



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/05/3215

Dated: 17-05-2023

Date of Test: 23-05-2023

To,
Chief Resident Engineer
Zerruk International (Pvt) Ltd.
Sialkot - Kharian Motorway Project.

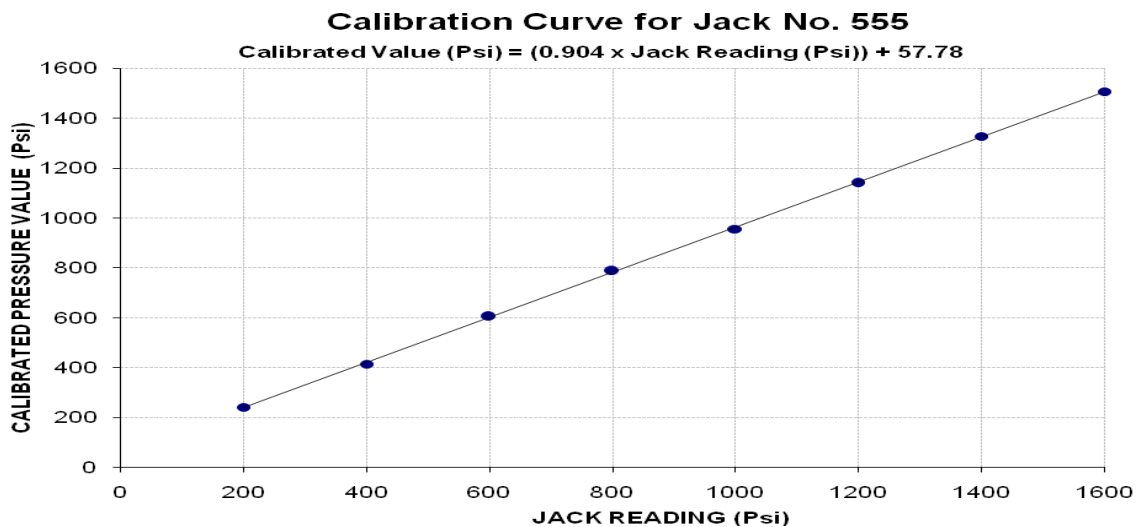
Subject: - **CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE**
(MARK: TFL/05/3215) (Page # 1/1)

Reference to your Letter No. SKMP/CRE/2023/0114, Dated: 09/05/2023 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 - 1600 (Psi)

Jack Reading (Psi)	200	400	600	800	1000	1200	1400	1600
Calibrated Load (kg)	29400	53200	77800	101200	122800	146600	170600	193800
Calibrated Pressure (Psi)	241	413	605	787	954	1139	1326	1506

The Ram Area for Calibration = 268.66 in²



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
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Department of Civil Engineering
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Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/05/3216, 3244

Dated: 17-05-2023

Date of Test: 23-05-2023

To,

Resident Engineer
NESPAK
High Court Bridge Project

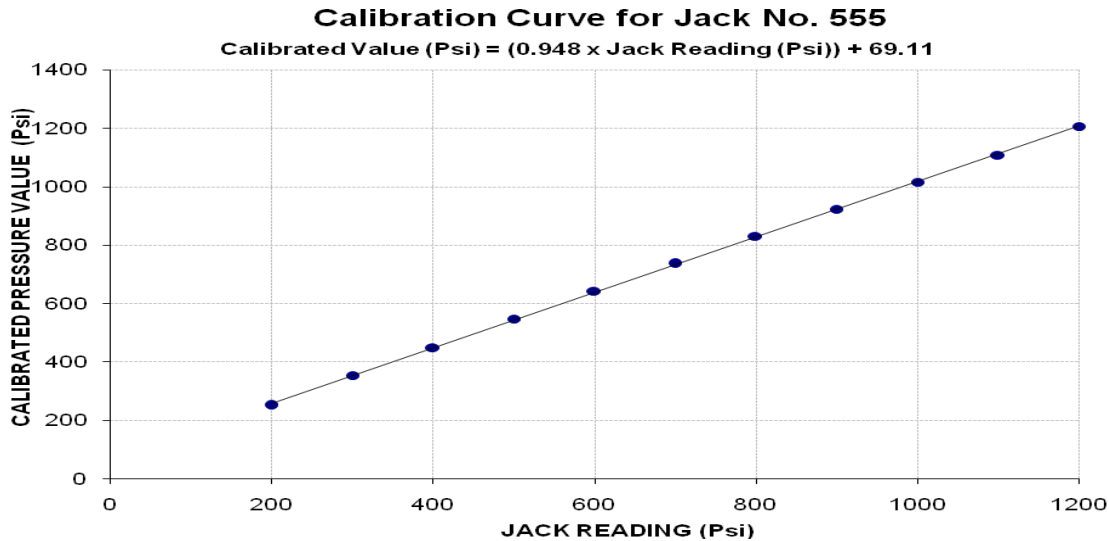
Subject: - **CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE**
(MARK: TFL/05/3216) (Page # 1/1)

