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One of Asia's Largest Manufacturer / Exporter of Cable Accessories, Earthing & Lightning Protection Systems





HEX - BCA factory at Vapi, Gujarat

HEX - HCA factory at Jamnagar, Gujarat

Welcome to the fascinating world of HEX.

This globally renowned brand is very well known in the arena of cable lugs, cable glands, other cable accessories, crimping tools & Earthing & Lightning Protection Systems & accessories.

The vast HEX range of products is manufactured by Brass Copper & Alloy (I) Ltd. which started its operations in 1991. This humble beginning made in a small workshop, has grown into one of Asia's largest industry offering a wide range of advanced solutions, services & products.

Our large & diverse base of valuable customers spread all over India & in most countries worldwide are a testimony to the history of our dedication & growth. The values on which this company was founded continue to spur us on even today towards the goals which we are committed to achieve for a sustainable future.

For us, sustainability means acting in the best interest of coming generations – with respect to the economy, the environment and society.

As you browse through our catalogue, we hope you will find what you are looking for. If not, just share your requirement with us or give us a call. If it is relevant to our line of work, we will be happy to provide a solution.

OTHER PRODUCTS MANUFACTURED BY HEX









MCF APPROVAL

MODERN COACH FACTORY RAEBARELI

Office of the Principal Chief Electrical Engineer Modern Coach Factory, Raebareli

Date: 03.11.2021

No. MCF/RBL/CEE/18255/Vol-I

Brass Copper and Alloy India Limited 15, Mehta Mahal, 2nd Floor, Mathew Road, Charni Road East Opera House Mumbai, Maharashtra-400004

Sub :- Regarding Updation of your firm status in electrical vendor directory.

Ref :- Firm request letter No. BCA/BM/0209, Dated: 02.09.2021.

Vide reference above, your firm request for status Updation in vendor directory has been scrutinized by this office and approved by competent Authority, Revised details are given below:-

Item Name:

-COPPER CRIMPING SOCKET

Specification; -EDTS 200, AM-1 &2, CORR.-3 & EDTS 201, REV.-A, AM-3, Corr-3,

PL No.

 $\hbox{-}42411350, 42900015, 42900037, 42980010, 42980367, 42980616, 42980884, \\$ 42981207, 42981694, 42981827, 42982200, 42982297, 42983526, 42988461,

42984968, 45982004.

Firm Name	Previous Status	Revised Status	Remark				
M/s Brass Copper and Alloy India Limited, Mumbai Address: 15, Mehta Mahal, 2 nd Floor, Mathew Road, Charni Road (East), Opera House Mumbai-400004. Works: Plot No. 11 at Vadkhambha, Tal. Kaparada, Distt. Valsad, Gujarat-396126	Developmental	Regular	Being group of items, approval status of the firms shall remain same for all the items covered under this group of items. Firms shall however be required to get prototype approved for each items separately if he has not supplied the same successfully earlier.				

This change will be updated, in vendor directory when next amendment issued.

Dy. CEE/D&D Modern Coach Factory, Raebareli

उप मुख्य विद्युत अभियंता (डिजाइन एवं डाइंग)

क रेल डिब्बा कारबाना/कल्लांग/राव Dy. CEE/D&D/MCF/RBL.

Copy to:

Dy. CMM/EL Modern coach Factory Lalganj/Raebareli

RCF APPROVAL



Indian Railways E-EPS Procurement System





Unified Vendor Approval Module

HEMANT MAGANLAL MEHTA., BRASS COPPER AND ALLOY INDIA LIMITED-MUMBAI (IREPS ID- 41936)

17-Jun-2023 15:07:13 IST

Vendor Directory (Published)

Organization	Indian Railway 🕶	Item/Sub-Item Description/ID/PL No	crimping
Approving Agency	RCF ~	Specification	
Department	AII ~	Drawing	
Sub-Directorate	•	STR	
Reference Date	17/06/2023	Items Per Page	5

Proceed

Total: 1

Vendor Directory status as of 17/06/2023 15:06

Approved Vendors (Vendor Count: 5)

M/s BRASS COPPER AND ALLOY INDIA Unit-1

LIMITED-MUMBAI

(ID- 41936)

Plot No-11, At Vadkhambha, Tal.:-Kaparada Valsad, Gujarat - 396126, India

Regd Add.: 2ND FLOOR, A/2, MEHTA | Current status since - 11/02/2022

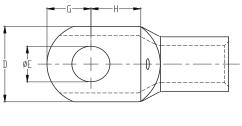
MAHAL, PADMAKAR L KHANDKE MARG, MATHEW ROAD, OPERA HOUSE,

