



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

To,
 Resident Engineer
 Pillar & Sons
 Rumanza Golf & Country Club, DHA Multan

Reference # CED/TFL **37866** (Dr. Usman Akmal)
 Reference of the request letter # P&S/OTH/GEN/00064

Dated: 10-02-2022
 Dated: 04-02-2022

Tension Test Report (Page -1/2)

Date of Test 15-02-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.343	3	0.358	0.11	0.101	2400	3600	48100	52430	72200	78700	1.50	18.8	SJ Steel
2	0.363	3	0.369	0.11	0.107	2800	3900	56200	57870	78200	80600	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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

o,
 Resident Engineer
 Pillar & Sons
 Rumanza Golf & Country Club, DHA Multan

Reference # CED/TFL **37866** (Dr. Usman Akmal)
 Reference of the request letter # P&S/OTH/GEN/00065

Dated: 10-02-2022
 Dated: 04-02-2022

Tension Test Report (Page -2/2)

Date of Test 15-02-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.337	10	1.274	1.27	1.275	33800	50400	58700	58440	87500	87200	1.20	15.0	SJ Steel
2	4.531	10	1.302	1.27	1.332	42000	57200	72900	69500	99300	94700	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
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To,
 Chief Resident Engineer
 NESPAK

Dualization of Road from Gujranwala to M-2 Interchange at Kot Sarwar via Hafizabad km 6.20 to km 80.35 length 74.15 km in District Gujranwala & Hafizabad (Section km No. 40.20 – 55.40, L = 15.20 km)

Reference # CED/TFL **37870** (Dr. Usman Akaml)

Dated: 10-02-2022

Reference of the request letter # SA-466F/103/GH/ML/Lab/03

Dated: 08-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-2022

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.365	3	0.370	0.11	0.107	3400	5000	68200	69770	100200	102600	1.30	16.3	
2	0.366	3	0.370	0.11	0.107	3400	5000	68200	69720	100200	102600	1.30	16.3	
3	4.304	10	1.269	1.27	1.265	48800	59800	84700	85010	103800	104200	1.30	16.3	
4	4.242	10	1.260	1.27	1.247	48800	59400	84700	86250	103100	105000	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
M/S FABCON
Lahore

Reference # CED/TFL **37871** (Dr. usman Akmal)

Dated: 10-02-2022

Reference of the request letter # Nil

Dated: 09-02-2022

Tension Test Report (Page – 1/1)

Date of Test 15-02-2022

Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test

Sr. No.	Designation			Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)											
1	Channel	250x88x9x12	35x9x350	24.50x9.00	220.50	6500	10700	289	476	0.70	35.00	TS-01A
2				24.20x8.90	215.38	6700	10400	305	474	0.80	40.00	TS-01B
3	Angle	100x100x9.6	35x9.6x350	24.60x9.70	238.62	7300	11300	300	465	0.80	40.00	TS-02A
4				24.40x9.70	236.68	7400	11400	307	473	0.70	35.00	TS-02B
5	MS Pipe	114.3 (4") 8.56 mm	35x8.56x350	24.30x8.70	211.41	6200	9700	288	450	0.60	30.00	TS-03A
6				24.30x8.50	206.55	6300	9700	299	461	0.60	30.00	TS-03B
7	MS Pipe	150x150x8	35x8x350	24.30x8.10	196.83	6000	9200	299	459	0.70	35.00	TS-04A
8				24.00x8.30	199.20	6000	9400	295	463	0.70	35.00	TS-04B
9	MS Chequered Plate	6	35x6x350	24.80x6.40	158.72	4800	7500	297	464	0.60	30.00	TS-05A
10				24.80x6.30	156.24	4800	7400	301	465	0.70	35.00	TS-05B

Only Ten Samples for Tensile Test

Bend Test

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
25 Engr Bn

Reference # CED/TFL **37873** (Dr. Usman Akmal)
 Reference of the request letter # Nil

Dated: 11-02-2022
 Dated: 10-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-202
 Gauge length 8 inches
 Description Galvanized Wire Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	0.104	-----	4.10	-----	13.2	-----	480	-----	357	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test												
Bend Test												

I/C Testing Laboratories
UET Lahore, Pakistan.

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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/02/37874

Dated: 11-02-2022

Date of Test: 15-02-2022

To,
Resident Engineer
NESPAK
Dualization of III Interchange (M-2) Via P.D.Khan to Jhelam I/C Bypass (02 Nos)
Length 128 km, District Jhelum

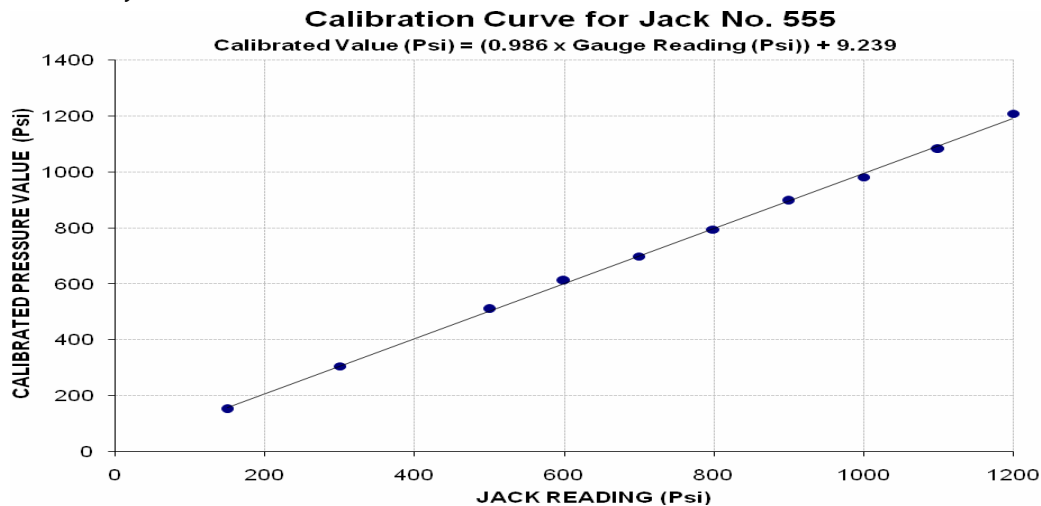
Subject: - **CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE**
(MARK: TFL/02/37874) (Page # 1/2)