Reference to your Letter No. RE/4376/SMH/23/3752, Dated: 15/05/2023 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)

Jack Reading (Psi)	200	300	400	500	600	700	800	900	1000	1100	1200
Calibrated Load (kg)	37600	53000	67400	82000	96400	110400	124400	138400	152200	166200	180800
Calibrated Pressure (Psi)	251	353	449	547	643	736	830	923	1015	1108	1206

The Ram Area for Calibration = 330.60 in² Witness by Abrar Hussain (Asso. Engineer,-8A, NESPAK)



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UET Lahore, Pakistan.

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Ref: CED/TFL/05/3222

Dated: 18-05-2023

Date of Test: 23-05-2023

To,

Resident Engineer
NESPAK

Dualization of Rawalpindi-Khuta Road Including 4-Lane Bridge Over Sihala Railway Pass, Sihala By-Pass & Kahuta By-Pass Package-2) km 16+500 to 28-352

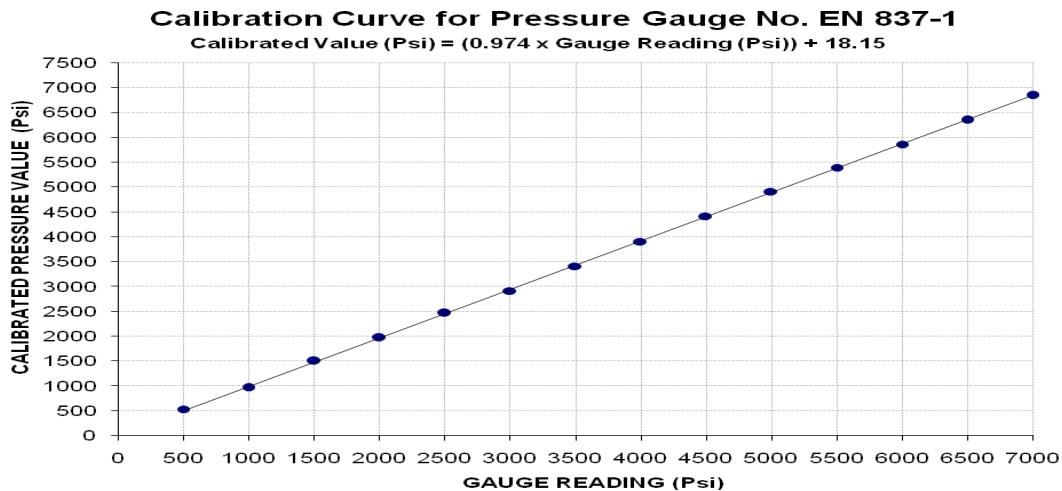
Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/05/3222)** (Page # 1/2)

Reference to your Letter No. NESPAK/103/MW/107, Dated: 17/05/2023 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 15000 (Psi)
Calibrated Range : Zero - 7500 (Psi)

Pressure Gauge Reading (Psi)	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
Calibrated Load (kg)	7400	13400	20900	27400	34300	40500	47500	54400	61500	68300	75100	81500	88400	95300
Calibrated Pressure (Psi)	532	963	1501	1968	2464	2909	3412	3908	4418	4906	5395	5854	6350	6846

The Ram Area for Calibration = 198 cm²



I/C Testing Laboratoires
UET Lahore, Pakistan.

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University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/05/3222

Dated: 18-05-2023

Date of Test: 23-05-2023

To,

Resident Engineer
NESPAK

Dualization of Rawalpindi-Khuta Road Including 4-Lane Bridge Over Sihala Railway Pass, Sihala By-Pass & Kahuta By-Pass Package-2) km 16+500 to 28-352

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/02/2804) (Page # 2/2)

Reference to your Letter No. NESPAK/103/MW/107, Dated: 17/05/2023 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 - 50 (mm)

Standard Reading	Dial Gauge Readings		
	Dial Gauge No. I (13I020264)	Dial Gauge No. II (14J230037)	Dial Gauge No. III (15L28001)
400	393	397	396
800	796	796	795
1200	1199	1197	1196
1600	1603	1597	1597
2000	2006	1997	1996
2400	2409	2397	2397
2800	2811	2797	2796
3200	3207	3195	3197
3600	3604	3595	3597
4000	4004	3995	3995
4400	4402	4395	4395
4800	4800	4795	4796
5000	5000	4995	4996

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Witness by Mehboob Subhani (Material Engineer NESPAK)

Ref: CED/TFL/05/3242

Dated: 22-05-2023

Date of Test: 23-05-2023

To,

Resident Engineer
NESPAK

Construction of High Court Bridge Project over Naula Lai, Rawalpindi.