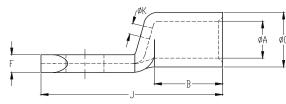
MCF/RCF/ICF TUBULAR CRIMPING SOCKETS/LUGS FOR E-BEAM CABLES

Spec.: EDTS-200 (as per active version)

Material: Copper Finish: Tinned Plated







Cable Size	MCF/ ICF/ RCF	STUD Size	Stud Hole Size	Barrel ID	Barrel OD	Palm Width	Palm Thickness	Barrel Length	Stud Center Distance from Barrel	Stud Center Distance from Top	Total Length	Inspection Hole	Product Code
mm²	Item No.	mm	E	A	С	D	F	В	Н	G	J	(Ø K)	
16	17	M6	6.5	5.8	8.5	11.9	2.7	14	10	6	33	Ø3	HTIR 16-6
16	16	M8	8.2	5.8	8.5	16	1.9	14	11	9	37	Ø3	HTIR 16-8
16	15	M10	10.2	5.8	8.5	16	1.9	14	11	9	37	Ø3	HTIR 16-10
25	14	M8	8.2	7.2	11.5	16	4.3	18	11	8	41	Ø3	HTIR 25-8
25	13	M10	10.2	7.2	11.5	19.6	3.4	18	14	11	47	Ø3	HTIR 25-10
25	23	M16	17	7.2	11.5	23	3	18	15	15	56	Ø3	HTIR 25-16
35	12	M10	10.2	8.2	13	17.9	4.8	18	10	10	43	Ø3	HTIR 35-10
50	11	M8	8.2	10	15.5	21.6	5.5	24	15	11	56	Ø3	HTIR 50-8
50	10	M10	10.2	10	15.5	21.6	5.5	24	15	11	56	Ø3	HTIR 50-10
50	9	M12	13	10	15.5	21.6	5.5	24	15	11	56	Ø3	HTIR 50-12
50	22	M16	17	10	15.5	25	4	24	15	15	62	Ø3	HTIR 50-16
70	8	M10	10.2	12	17.8	25	5.8	24	15	13	58	Ø3	HTIR 70-10
70	7	M12	13	12	17.8	25	5.8	24	15	13	58	Ø3	HTIR 70-12
70	18	M16	17	12	17.8	26	5	24	15	15	62	Ø3	HTIR 70-16
95	6	M8	8.2	13.5	20	27.8	6.5	24	17	15	62	Ø4	HTIR 95-8
95	5	M10	10.2	13.5	20	27.8	6.5	24	17	15	62	Ø4	HTIR 95-10
95	4	M12	13	13.5	20	27.8	6.5	24	17	15	62	Ø4	HTIR 95-12
95	19	M16	17	13.5	20	28	6.5	24	17	15	64	Ø4	HTIR 95-16
120	3	M12	13	15.4	23	32	7.6	29	18	17	71	Ø4	HTIR 120-12
120	20	M16	17	15.4	23	32	7.6	29	18	17	71	Ø4	HTIR 120-16
150	2	M12	13	17.4	26	36.4	8.6	29	21	18	76	Ø4	HTIR 150-12
150	1	M16	17	17.4	26	36.4	8.6	29	21	18	76	Ø4	HTIR 150-16
185	21	M16	17	19	28	38.5	9	32	21	19	82	Ø4	HTIR 185-16

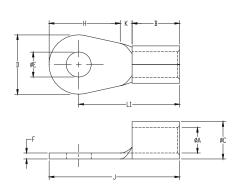


MCF/RCF/ICF RING TONGUE TYPE CRIMPING SOCKETS/LUGS FOR E-BEAM CABLES

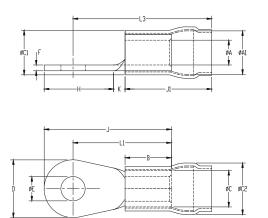
Spec.: EDTS-201 (as per active version)

Material: Copper Finish: Tinned Plated





Type-I (Non Insulated)



Type-II (Insulated with Metal Reinforcement)

Cable	MCF/ICF																	
Size	/RCF Item	E	Α	С	D	F	D B	IMENSIC K	ONS IN IV	IM L1	J	A1	C1	J1	C2	L3	Type (I/II)	Product Code
mm ²	S.No.																()	
1.5	11	5.2	1.8	3.8	10	1	5	2	13	15	20	4.4	5.4	10	6	20	II	HRRIR 1.5-5
2.5	10	6.4	2.7	5.3	12	1.3	6	2	14	16	22	7.6	7.1	15	8.6	25	II	HRRIR 2.5-6
4	9	3.2	2.9	5.5	7.2	1.3	6	2	10	14.4	18	6.4	7.3	15	8.6	23.4	II	HRRIR 4-3
4	8	6.4	2.8	5	12	1.1	6	2	12	14	20	6.4	6.9	15	8.6	23	II	HRRIR 4-6
4	12	8.2	3.3	5.3	14	1	6	2	14.5	15.5	22.5	6.4	7.1	15	8.6	24.5	II	HRRIR 4-8
6	3	5.2	3.6	6.2	9.6	1.3	8	2	15.8	21	25.8	0	0	0	0	0	ı	HRIR 6-5
6	4	6.4	3.6	6.2	12	1.3	8	2	19.8	23.8	29.8	0	0	0	0	0	ı	HRIR 6-6
6	5	8.2	3.6	6.2	16	1.3	8	2	26.5	28.5	36.5	0	0	0	0	0	ı	HRIR 6-8
6	6	10.2	3.6	6.2	16	1.3	8	2	26.5	28.5	36.5	0	0	0	0	0	ı	HRIR 6-10
6	7	13	3.6	6.2	19	1.3	8	2	28.5	29	38.5	0	0	0	0	0	I	HRIR 6-12
10	2	6.4	4.8	7.4	16	1.3	8	2	28.3	30.3	38.3	0	0	0	0	0	I	HRIR 10-6
10	1	8.2	4.8	7.4	16	1.3	8	2	28.3	30.3	38.3	0	0	0	0	0	1	HRIR 10-8
10	13	10.5	5.2	8.4	22	1.6	8	2	39	38	49	10.9	9.9	23	12.9	53	II	HRRIR 10-10



BLW APPROVAL



भारतीय रेल (रेल मंत्रालय)

बनारस रेल इंजन कारखाना

वाराणसी -221004 भारत INDIAN RAILWAY (MINISTRY OF RAILWAY) BANARAS LOCOMOTIVE WORKS

VARANASI-221004 INDIA

ISO 9001 :2015, ISO 14001 :2015 OHS 18001 :2007 ISO 50001 :2011 ISO 3834-2:2005 NABL Accreditation GreenCo Silver IRIS Certification SS Workplace Management System

Telfax: 0542-2270104, email: dycdemdesing@gmail.com

CERTIFICATE OF REGISTRATION

M/s Brass Copper and Alloy India Ltd.
2nd Floor, A/2, Mehta Mahal,
Padmakar L KhandKe Mark,
Mathew Road, Opera House,
Mumbai, Maharashtra - 400004, India
Email-hemant@hexworldwide.com

Registration No.2022/BLW/DEV/EL/192

Sub:-Capacity Cum Capability Assessment for development & manufacturing and for three phase Electric Locomotives.

Ref: Firm's Request ID No.10563, Dt-26-11-21.

The assessment of firm as per following details, has been approved by competent authority for Development, manufacture & supply of following items for three phase Electric locomotives.

SN	Item Description	CLW specification no.	Item ID	
1-	Cable lug	CLW-ES-3-0130	2100250	

Office Address:

M/s Brass Copper and Alloy India Ltd. 2nd Floor, A/2, Mehta Mahal, Padmakar L Khandke Mark, Mathew Road, Opera House, Mumbai, Maharashtra – 400004 Mob No-7303546777,9820124846 Email-hemant@hexworldwide.com

Factory Address:

M/s Brass Copper and Alloy India Ltd.
Plat No-11, Vadkhamba Taluka, Kaparada
Dist-Valsad, Gujarat- 396126.
Mob No-7303546777,9820124846
Email-hemant@hexworldwide.com

This registration is valid subject to the following conditions:

- 1. The supply should meet the requirement of the Specification.
- No design change or no change in Bill of Material, Establishment/Mfg and facilities shall be made without the prior approval of Dy. HOD
- 3. Notwithstanding this approval, Vendor is wholly and completely responsible for quality, field performance, reliability and life of the Item/Items supplied by him.
- 4. Complete Compliance to the condition given in purchase Order of BLW.
- Copy of the Income Tax Clarence Certificate should be submitted to PFA each year before 31st December.
- All future modifications/Changes in equipment, facilities and establishment at your works should be promptly communicated to BLW.
- No Change in Location of any activity except / approval of BLW.
 This is issued with approval of PCEE BLW on dated 19.05.2022

