

Xue FeiYang, Dy Manager

Test Performed By: Dr. /Engr. Asad Ali Gillani

PowerChina SEPCO1 Electric Power Constuction.Co Ltd. (500KV Nokhar Grid Station)

Client Reference: WB-10A-GS-SEPCP01-347

SOM Lab Ref: 611 (Page-1/1)

Dated: 21-01-2025

Dated: 21-01-2025

Test: Tension Test

Test Specification: ASTM-A-615

Guage Length: 200 mm

Sample Type: MS Def Bar (Aziz Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | kg/m | mm | mm | mm ² | mm ² | kN | kN | MPa | MPa | MPa | MPa | mm | mm | % | |
| 1 | 2.183 | 19 | 18.81 | 284 | 278 | 125.20 | 199.70 | 441 | 451 | 703 | 719 | 35.0 | 200 | 17.5 | |
| 2 | 2.241 | 19 | 19.06 | 284 | 285 | 132.70 | 205.20 | 467 | 465 | 723 | 719 | 32.5 | 200 | 16.3 | |
| 3 | 0.868 | 12 | 11.86 | 113 | 111 | 47.50 | 72.70 | 420 | 430 | 643 | 658 | 27.5 | 200 | 13.8 | |
| 4 | 0.873 | 12 | 11.90 | 113 | 111 | 47.20 | 72.70 | 418 | 425 | 643 | 654 | 30.0 | 200 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Witnessed By: Nasir Alvi (J.E,NESPAK), Ali Naqvi (SEPCO1)

BEND TEST:

| | | |
|------|--|---|
| 19mm | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Eight Samples Received and Tested |
| 19mm | Sample bend through 180 degrees Satisfactorily without any crack | |
| 12mm | Sample bend through 180 degrees Satisfactorily without any crack | |
| 12mm | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Waqas Ahmed Ghumman,PM
 High-Q Constructions Lhr.(Const Of High-Q Mall at 3-A, Gulberg II Lahore)

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: QC/HQ/CIVIL/257

Dated: 21-01-2025

SOM Lab Ref: CED/SOM/616 (Page-1/1)

Dated: 21-01-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

Gauge Length: 200 mm

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | kg/m | mm | mm | mm ² | mm ² | kN | kN | MPa | MPa | MPa | MPa | mm | mm | % | |
| 1 | 2.228 | 20 | 19.02 | 314 | 284 | 134.00 | 178.50 | 427 | 472 | 568 | 629 | 32.5 | 200 | 16.3 | |
| 2 | 2.223 | 20 | 18.99 | 314 | 283 | 139.00 | 183.50 | 442 | 491 | 584 | 648 | 32.5 | 200 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|------|--|---|
| 20mm | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Three Samples Received and Tested |
| | | |
| | | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Imtiaz Khalil

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Engineer QA/QC ZES Zain Engineering Solutions.(Ramada Project)

Client Reference: ZES-QA/QC-03/25

Dated: 21-01-2025

SOM Lab Ref: CED/SOM/613(Page-1/1)

Dated: 21-01-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-F1554

Sample Type: MS Plain Bar (New Shalimar)

Gauge Length: 200 mm

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | kg/m | mm | mm | mm ² | mm ² | kN | kN | MPa | MPa | MPa | MPa | mm | mm | % | |
| 1 | 1.829 | 17 | 17.22 | 227 | 233 | 88.20 | 128.50 | 389 | 379 | 566 | 552 | 50.0 | 200 | 25.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

BEND TEST:

| | | |
|----|------------------------|--|
| -- | No Bend test performed | Note:- Only One Sample Received and Tested |
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| | | |
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Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Wasif Manzoor
Salman Developers Lahore.(Mian Usman Sb Villa)

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: Nil

SOM Lab

Ref: 609 (Page-1/1)

Dated: 21-01-2025

Dated: 21-01-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.705 | 8 | 1.006 | 0.79 | 0.795 | 27.95 | 35.02 | 78030 | 77540 | 97750 | 97140 | 1.20 | 8.0 | 15.0 | |
| 2 | 2.707 | 8 | 1.007 | 0.79 | 0.796 | 27.65 | 34.81 | 77180 | 76600 | 97190 | 96450 | 1.40 | 8.0 | 17.5 | |
| 3 | 1.513 | 6 | 0.753 | 0.44 | 0.445 | 14.42 | 18.91 | 72300 | 71490 | 94780 | 93720 | 1.50 | 8.0 | 18.8 | |
| 4 | 1.418 | 6 | 0.729 | 0.44 | 0.417 | 13.12 | 17.76 | 65760 | 69390 | 89010 | 93920 | 1.50 | 8.0 | 18.8 | |
| 5 | 0.653 | 4 | 0.494 | 0.20 | 0.192 | 5.93 | 9.19 | 65420 | 68150 | 101390 | 105620 | 1.00 | 8.0 | 12.5 | |
| 6 | 0.652 | 4 | 0.494 | 0.20 | 0.192 | 5.37 | 8.23 | 59240 | 61710 | 90720 | 94500 | 1.10 | 8.0 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Nine Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Wasif Manzoor
Salman Developers Lahore.(Mian Numan Sb Villa)

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: Nil

SOM Lab

Ref: 610 (Page-1/1)