Reference to your Letter No. NESPAK/RE/JH/22/01/012, Dated: 10/02/2022 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 - 6000 (Psi)
Calibrated Range : Zero - 1200 (Psi)

Hydraulic Jack Reading (Psi)	150	300	500	600	700	800	900	1000	1100	1200
Calibrated Load (kg)	23400	47050	78600	94300	107800	122600	138400	151500	166900	186600
Calibrated Pressure (Psi)	152	305	510	611	699	795	897	982	1082	1210

The Ram Area of Jack = 340 in²



I/C Testing Laboratories
UET Lahore, Pakistan.

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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/02/37874

Dated: 11-02-2022

Date of Test: 15-02-2022

To,

Resident Engineer

NESPAK

Dualization of III Interchange (M-2) Via P.D.Khan to Jhelam I/C Bypass (02 Nos)
Length 128 km, District Jhelum

Subject: - **CALIBRATION OF DIAL GAUGES (MARK: TFL/01/37874)** (Page # 2/2)

Reference to your Letter No. NESPAK/RE/JH/22/01/012, Dated: 10/02/2022 on the subject cited above. Four 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 (S17649)	Dial Gauge No. II (S17630)	Dial Gauge No. III (14J230037)	Dial Gauge No. III (15L280071)
200	199	197	196	195
400	399	395	395	395
600	598	595	595	590
800	798	795	794	790
1000	998	996	996	988
1200	1198	1196	1194	1186
1400	1397	1395	1393	1385
1600	1597	1595	1594	1586
1800	1797	1796	1793	1787
2000	1997	1996	1992	1986
2200	2197	2196	2191	2184
2400	2397	2396	2391	2383
2600	2597	2595	2591	2584
2800	2796	2794	2791	2783
3000	2996	2995	2991	2984

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
 Resident Engineer
 NESPAK
 Infrastructure Development of Quaid-e-Azam Business Park on Motorway M-2, District
 Sheikhpura

Reference # CED/TFL **37881** (Dr. Usman Akmal)
 Reference of the request letter # 4163/11/MY/01/157

Dated: 14-02-2022
 Dated: 09-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.152	10	1.247	1.27	1.221	36200	54600	62900	65370	94800	98600	1.50	18.8	Faizan Steel
2	4.176	10	1.250	1.27	1.228	38000	55800	66000	68230	96900	100200	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
 GM Projects
 Ittefaq Building Solutions Pvt Ltd
 Allied Bank at Faisalabad

Reference # CED/TFL **37882** (Dr. Usman Akmal)
 Reference of the request letter # IBS/CED/AB-02

Dated: 14-02-2022
 Dated: 14-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.372	3	0.373	0.11	0.109	3300	4600	66200	66610	92200	92900	1.50	18.8	
2	0.376	3	0.375	0.11	0.111	3400	4600	68200	67790	92200	91800	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
 Resident Engineer
 ACE Limited jv ACC (Pvt) Ltd.
 Construction of Lodhran - Multan Project section (N-5) (North Bound 62 km)

Reference # CED/TFL **37883** (Dr. Ali Ahmed)
 Reference of the request letter # RE/ACE/LMP/2022/156

Dated: 14-02-2022
 Dated: 03-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.134	32	31.60	1.25	1.215	32400	53400	57143	58770	94181	96900	1.70	21.3	Mujahid Steel
2	4.080	32	31.39	1.25	1.199	32600	53400	57496	59920	94181	98200	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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To,
Assistant Executive Engineer-II
Central Civil Division
Pak P.W.D. Sargodha
(Construction of Regional Tax Office Sargodha Sub Head Civil Works for 06 No Office Buildings)

Reference # CED/TFL **37884** (Dr. Usman Akmal)
Reference of the request letter # AEE/CCCD/SGD/01

Dated: 14-02-2022
Dated: 04-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.366	3/8	0.370	0.11	0.108	3600	4900	72200	73760	98200	100400	1.10	13.8	
2	0.371	3/8	0.372	0.11	0.109	3600	4900	72200	72850	98200	99200	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
M/S Landmark Consultants (Pvt) Ltd
Gulberg II, Lahore
(Parkview Apartments)

Reference # CED/TFL **37890** (Dr. Usman Akmal)
Reference of the request letter # CIV/172/14022022

Dated: 15-02-2022
Dated: 14-02-2022

Tension Test Report (Page -1/1)

Date of Test 15-02-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3	0.376	0.11	0.111	4200	5300	84200	83410	106200	105300	0.70	8.8	
2	0.376	3	0.375	0.11	0.111	4300	5500	86200	85650	110200	109600	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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I/C Testing Laboratories
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