



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/12/32298

Dated: 26-12-18

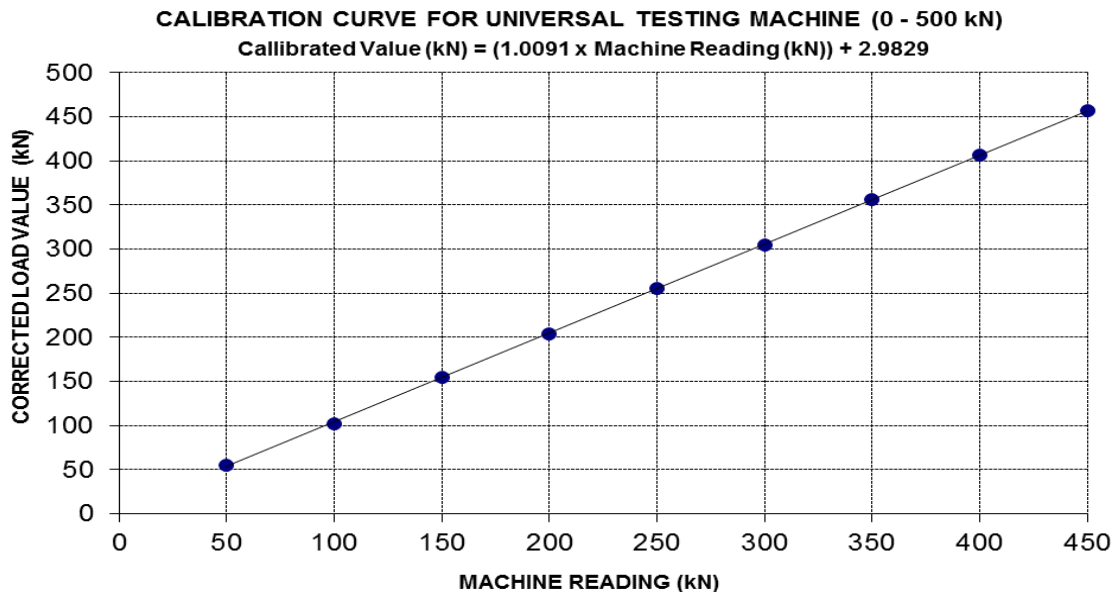
To
M/S Madina Steel Casting Mills
Gujranwala

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 1000 kN (Scale 0-500 kN) (MARK: CED/TFL/12/22298) (Page # 1/4)**

Reference to your letter No. Nil, dated: 26/12/2018 on the subject cited above. One Universal Testing Machine has been calibrated by using standard calibration device. The results are tabulated as under:

Total Range : Zero - 500 (kN)
Calibrated Rang : Zero - 450 (kN)

Machine Reading (kN)	50	100	150	200	250	300	350	400	450
Corrected Load Value (kN)	55	102	155	204	255	305	356	407	458



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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Pakistan. Ph: 92-42-99029202

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Dated: 26-12-18

To
M/S Madina Steel Casting Mills
Gujranwala

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 1000 kN (Scale 0-1000 kN) (MARK: CED/TFL/12/22298) (Page # 2/4)**

Reference to your letter No. Nil, dated: 26/12/2018 on the subject cited above. One Universal Testing Machine has been calibrated by using standard calibration device. The results are tabulated as under:

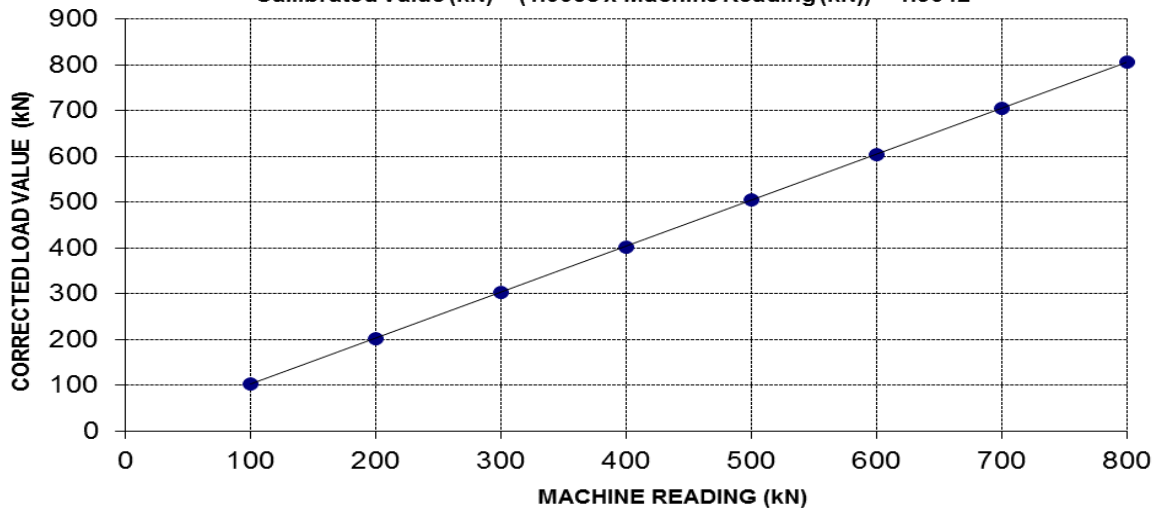
Total Range : Zero - 1000 (kN)