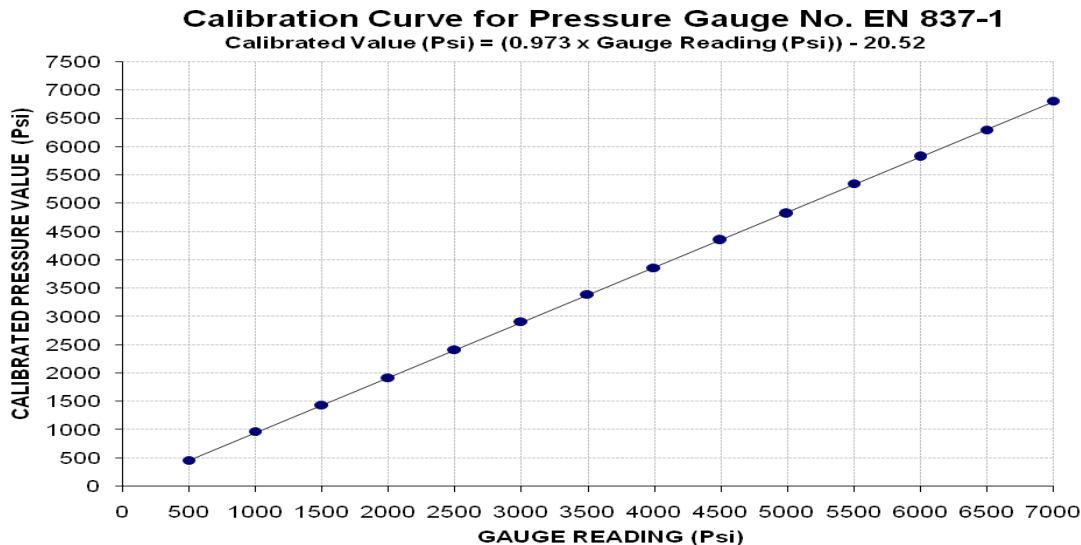
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/05/3216) (Page # 1/1)

Reference to your Letter No. HCB/RE/03/2023, Dated: 17/05/2023 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 15000 (Psi)
Calibrated Range : Zero - 7500 (Psi)

Pressure Gauge Reading (Psi)	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
Calibrated Load (kg)	6400	13500	20000	26800	33600	40500	47200	53800	60600	67100	74500	81100	87700	94800
Calibrated Pressure (Psi)	460	970	1437	1925	2414	2909	3391	3865	4353	4820	5352	5826	6300	6810

The Ram Area for Calibration = 198 cm²



I/C Testing Laboratories
UET Lahore, Pakistan.

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Ref: CED/TFL/05/3251

Dated: 22-05-2023

Date of Test: 23-05-2023

To,

Resident Engineer
NESPAK

Construction of Flyover at 47/Pull Length 4400 Rft in District Sargodha.

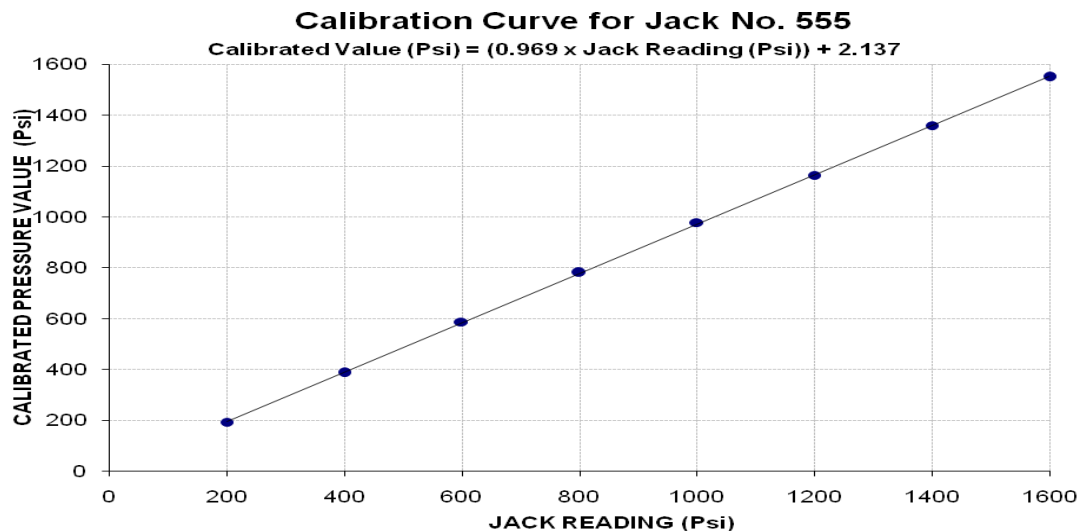
Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE
(MARK: TFL/05/3251) (Page # 1/2)