Dated: 21-01-2025

Dated: 21-01-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.663 | 8 | 0.998 | 0.79 | 0.783 | 25.56 | 36.16 | 71350 | 71980 | 100940 | 101840 | 1.40 | 8.0 | 17.5 | |
| 2 | 2.660 | 8 | 0.998 | 0.79 | 0.782 | 25.23 | 36.00 | 70440 | 71160 | 100510 | 101540 | 1.50 | 8.0 | 18.8 | |
| 3 | 1.552 | 6 | 0.762 | 0.44 | 0.456 | 15.11 | 20.15 | 75720 | 73070 | 101020 | 97470 | 1.30 | 8.0 | 16.3 | |
| 4 | 1.553 | 6 | 0.762 | 0.44 | 0.456 | 15.09 | 20.31 | 75620 | 72970 | 101780 | 98210 | 1.20 | 8.0 | 15.0 | |
| 5 | 0.672 | 4 | 0.501 | 0.20 | 0.197 | 5.98 | 8.28 | 65990 | 66990 | 91280 | 92670 | 1.00 | 8.0 | 12.5 | |
| 6 | 0.666 | 4 | 0.500 | 0.20 | 0.196 | 7.03 | 8.48 | 77560 | 79150 | 93530 | 95430 | 1.00 | 8.0 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Nine Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Kashif Mahmood, AE

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

IT University of Punjab.(Const of Admin Block at Main Campus Barki Road Lahore)

Client Reference: ITU/OEW/25/018

SOM Lab

Ref:

612 (Page-1/1)

Dated: 20-01-2025

Dated:

21-01-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.572 | 6 | 0.767 | 0.44 | 0.462 | 17.18 | 22.17 | 86100 | 82000 | 111130 | 105840 | 1.00 | 8.0 | 12.5 | |
| 2 | 1.587 | 6 | 0.770 | 0.44 | 0.466 | 17.38 | 22.27 | 87120 | 82260 | 111640 | 105410 | 1.10 | 8.0 | 13.8 | |
| 3 | 0.662 | 4 | 0.498 | 0.20 | 0.195 | 6.42 | 8.82 | 70820 | 72640 | 97230 | 99730 | 1.20 | 8.0 | 15.0 | |
| 4 | 0.660 | 4 | 0.497 | 0.20 | 0.194 | 6.52 | 8.87 | 71940 | 74170 | 97800 | 100820 | 1.10 | 8.0 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Six Samples Received and Tested |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Jawad Qayyum Khan,RE

Test Performed By: Dr. /Engr. Asad Ali Gillani

NESPAK Sargodha.(Restoration/Imp Of From Chashma to CPEC Interchange Kundal Distt Mianwali)

Client Reference: 4376/JQK/24/7057

SOM Lab

Ref: 614 (Page-1/1)

Dated: 13-01-2025

Dated: 21-01-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Kamran Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.658 | 8 | 0.997 | 0.79 | 0.781 | 17.48 | 26.61 | 48810 | 49370 | 74280 | 75130 | 1.70 | 8.0 | 21.3 | |
| 2 | 2.656 | 8 | 0.997 | 0.79 | 0.781 | 17.38 | 26.73 | 48520 | 49080 | 74620 | 75480 | 1.70 | 8.0 | 21.3 | |
| 3 | 1.496 | 6 | 0.748 | 0.44 | 0.440 | 11.85 | 17.53 | 59380 | 59380 | 87880 | 87880 | 1.50 | 8.0 | 18.8 | |
| 4 | 1.494 | 6 | 0.748 | 0.44 | 0.439 | 11.82 | 17.55 | 59270 | 59410 | 87990 | 88190 | 1.60 | 8.0 | 20.0 | |
| 5 | 1.048 | 5 | 0.626 | 0.31 | 0.308 | 7.77 | 11.72 | 55260 | 55620 | 83400 | 83940 | 1.50 | 8.0 | 18.8 | |
| 6 | 1.038 | 5 | 0.623 | 0.31 | 0.305 | 7.51 | 11.54 | 53450 | 54330 | 82100 | 83440 | 1.60 | 8.0 | 20.0 | |
| 7 | 0.667 | 4 | 0.500 | 0.20 | 0.196 | 4.74 | 6.95 | 52270 | 53340 | 76660 | 78230 | 1.70 | 8.0 | 21.3 | |
| 8 | 0.661 | 4 | 0.497 | 0.20 | 0.194 | 4.81 | 7.03 | 53060 | 54700 | 77560 | 79960 | 1.60 | 8.0 | 20.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Twelve Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sub Divisional officer,

Test Performed By: Dr. /Engr. Asad Ali Gillani

Ravi Syphon Sub Div Batapur Lhr.(Const Of Gated Head Regulators BRBD Link Canal,Pkg-C)

Client Reference: 317/1-G

SOM Lab

Ref: 615 (Page-1/1)

Dated: 14-01-2025

Dated: 21-01-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Ittehad Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.708 | 8 | 1.007 | 0.79 | 0.796 | 27.47 | 35.17 | 76700 | 76120 | 98180 | 97440 | 1.40 | 8.0 | 17.5 | |
| 2 | 2.665 | 8 | 0.998 | 0.79 | 0.783 | 26.15 | 34.86 | 73000 | 73650 | 97330 | 98200 | 1.30 | 8.0 | 16.3 | |
| 3 | 1.510 | 6 | 0.752 | 0.44 | 0.444 | 16.74 | 20.74 | 83900 | 83140 | 103980 | 103040 | 1.20 | 8.0 | 15.0 | |
| 4 | 1.509 | 6 | 0.751 | 0.44 | 0.443 | 15.11 | 19.57 | 75720 | 75210 | 98100 | 97440 | 1.10 | 8.0 | 13.8 | |
| 5 | 0.672 | 4 | 0.501 | 0.20 | 0.197 | 8.18 | 9.94 | 90150 | 91530 | 109600 | 111270 | 1.10 | 8.0 | 13.8 | |
| 6 | 0.675 | 4 | 0.502 | 0.20 | 0.198 | 7.59 | 9.43 | 83750 | 84590 | 103980 | 105030 | 1.00 | 8.0 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Nine Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk