roads Limited
Dualization of Sheikhupura – Gujranwala Road

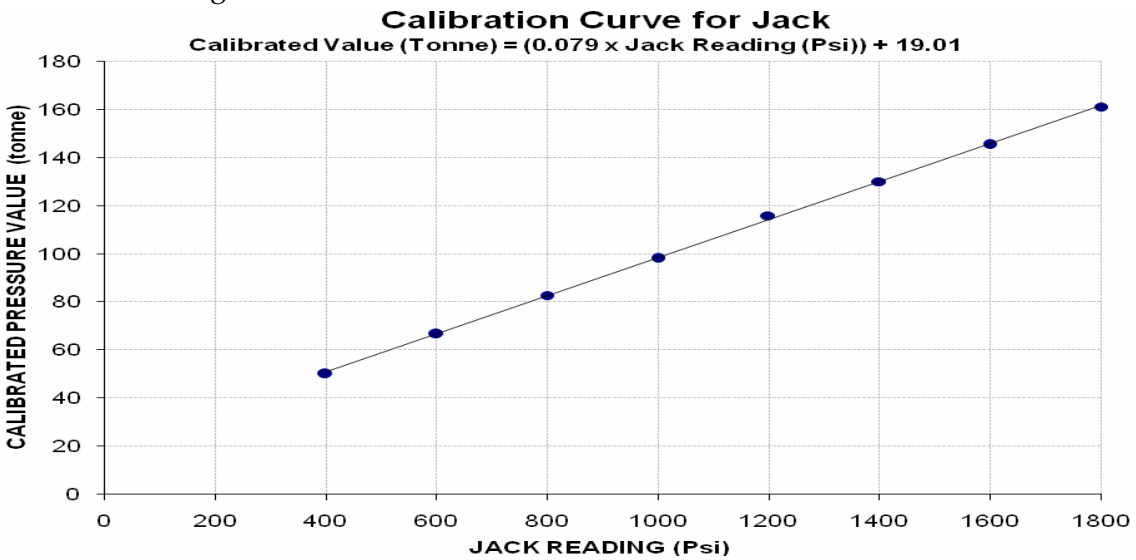
Subject: **- CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE (MARK: TFL/05/36413)** (Page # 1/2)

Reference to your Letter No. MMC/SRL/SGRP/60, Dated: 28/04/2021 on the subject cited above. One Hydraulic Jack No. 555 with Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 8600 (Psi)
Calibrated Range : Zero - 1800 (Psi)

Hydraulic Jack Reading (Psi)		400	600	800	1000	1200	1400	1600	1800
Calibrated Load	(kg)	50000	66600	82600	98100	115800	130000	145400	161100
	Tonne	50.00	66.60	82.60	98.10	115.80	130.00	145.40	161.10

1 tonne = 1000 kg



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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To,
Manager Monitoring & Coordination
Shajar Roads Limited
Dualization of Sheikhupura – Gujranwala Road

Subject: **- CALIBRATION OF DIAL GAUGES (MARK: TFL/05/36413)** (Page # 2/2)

Reference to your Letter No. MMC/SRL/SGRP/60, Dated: 28/04/2021 on the subject cited above. Three Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm)
Calibrated Range : Zero - 30 (mm)

Standard Reading	Dial Gauge Readings		
	Dial Gauge No. I (A05306)	Dial Gauge No. II (Z07338)	Dial Gauge No. III (Z07335)
200	178	197	189
400	378	396	390
600	578	595	589
800	777	795	788
1000	979	996	988
1200	1176	1195	1188
1400	1376	1394	1388
1600	1577	1594	1588
1800	1776	1795	1788
2000	1977	1994	1988
2200	2176	2194	2188
2400	2376	2394	2388
2600	2576	2594	2588
2800	2778	2795	2787
3000	2976	2994	2987

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To,
Project Manager
Aldo International (Pvt) Ltd
Construction of Bridge at Khaira Distributary, Ata Buxh Road, Kamahan

Reference # CED/TFL **36416** (Dr. M Rizwan Riaz) Dated: 03-05-2021
Reference of the request letter # Al/UET/001 Dated: 03-05-2021

Tension Test Report (Page – 1/2)

Date of Test 05-05-2021
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**	**782.0**	**17300**	**169.71**	**19400**	**190.31**	**199**	**>3.50**	**xx**
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only one sample 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

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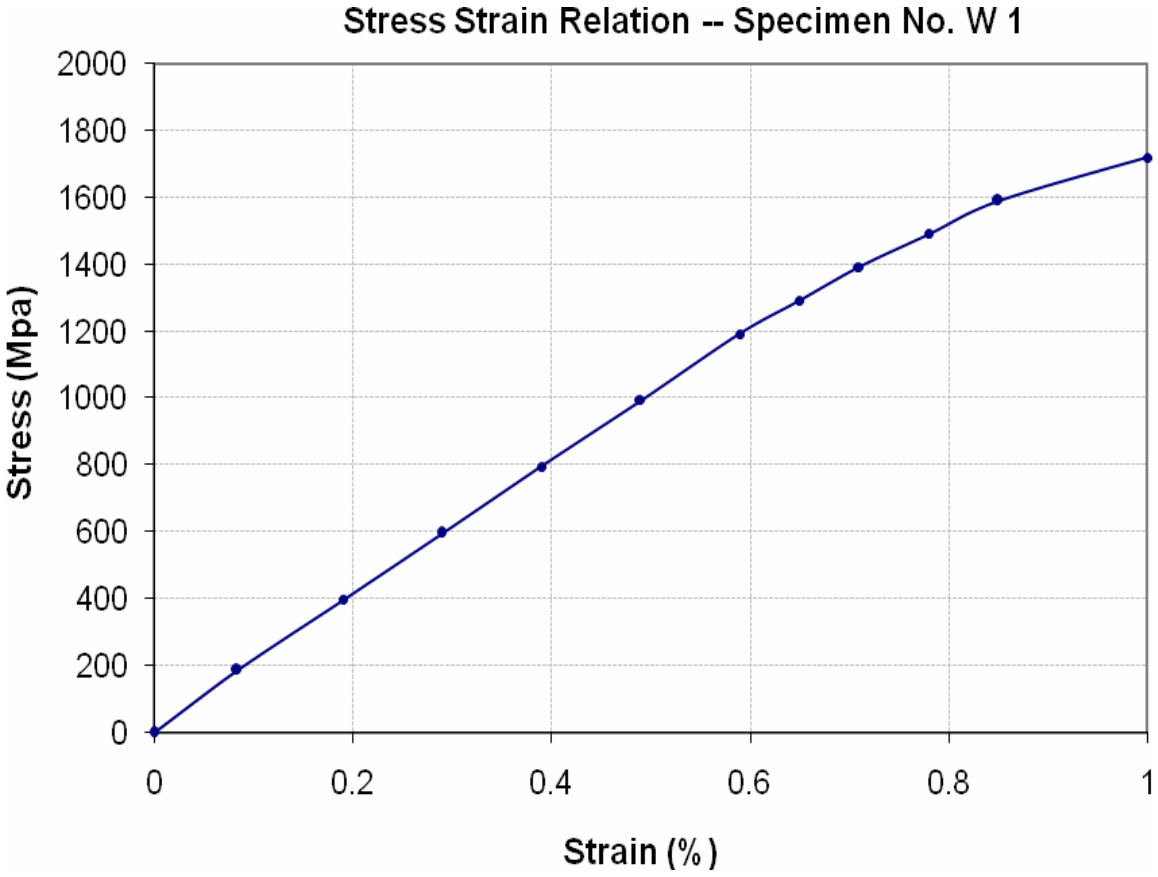
Graph (Page – 2/2)



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