Reference to your Letter No. RE/4376/SMH/23/3752, Dated: 22/05/2023 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 - 10000 (Psi)
Calibrated Range : Zero - 1600 (Psi)

Jack Reading (Psi)	200	400	600	800	1000	1200	1400	1600
Calibrated Load (kg)	24800	49800	75400	100400	125800	149800	174800	199300
Calibrated Pressure (Psi)	193	387	586	780	978	1164	1359	1549

The Ram Area for Calibration = 283.64 in²



I/C Testing Laboratoires
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Dated: 22-05-2023

Date of Test: 23-05-2023

To,

Resident Engineer
NESPAK

Construction of Flyover at 47/Pull Length 4400 Rft in District Sargodha.

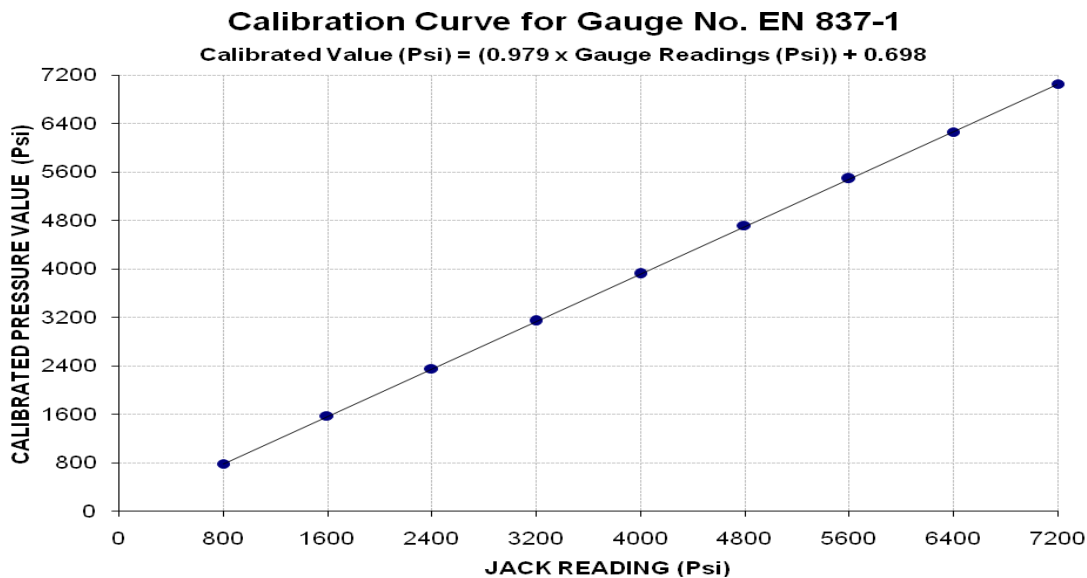
Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/05/3251)** (Page # 2/2)

Reference to your Letter No. RE/4376/SMH/23/3752, Dated: 22/05/2023 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10000 (Psi)
Calibrated Range : Zero - 7200 (Psi)

Gauge Reading (Psi)	800	1600	2400	3200	4000	4800	5400	6400	7200
Calibrated Load (kg)	10850	21850	32700	43700	54500	65700	76400	87100	98200
Calibrated Pressure (Psi)	779	1570	2349	3139	3915	4719	5488	6257	7054

The Ram Area for Calibration = 198 cm²



I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
M/S Vision Engineering (Pvt) Ltd
Lahore

Reference # CED/TFL **3263** (Dr. Ali Ahmed)
Reference of the request letter # VECO/2023/0523/7970

Dated: 23-05-2023

Dated: 23-05-2023

Tension Test Report (Page – 1/1)

Date of Test 23-05-2023
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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	433.0	9700	95.16	10700	104.97	>3.50	xx
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only one sample for Test									

I/C Testing Laboratories
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