



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

To,
DCRE/RE-1
Zeeruk International (Pvt) Ltd
Lahore Sialkot Motorway Project

Reference # CED/TFL **33489** (Dr. Waseem Abbas)
Reference of the request letter # LSM/RE-1/2019/922

Dated: 04-07-2019
Dated: 04-07-2019

Tension Test Report (Page – 1/1)

Date of Test 10-07-2019

Gauge length -----

Description Galvanized Chain Link Wire Tensile Test as per AASHTO M-181

| Sr. No. | Diameter Wire | Breaking Load | Remarks |
|------------------------------------|---------------|---------------|---------|
| | (mm) | (kN) | |
| 1 | 3.10 | 4.40 | |
| 2 | 3.05 | 4.50 | |
| 3 | 3.10 | 4.65 | |
| - | - | - | |
| - | - | - | |
| - | - | - | |
| - | - | - | |
| - | - | - | |
| Only Three Samples for Test | | | |

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

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To,
DCRE/RE-1
Zeeruk International (Pvt) Ltd
Lahore Sialkot Motorway Project

Reference # CED/TFL **33490** (Dr. Waseem Abbas)
Reference of the request letter # LSM/RE-1/2019/924

Dated: 04-07-2019
Dated: 04-07-2019

Tension Test Report (Page – 1/1)

Date of Test 10-07-2019
Gauge length -----
Description Galvanized Tension & Chain Link Wire Tensile Test as per AASHTO M-181

| Sr. No. | Diameter of Single Wire | Breaking Load | Remarks |
|-----------------------------------|-------------------------|---------------|-----------------|
| | (mm) | (kN) | |
| 1 | 3.0 | 6.60 | Tension Wire |
| 2 | 3.0 | 6.90 | |
| 3 | 3.0 | 3.45 | Chain Link Wire |
| 4 | 3.0 | 3.70 | |
| - | - | - | |
| - | - | - | |
| - | - | - | |
| - | - | - | |
| Only Four Samples for Test | | | |

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
 Manager Civil
 Orient
 Hotel Tower Project FTC Johar Town – Lahore
 (Afco Steel)

Reference # CED/TFL **33514** (Dr. Waseem Abbas) Dated: 09-07-2019
 Reference of the request letter # ORIENT/AFCO/Hotel Tower/Steel/005 Dated: 08-07-2019

Tension Test Report (Page -1/1)

Date of Test 10-07-2019
 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 | 0.431 | 10 | 10.20 | 0.12 | 0.127 | 3400 | 5400 | 62464 | 59140 | 99207 | 94000 | 1.40 | 17.5 | |
| 2 | 0.428 | 10 | 10.17 | 0.12 | 0.126 | 3500 | 5400 | 64301 | 61250 | 99207 | 94500 | 1.40 | 17.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 10mm Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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Ref: CED/TFL/07/33515

Dated: 09-07-19

To,
General Civil
Orient
Hotel Tower Project FTC Johar Town - Lahore

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/33515)

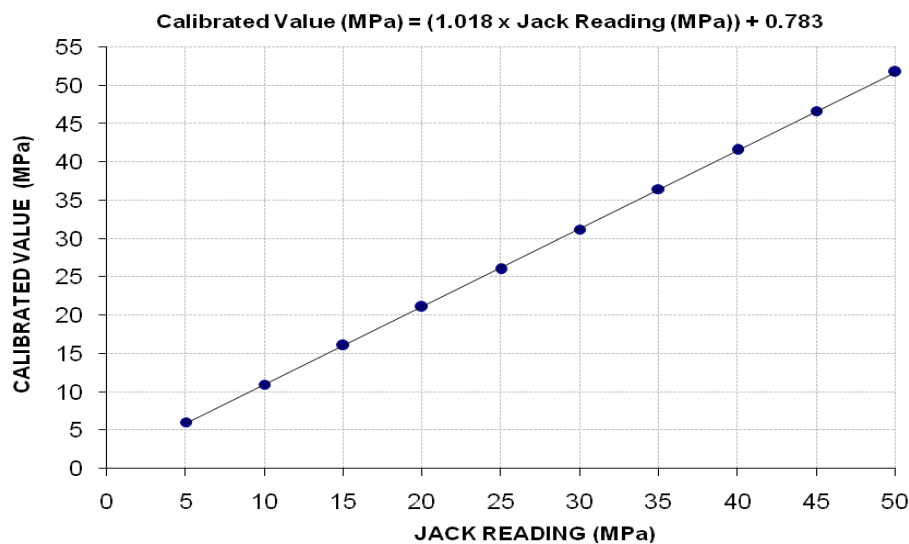
Reference to your Letter No. ORIENT/ICP/Hotel Tower/Jacks/001, Dated: 08/07/2019 on the subject cited above. One Hydraulic Jack (Jack No. COF100N150 & Gauge No. 073004181) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 50 (MPa)