Calibrated Rang : Zero - 800 (kN)

Machine Reading (kN)	100	200	300	400	500	600	700	800
Corrected Load Value (kN)	104	202	303	401	504	605	706	807

CALIBRATION CURVE FOR UNIVERSAL TESTING MACHINE (0 - 1000 kN)

Calibrated Value (kN) = (1.0058 x Machine Reading (kN)) + 1.3642



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Ref: CED/TFL/12/32298

Dated: 26-12-18

To
M/S Madina Steel Casting Mills
Gujranwala

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 2000 kN (Scale 0-500 kN) (MARK: CED/TFL/12/22298) (Page # 3/4)**

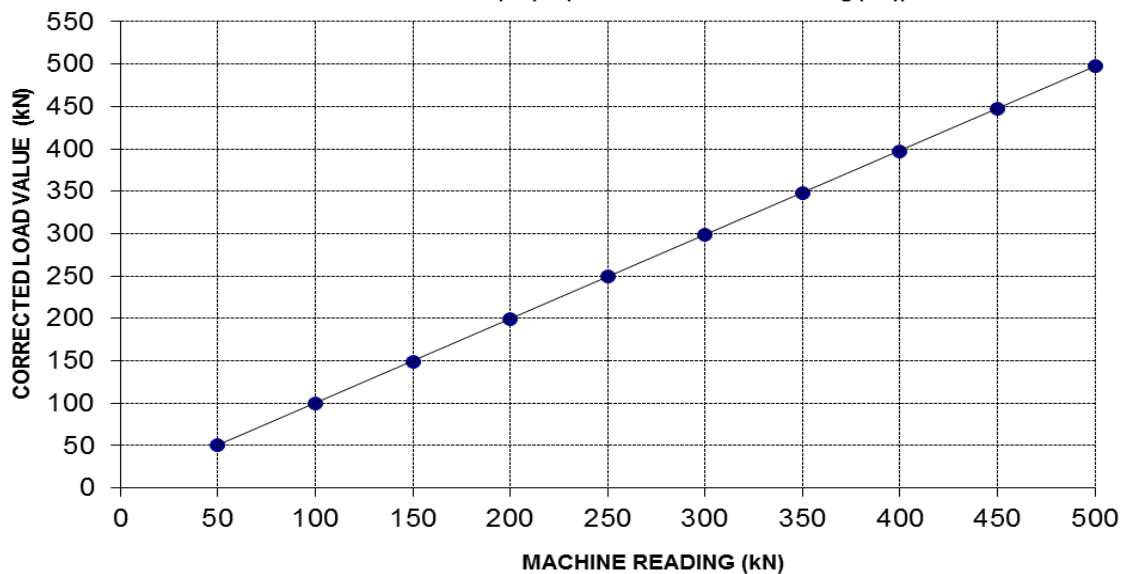
Reference to your letter No. Nil, dated: 26/12/2018 on the subject cited above. One Universal Testing Machine has been calibrated by using standard calibration device. The results are tabulated as under:

Total Range : Zero - 500 (kN)
Calibrated Rang : Zero - 500 (kN)

Machine Reading (kN)	50	100	150	200	250	300	350	400	450	500
Corrected Load Value (kN)	50	100	149	199	250	298	348	397	448	497

CALIBRATION CURVE FOR UNIVERSAL TESTING MACHINE (0 - 500 kN)

Calibrated Value (kN) = (0.9931 x Machine Reading (kN)) + 0.599



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UET Lahore, Pakistan.

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Ref: CED/TFL/12/32298

Dated: 26-12-18

To
M/S Madina Steel Casting Mills
Gujranwala

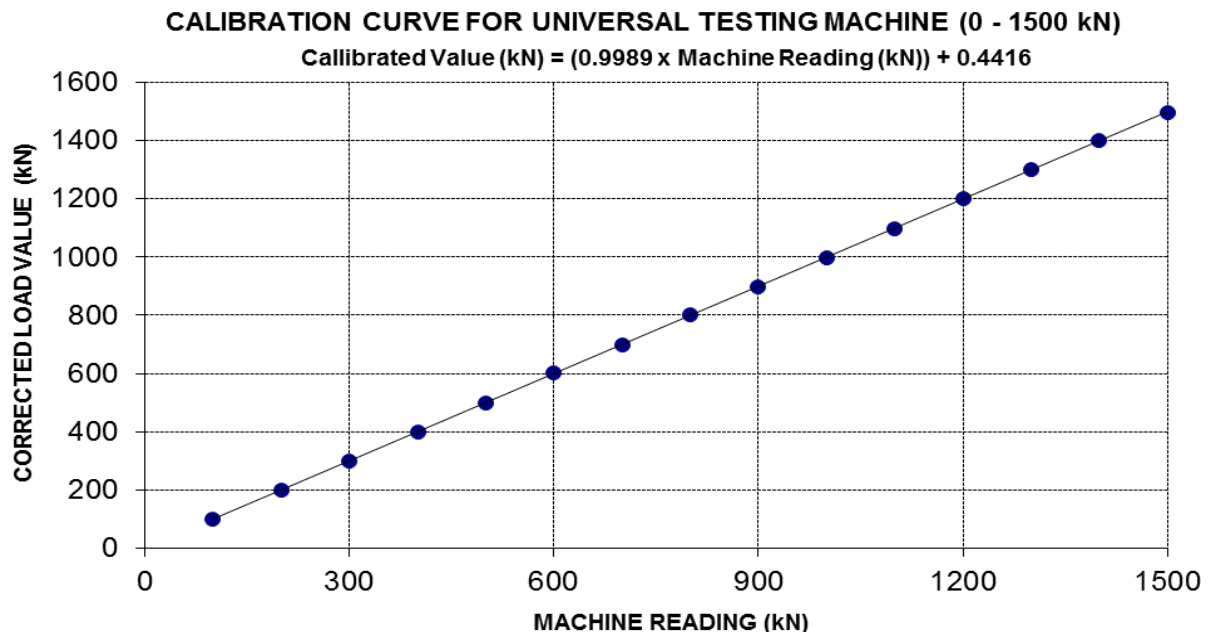
Subject:- CALIBRATION OF UNIVERSAL TESTING MACHINE OF 2000 kN (Scale 0-2000 kN) (MARK: CED/TFL/12/22298) (Page # 4/4)

Reference to your letter No. Nil, dated: 26/12/2018 on the subject cited above. One Universal Testing Machine has been calibrated by using standard calibration device. The results are tabulated as under:

Total Range : Zero - 2000 (kN)

Calibrated Rang : Zero - 1500 (kN)

Machine Reading (kN)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Corrected Load Value (kN)	100	200	300	399	499	601	700	803	899	999	1097	1199	1300	1400	1496



I/C Testing Laboratoires
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
 Resident Engineer (RRWP-II)
 PEAS Consulting (Pvt) Ltd
 Rawat- Rawalpindi Widening Project (RRWP) – Phase – II
 Conversion of 02-Lane Lai and Sawan Bridge to 04-Lane Bridges

Reference # CED/TFL **32306** (Dr. M Rizwan Riaz)
 Reference of the request letter # PEAS/NHA/LSB/2018/126

Dated: 27-12-2018
 Dated: 17-12-2018

Tension Test Report (Page – 1/3)

Date of Test 02-01-2019
 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)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	775.0	782.0	17500	171.68	19800	194.24	199	>3.50	xx
2	12.70 (1/2")	775.0	782.0	18100	177.56	19900	195.22	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only two samples for Test										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

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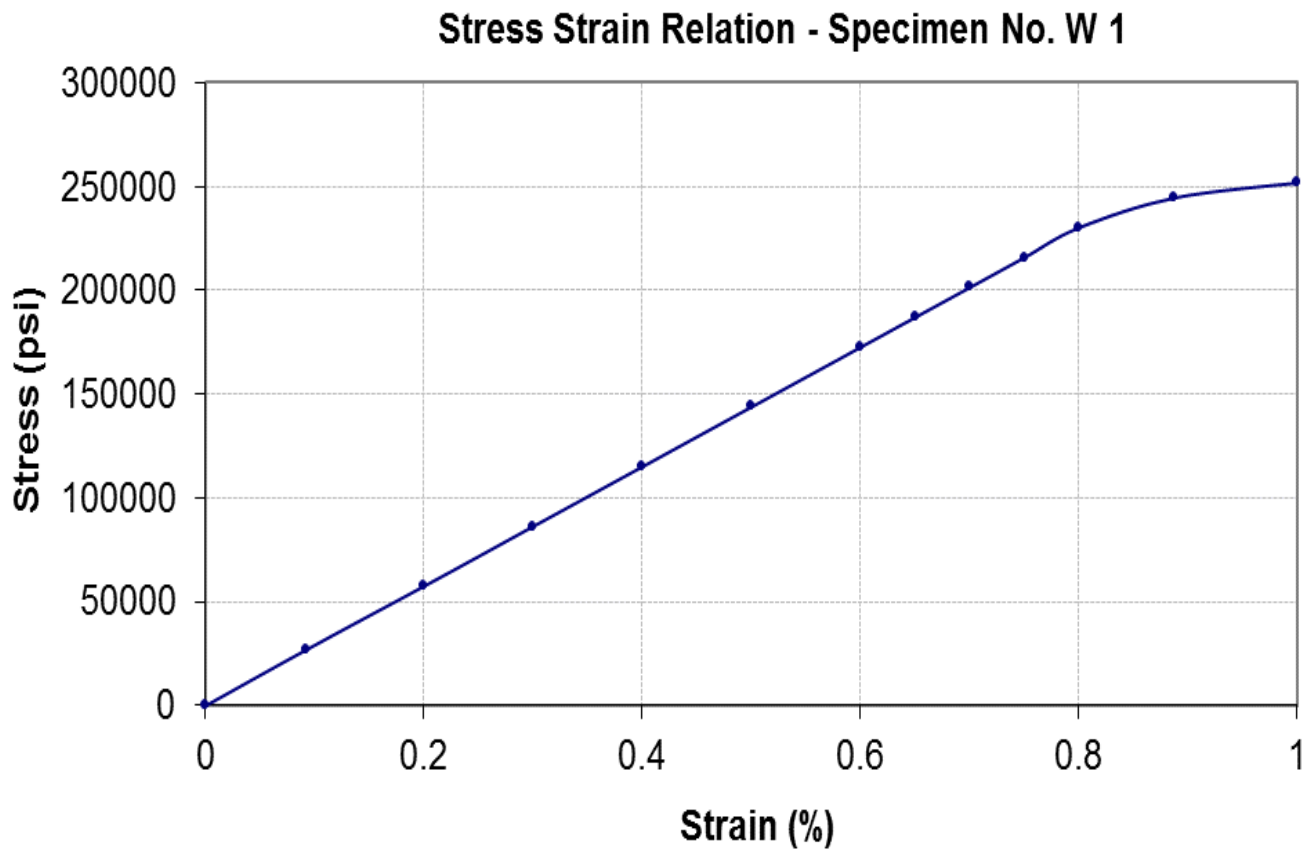
To,
Resident Engineer (RRWP-II)
PEAS Consulting (Pvt) Ltd
Rawat- Rawalpindi Widening Project (RRWP) – Phase – II
Conversion of 02-Lane Lai and Sawan Bridge to 04-Lane Bridges

Reference # CED/TFL **32306** (Dr. M Rizwan Riaz)
Reference of the request letter # PEAS/NHA/LSB/2018/126

Dated: 27-12-2018

Dated: 17-12-2018

Graph (Page – 2/3)



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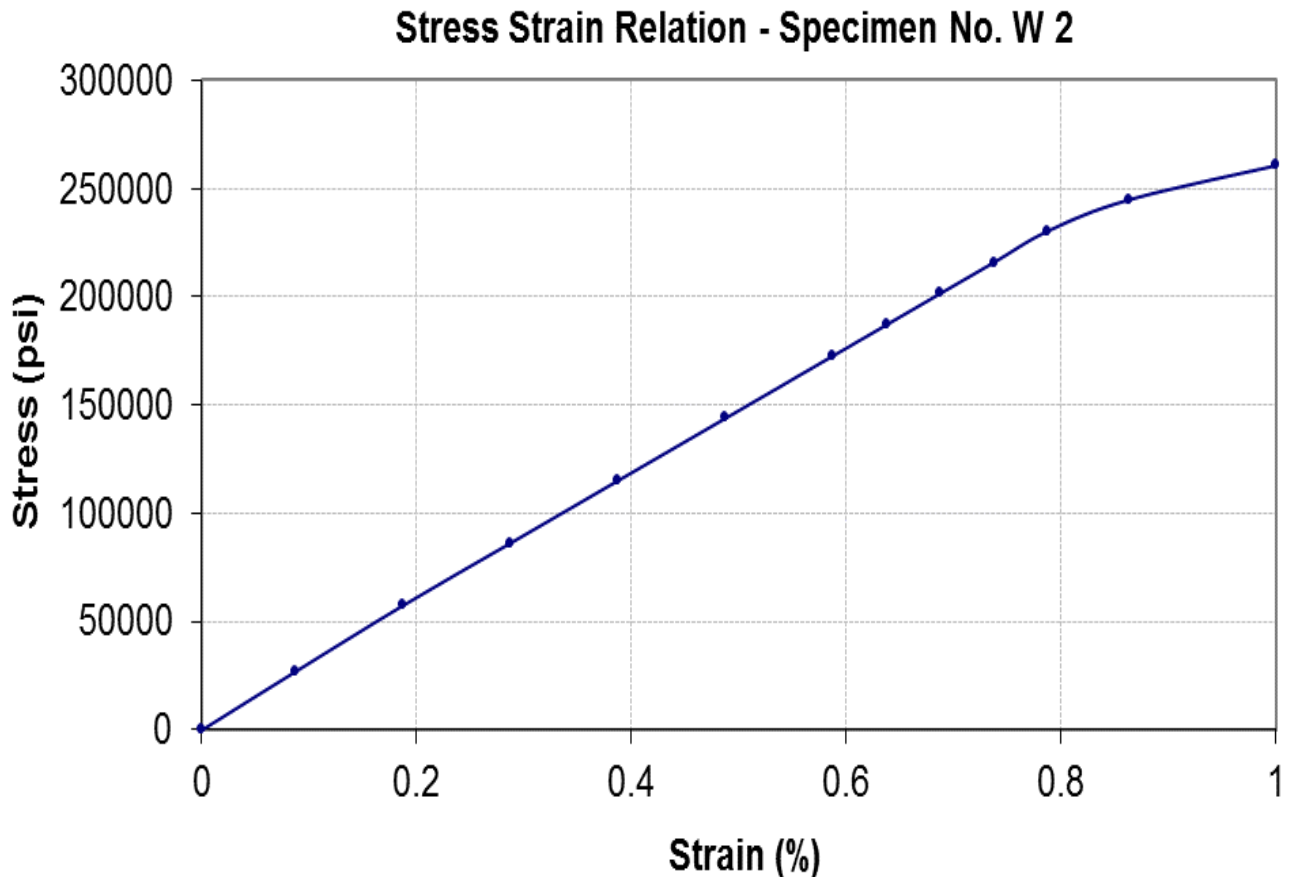
To,
Resident Engineer (RRWP-II)
PEAS Consulting (Pvt) Ltd
Rawat- Rawalpindi Widening Project (RRWP) – Phase – II
Conversion of 02-Lane Lai and Sawan Bridge to 04-Lane Bridges

Reference # CED/TFL **32306** (Dr. M Rizwan Riaz)
Reference of the request letter # PEAS/NHA/LSB/2018/126

Dated: 27-12-2018

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Graph (Page – 3/3)



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

Reference # CED/TFL **32315** (Dr. Qasim Khan)
 Reference of the request letter # LSMP/RE-1/2018/585

Dated: 28-12-2018
 Dated: 27-12-2018

Tension Test Report (Page – 1/2)

Date of Test 02-01-2019
 Gauge length 2 inches
 Description Galvanized Corrugated Steel Beam & Galvanized Steel Post Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Steel Beam	2.75x0.275	0.76	4400	6300	5818.18	8330.58	0.40	20.00	
2	Steel Beam	2.75x0.275	0.76	4500	6400	5950.41	8462.81	0.45	22.50	
3	Steel Post	2.13x0.710	1.51	5100	7400	3372.35	4893.21	0.60	30.00	
4	Steel Post	2.13x0.710	1.51	5200	7700	3438.47	5091.58	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Four Samples for Tensile Test										
Bend Test										

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,
Laboratory Manager
CGGC Suki Kinari Project Management in Pakistan
874 MW Suki Kinari Hydro power Project (Liuzhou Ovm Machinery Co. Ltd)

Reference # CED/TFL **32321** (Dr. M Rizwan Riaz)
Reference of the request letter # Nil

Dated: 28-12-2018
Dated: 26-12-2018

Tension Test Report (Page – 1/2)

Date of Test 02-01-2019
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)		Young's Modulus of Elasticity	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	E, GPa		
1	15.24 (0.6")	1102.0	1126.0	24000	235.44	27700	271.74	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only one sample for Test										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratoires
UET Lahore, Pakistan.

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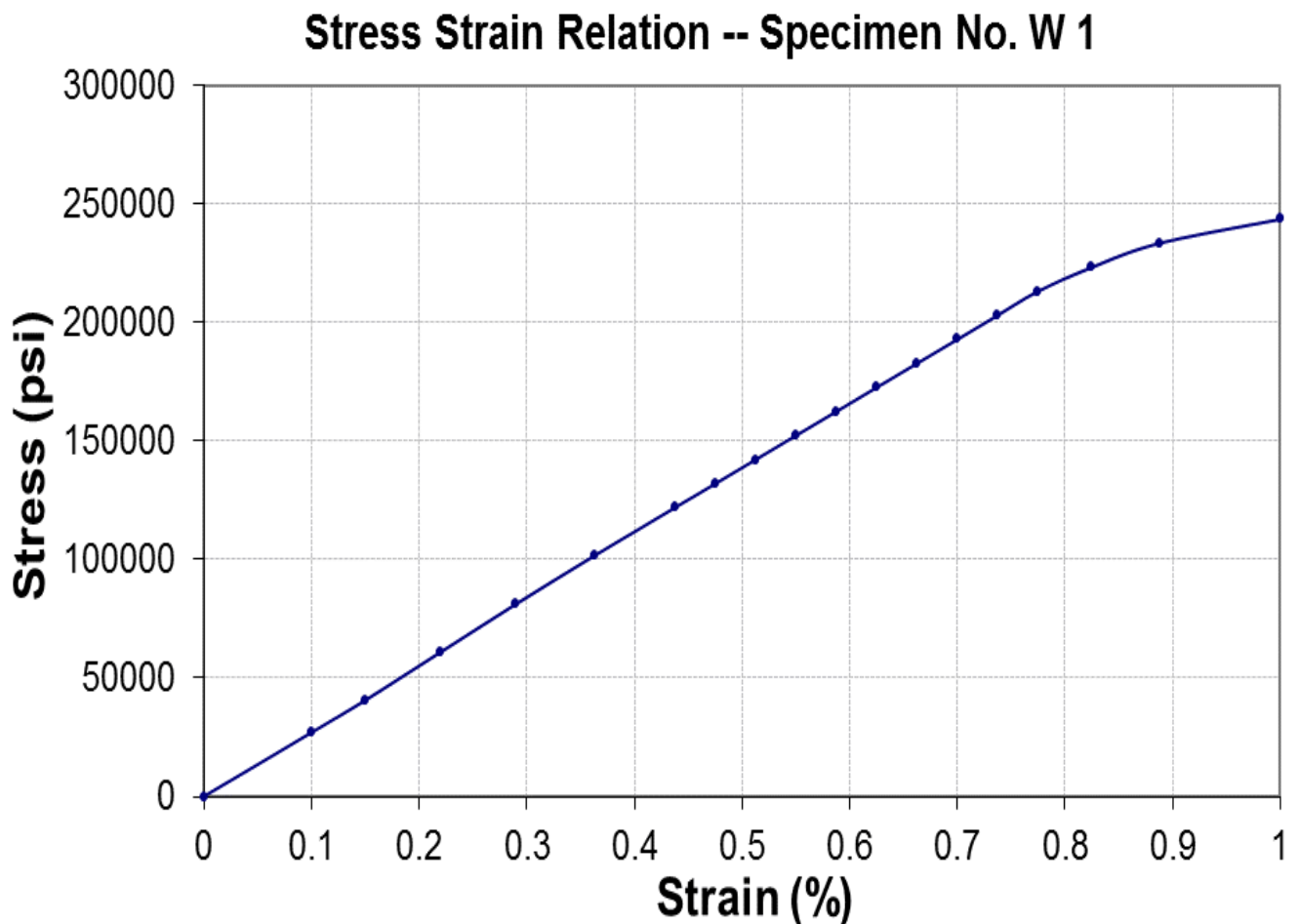
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Laboratory Manager
CGGC Suki Kinari Project Management in Pakistan
874 MW Suki Kinari Hydro power Project (Liuzhou Ovm Machinery Co. Ltd)

Reference # CED/TFL **32321** (Dr. M Rizwan Riaz)
Reference of the request letter # Nil

Dated: 28-12-2018
Dated: 26-12-2018

Graph (Page – 2/2)



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
 RENARDET S.A ((M-4), Package-III A)
 Construction Supervision of Four Lane Motorway from Faisalabad to Khanewal Project (M-4)
 184 km, Package-3A Shorkot – Dinpur Section (31km)(D & L International)(M/s CGGC)

Reference # CED/TFL **32322** (Dr. Qasim Khan)
 Reference of the request letter # RSA/M-4/3A/2018/265

Dated: 28-12-2018
 Dated: 27-12-2018

Tension Test Report (Page – 1/2)

Date of Test 02-01-2019
 Gauge length 2 inches
 Description Vertical Post Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Vertical Post	2.40x0.61	1.46	5400	7900	3688.52	5396.17	0.70	35.00	
2	Vertical Post	2.40x0.61	1.46	5700	8100	3893.44	5532.79	0.70	35.00	
3	Vertical Post	2.40x0.60	1.44	5700	7900	3958.33	5486.11	0.80	40.00	
4	Vertical Post	2.41x0.61	1.47	6100	8300	4149.38	5645.87	0.70	35.00	
5	Vertical Post	2.40x0.61	1.46	5400	8000	3688.52	5464.48	0.70	35.00	
6	Vertical Post	2.40x0.61	1.46	5300	8000	3620.22	5464.48	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
Only Six Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
Resident Engineer
RENARDET S.A ((M-4), Package-III A)
Construction Supervision of Four Lane Motorway from Faisalabad to Khanewal Project (M-4)
184 km, Package-3A Shorkot – Dinpur Section (31km)(D & L International)(M/s CGGC)

