# 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
Metroplan-Asian Jv
Resident Construction Supervision for Establishment of 200 Bedded Mother & Child Hospital and Nursing College, District Mianwali

Reference # CED/TFL **35213** (Dr. Qasim Khan) Dated: 13-08-2020
Reference of the request letter # Metroplan Asian Jv-Nexus-MMCH-RE-369Dated: 11-08-2020

## Tension Test Report



Date of Test 17-08-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 4.540 | 10 | 1.304 | 1.27 | 1.334 | 31000 | 48600 | 53800 | 51200 | 84400 | 80300 | 2.30 | 28.8 | SJ Steel |
| 2 | 4.523 | 10 | 1.301 | 1.27 | 1.330 | 31000 | 48800 | 53800 | 51390 | 84700 | 80900 | 1.80 | 22.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

**Note: only two samples for tensile and one sample for bend test**

Bend Test

#10 Bar Bend Test Through 180º is Satisfactory

**I/C Testing Laboratoires**
**UET Lahore, Pakistan.**

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3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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**Pakistan. Ph: 92-42-99029202**

To,
M/S Tariq Zia & Co.
Lahore
Construction of PET-CT Suit at Shaukat Khanum Hospital Lahore

Reference # CED/TFL **35215** (Dr. Qasim Khan) Dated: 13-08-2019
Reference of the request letter # Nil Dated: 10-08-2019

## Tension Test Report (Page -1/1)

Date of Test 17-08-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (inch) | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.433 | 3/8 | 0.403 | 0.11 | 0.127 | 4080 | 5780 | 81800 | 70620 | 115900 | 100100 | 1.20 | 15.0 | |
| 2 | 0.434 | 3/8 | 0.403 | 0.11 | 0.127 | 4150 | 5760 | 83200 | 71780 | 115500 | 99700 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
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**I/C Testing Laboratoires**
**UET Lahore, Pakistan.**

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

To,
M/S Moaz Steel
Lahore
(CGGC-DESCON Jv Muhammad Dam Project)

Reference # CED/TFL **35216** (Dr. Qasim Khan) Dated: 12-08-2020
Reference of the request letter # MZ/CGGC-DES/MD/UET/023 Dated: 12-082020

## Tension Test Report (Page – 1/1)

Date of Test 17-08-2020
Gauge length 2 inches
Description Plate Washer 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) | ($mm^2$) | (kN) | (kN) | (MPa) | (MPa) | (in) | | |
| **1** | **Plate Washer** | **40.50x12.00** | **486.00** | **195.50** | **250.20** | **402.26** | **514.81** | **0.70** | **35.00** | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| **Only One Sample for Tensile Test** | | | | | | | | | | |
| | | | | | | | | | | |
| **Bend Test** | | | | | | | | | | |
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**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,
Sr. Project Manager
Izhar Construction (Pvt) Ltd
Construction of Structural Works of Dolmen Shopping Mall, Lahore

Reference # CED/TFL **35217** (Dr. Qasim Khan) Dated: 13-08-2019
Reference of the request letter # ICPL/CONST-DML/20/17 Dated: 13-08-2019

## Tension Test Report (Page -1/1)

Date of Test 17-08-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (mm) | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.405 | 10 | 9.88 | 0.12 | 0.119 | 4510 | 5300 | 82856 | 83590 | 97370 | 98300 | 0.80 | 10.0 | Amerli Steel |
| 2 | 0.407 | 10 | 9.92 | 0.12 | 0.120 | 4250 | 5220 | 78080 | 78220 | 95900 | 96100 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 10mm Dia Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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**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,
Sr. Project Manager
Ittefaq Construction Associates
Construction of Ware House Building, Humble Tex Pvt. Ltd., Lahore

Reference # CED/TFL **35218** (Dr. Qasim Khan) Dated: 13-08-2019
Reference of the request letter # ICA/H.T/12 Dated: 13-08-2019

## Tension Test Report (Page -1/1)

Date of Test 17-08-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.375 | 3 | 0.375 | 0.11 | 0.110 | 3690 | 4960 | 74000 | 73820 | 99400 | 99300 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**I/C Testing Laboratoires**
**UET Lahore, Pakistan.**