| Hydraulic Jack Reading (MPa) | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
|------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Calibrated Load (kg) | 8300 | 14900 | 21900 | 28700 | 35400 | 42500 | 49700 | 56600 | 63600 | 70500 |
| Calibrated Pressure (MPa) | 6.09 | 10.94 | 16.08 | 21.08 | 26.00 | 31.21 | 36.50 | 41.56 | 46.70 | 51.77 |

The Ram Area of Jack = 133.55 cm²

Calibration Curve For Jack



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Test Floor Laboratory
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University of Engineering and Technology Lahore, 54890
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To,
 General Manager
 H. Sadar Ali Akhtar Ali Pvt Ltd
 Halloki Lahore
 (Water Treatment Plant)(Palkhu Builders & Engineers)

Reference # CED/TFL **33518** (Dr. Waseem Abbas)
 Reference of the request letter # Nil

Dated: 09-07-2019
 Dated: 09-07-2019

Tension Test Report (Page -1/1)

Date of Test 10-07-2019
 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 | 0.366 | 3 | 0.370 | 0.11 | 0.108 | 3300 | 4800 | 66200 | 67590 | 96200 | 98400 | 0.90 | 11.3 | |
| 2 | 0.356 | 3 | 0.365 | 0.11 | 0.105 | 3500 | 4800 | 70200 | 73720 | 96200 | 101100 | 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 | | | | | | | | | | | | | | |
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To,
M/S Defence Housing Authority.
Lahore Cantt
(Const. of Mosque at Sector-S, DHA Ph-VIII)(M/s Innovative)

Reference # CED/TFL **33522** (Dr. Waseem Abbas)
Reference of the request letter # 408/241/E/Lab/632/24

Dated: 09-07-2019
Dated: 08-07-2019

Tension Test Report (Page -1/1)

Date of Test 10-07-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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 | 0.371 | 3 | 0.373 | 0.11 | 0.109 | 3200 | 4700 | 64200 | 64680 | 94200 | 95000 | 1.20 | 15.0 | Kamran Steel |
| 2 | 0.373 | 3 | 0.374 | 0.11 | 0.110 | 3300 | 4800 | 66200 | 66370 | 96200 | 96600 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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To,
 Chief Resident Engineer, Package-1
 NESPAK
 Construction/ Improvement & Rehabilitation of at Grade Works along Lahore Orange Line
 Metro Train Corridor Package-1 (Section-I) from Daroghawala Chowk to Pakistan Mint (Right Side)

Reference # CED/TFL **33523-524** (Dr. Waseem Abbas) Dated: 09-07-2019
 Reference of the request letter # 4042/13/FAM/steel-031-A Dated: 09-07-2019

Tension Test Report (Page -1/1)

Date of Test 10-07-2019
 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 | 0.368 | 3 | 0.371 | 0.11 | 0.108 | 3600 | 5200 | 72200 | 73370 | 104200 | 106000 | 1.00 | 12.5 | Afco Steel |
| 2 | 0.365 | 3 | 0.370 | 0.11 | 0.107 | 3700 | 5200 | 74200 | 76020 | 104200 | 106900 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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To,
M/S Defence Housing Authority.
Lahore Cantt
(Proposed Commercial Plaza, DRGCC Ph-III, DHA Ph-VI)(M/s Construct)

Reference # CED/TFL **33525** (Dr. M Rizwan Riaz)
Reference of the request letter # 408/241/E/Lab/634/2921

Dated: 10-07-2019
Dated: 09-07-2019

Tension Test Report (Page -1/1)

Date of Test 10-07-2019
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 | 0.370 | 3 | 0.372 | 0.11 | 0.109 | 3400 | 4600 | 68200 | 68900 | 92200 | 93300 | 1.40 | 17.5 | Kamran Steel |
| 2 | 0.378 | 3 | 0.376 | 0.11 | 0.111 | 3200 | 4700 | 64200 | 63550 | 94200 | 93400 | 1.30 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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