Reference # CED/TFL **32322** (Dr. Qasim Khan)
Reference of the request letter # RSA/M-4/3A/2018/265

Dated: 28-12-2018
Dated: 27-12-2018

Weight & Size Test Report (Page – 2/2)

Date of Test 02-01-2019
Gauge length -----
Description Vertical Post Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Web Thickness (t _w)	Remark
		(g)	(cm)	(kg/m)	(mm)	
1	Vertical Post	13438	99.50	13.51	6.10	
2	Vertical Post	13906	99.60	13.96	6.20	
3	Vertical Post	13994	100.30	13.95	6.10	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
Only Three Samples for 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,
 Resident Engineer
 Al-Imam Enterprises Pvt. Ltd
 Construction of Penta Square, Phase-V, Lahore

Reference # CED/TFL **32323** (Dr. Qasim Khan)
 Reference of the request letter # Al-Imam/746/DHA/LHE/734

Dated: 01-01-2019
 Dated: 28-12-2018

Tension Test Report (Page – 1/2)

Date of Test 02-01-2019
 Gauge length 2 inches
 Description MS Pipe 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)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	150x150x5	27.50x4.70	129.25	6300	7100	478.17	538.89	0.40	20.00	
2		27.50x4.70	129.25	6300	7100	478.17	538.89	0.45	22.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Resident Engineer
Al-Imam Enterprises Pvt. Ltd
Construction of Penta Square, Phase-V, Lahore

Reference # CED/TFL 32323 (Dr. Qasim Khan)
Reference of the request letter # Al-Imam/746/DHA/LHE/734

Dated: 01-01-2019
Dated: 28-12-2018

Weight & Size Test Report (Page – 2/2)

Date of Test 02-01-2019
Gauge length -----
Description MS Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	X ₁	X ₂	Thickness	Remark
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	150x150x5	12978	60.70	21.38	155.00	155.00	4.70	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only One Sample for Test								

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
Resident Engineer
Al-Imam Enterprises Pvt. Ltd
Construction of Gold Crest Mall and Residency Phase 4, DHA Lahore

Reference # CED/TFL **32324** (Dr. Qasim Khan)
Reference of the request letter # Al-Imam/01/GIGA/DHA/LHE/569

Dated: 01-01-2019
Dated: 26-12-2018

Weight & Size Test Report (Page – 1/1)

Date of Test 02-01-2019
Gauge length -----
Description MS Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Diameter	Thickness	Remark
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	3	3003	29.90	10.04	89.00	79.40	4.80	
2	6	7989	30.30	26.37	169.00	154.80	7.10	
3	10	17000	30.40	55.92	273.00	255.40	8.80	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only Three Samples for Test								

I/C Testing Laboratoires
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To,
Resident Engineer
RENARDET S.A ((M-4), Package-II)
Construction of Faisalabad-Khanewal Motorway (M-4) Project, Package-II, Gojra-Jamani,
Section A (km 58+200 to 70+200 R/S)

Reference # CED/TFL **32333** (Dr. Qasim Khan)
Reference of the request letter # RE/M-4/2A/2018/455

Dated: 01-01-2019
Dated: 28-12-2018

Tension Test Report (Page – 1/1)

Date of Test 26-11-2018
Gauge length -----
Description Chain Link Fence Wire Tensile Test as per AASHTO-M-181

Sr. No.	Diameter of Wire	Breaking Load		Remarks
	(mm)	(kg)	(kN)	
1	3.20	600	5.89	
2	3.25	550	5.40	
3	3.20	550	5.40	
4	3.20	600	5.89	
5	3.20	550	5.40	
6	3.25	600	5.89	
-	-	-	-	
Only Six Samples for 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

Ref: CED/TFL/01/32339

Dated: 01-01-19

To
Team Leader
Trimmu Punjnad Barrages Consultants
Trimmu and Punjnad Barrages Improvement
Trimmu Barrage, Jhang

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/01/32339)

Reference to your Letter No. TPBC/2018/2852, dated: 31/12/2018 on the subject cited above. One Pressure Gauge (WIKA) as received by us has been calibrated. The results are tabulated as under:

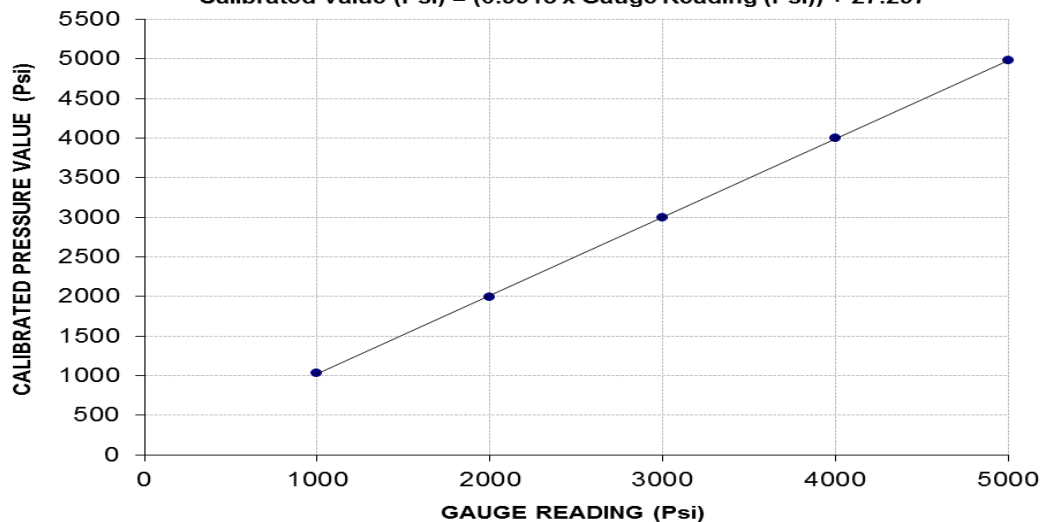
Total Range : Zero - 8500 (Psi)
Calibrated Range : Zero - 5000 (Psi)

Pressure Gauge Reading (Psi)	1000	2000	3000	4000	5000
Calibrated Load (kg)	14400	27700	41700	55700	69400
Calibrated Pressure (Psi)	1034.40	1989.78	2995.45	4001.12	4985.23

The Ram Area of Calibration = 198 cm² Witness by Muhammad Shahid (Sr. Engr. GT & GED, NESPAK)

Calibration Curve for Pressure Gauge

Calibrated Value (Psi) = (0.9913 x Gauge Reading (Psi)) + 27.297



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To,
 Syed Jawad ul Hussan
 Faisalabad
 (Site ID ; FFDR41)

Reference # CED/TFL **32342** (Dr. Rizwan Riaz)
 Reference of the request letter # Nil

Dated: 01-01-2019
 Dated: 01-01-2019

Tension Test Report (Page -1/1)

Date of Test 02-01-2019
 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	0.345	3	0.359	0.11	0.101	3000	4600	60200	65230	92200	100100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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
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University of Engineering and Technology Lahore, 54890
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To,
 Resident Engineer-I
 NESPAK
 Installation of Height Restriction Gantries and Road Signage at Canal Bank from Doctor's
 Hospital to Mughalpura Underpass, Lahore

Reference # CED/TFL **32344** (Dr. Qasim Khan)
 Reference of the request letter # 3772/RSC/RSC/MWA/04/11

Dated: 01-01-2019
 Dated: 03-11-2018

Tension Test Report (Page – 1/2)

Date of Test 02-01-2019
 Gauge length 2 inches
 Description Pipe 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)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	75x4	25.90x4.20	108.78	4600	6500	414.84	586.18	0.60	30.00	
2		25.90x4.20	108.78	4500	6300	405.82	568.15	0.60	30.00	
3	400x10	25.40x9.80	248.92	9300	12800	366.52	504.45	0.80	40.00	
4		25.40x9.75	247.65	9100	12800	360.47	507.04	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Four Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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To,
Resident Engineer-I
NESPAK
Installation of Height Restriction Gantries and Road Signage at Canal Bank from Doctor's
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Reference # CED/TFL **32344** (Dr. Qasim Khan)
Reference of the request letter # 3772/RSC/RSC/MWA/04/11

Dated: 01-01-2019
Dated: 03-11-2018

Weight & Size Test Report (Page – 2/3)

Date of Test 02-01-2019
Gauge length -----
Description Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Diameter	Thickness	Remark
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	75x4	3454	45.70	7.56	77.00	68.70	4.15	
2	400x10	41700	45.60	91.45	407.00	387.60	9.70	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only Two Samples for 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,
 Resident Engineer
 Dar Engineering
 Punjab Agriculture Food and Durg Authority's Science Enclave, Lahore Pakistan

Reference # CED/TFL **32347** (Dr. M Rizwan Riaz) Dated: 02-01-2019
 Reference of the request letter # DB-78/DAR/RE/ME/2019/0167 Dated: 01-01-2019

Tension Test Report (Page -1/1)

Date of Test 02-01-2019
 Gauge length 2 inches
 Description Threaded Rod Tensile Test as per ASTM F-1554

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	0.356	-----	7.60	-----	45.4	1600	2200	346	475	0.2	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one samples for tensile test												
Bend Test												

Witness by Muhammad Kamran Sheikh (ME Dar Engineering), Armughan Khan (Asst. PE Unibuild) and Umar Asif Fischer)

I/C Testing Laboratoires
UET Lahore, Pakistan.

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