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To,
Asstt: Executive Engineer-I
Central Civil Division No. I
Pak P.W.D., Lahore
(Construction of Double Storey Ladies Hostel with Provision of Third Storey alongwith Mess, Recreation Hall and Allied Facilities at Allama Iqbal International Airport Lahore (AIIAP)

Reference # CED/TFL **35219** (Dr. Qasim Khan) Dated: 13-08-2019
Reference of the request letter # AEE-I/LCCD-I/53-ASF/08Dated: 29-06-2019

## Tension Test Report (Page -1/1)

Date of Test 17-08-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (inch) | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.377 | 3/8 | 0.376 | 0.11 | 0.111 | 4200 | 5320 | 84200 | 83490 | 106600 | 105800 | 0.90 | 11.3 | |
| 2 | 0.382 | 3/8 | 0.378 | 0.11 | 0.112 | 4230 | 5370 | 84800 | 83110 | 107600 | 105500 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

**Note: only two samples for tensile and one sample for bend test**

Bend Test

3/8" Dia Bar Bend Test Through 180º is Satisfactory

**I/C Testing Laboratoires**
**UET Lahore, Pakistan.**

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Ref: CED/TFL/08/35227 Dated: 17-08-2020

Dated of Test: 17-08-2020

**To**
**M/S Hammad Pipe Factory**
**Lahore**

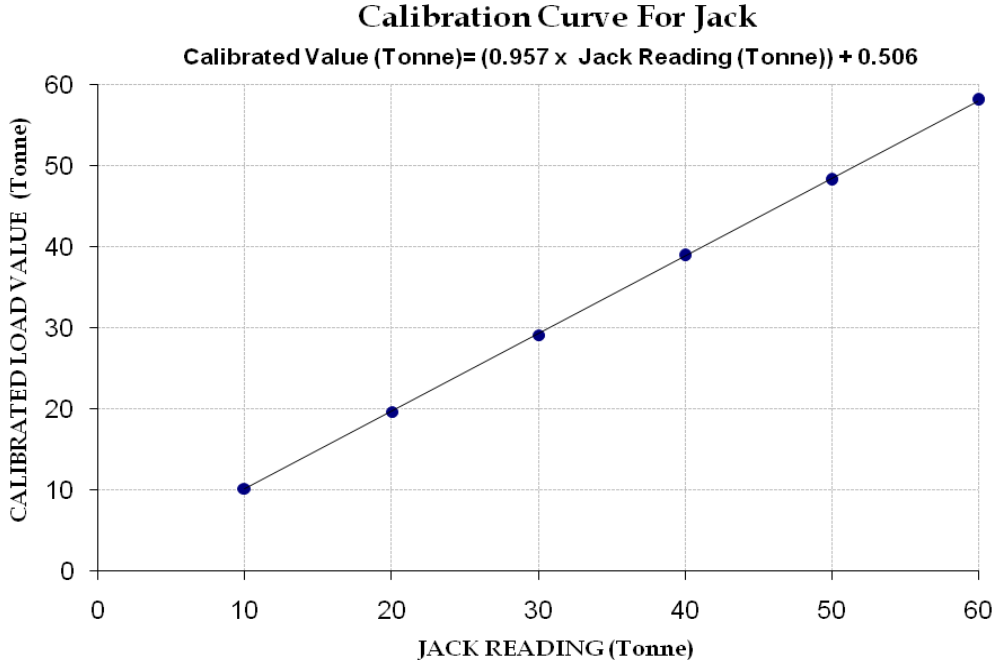
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/08/35227)**

Reference to your Letter No. Nil, Dated: 13/08/2020 on the subject cited above. One Hydraulic Jack as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 100 (Tonne)**
**Calibrated Range : Zero - 60 (Tonne)**

| Hydraulic Jack Reading (Tonne) | | 10 | 20 | 30 | 40 | 50 | 60 |
|---|---|---|---|---|---|---|---|
| Calibrated Load | (kg) | 10200 | 19600 | 29100 | 38900 | 48200 | 58100 |
| | Tonne | 10.20 | 19.60 | 29.10 | 38.90 | 48.20 | 58.10 |

1 Tonne = 1000 Kg




**I/C Testing Laboratoires**
**UET Lahore, Pakistan.**

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