BLW/BSB/DnD/ELM/CCAR Date-20.05.2022 (Angad Tiwari)

Dy. Chief Design Engineer- I

CLW APPROVAL



Indian Railways E-EPS Procurement System





Unified Vendor Approval Module

HEMANT MAGANLAL MEHTA., BRASS COPPER AND ALLOY INDIA LIMITED-MUMBAI (IREPS ID- 41936)

17-Jun-2023 15:06:24 IST

Vendor Directory (Published)

Organization	Indian Railway 🗸	Item/Sub-I Description No	LIGOLDO
Approving Agency	CLW ~	Specification	on CLW-ES-3-013
Department	All ~	Drawing	
Sub-Directorate	,	STR	
Reference Date	17/06/2023	Items Per F	Page 5

Proceed

Total: 1

Vendor Directory status as of 17/06/2023 15:05

Item ID: 2100250 , Cable Lug PL No: 29615458, 🗟 📓 CLW CLW/ES/3/0130 ALT. DRAWINGS, Spec: Drw: STR: CLW/2020/ELDO/E/STR/0087 Rev 0,

Developmental Vendors (Vendor Count: 6)

M/s BRASS COPPER AND ALLOY INDIA Unit-1 LIMITED-MUMBAI (ID- 41936)

MAHAL, PADMAKAR L KHANDKE MARG, Approved by: BLW MATHEW ROAD, OPERA HOUSE, MUMBAI MUMBAI, Maharashtra 400004, India

Plot No-11, At Vadkhambha, Tal.:-Kaparada Valsad, Gujarat - 396126, India

Regd Add.: 2ND FLOOR, A/2, MEHTA | Current status since - 03/06/2022

- This is conditional approval subject

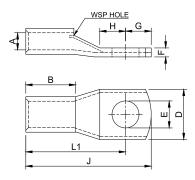
Prototype Approval: Supply (even for field trials, wherever applicable) shall commence only after approval of the prototype by the BLW.

CLW LUGS

CABLE LUGS WITH INSPECTION WINDOW FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material: Electrolytic Copper Finish: Tinned Plated

CLW	STUD												
POS	HOLE	1	١.	D		F	G	Н	L1	В	J	CLW	PRODUCT
NO.	E	MIN	MAX	MIN	MAX							FIG. No.	CODE
P0208	8.4	2.3	2.55	11.5	12.5	0.6	8.0	9.0	17.0	8.0	25.0	1	HCLW 2.5-8
P0310	10.5	3.3	3.9	13.5	16.5	0.68	9.0	10.0	24.0	9.5	32.0	2	HCLW 4-6-10
P0410	10.5	4.6	4.9	13.8	18.5	0.6	9.0	11.0	24.5	9.5	34.5	3	HCLW 10-10A
P0413	13.2	4.6	4.9	18.5	21.1	0.6	11.0	14.0	27.5	9.5	39.5	4	HCLW 10-12
P0913	13.2	8.8	9.58	19.5	21.5	2.1	11.0	14.0	35.5	14.0	47.5	5	HCLW 25-12
P0963	13.2	9.9	10.58	20.5	22.3	2.5	11.0	14.0	39.5	15.0	51.5	6	HCLW 35-12



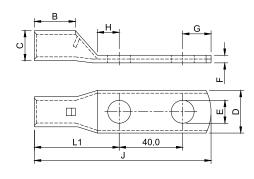
Specification No: CLW/ES/3/0130

CABLE DOUBLE HOLE LUGS WITH RECTANGULAR NOTCH FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material: Electrolytic Copper Finish: Tinned Plated

	STUD HOLE			DIN	IENSIO	NS IN I	MM			CLW	PRODUCT
NO.	E	С	D	F	G	Н	L1	В	J	FIG. No.	CODE
P0010	11.5	16.7	31.5	4.7	11.5	13.5	60.5	32.0	112.0	41	HCLW2E 0010

Specification No: CLW/ES/3/0010



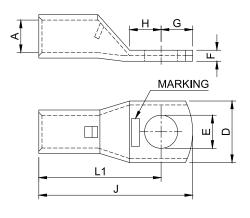


CLW LUGS

CABLE LUGS WITH RECTANGULAR NOTCH FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material: Electrolytic Copper Finish: Tinned Plated

CLW	STUD									
POS	HOLE		_	_	ISIONS		_		CLW	PRODUCT
NO.	Е	Α	D	F	G	Н	L1	J	FIG. No.	CODE
P1008	8.4	10.0	19.0	2.9	10.0	10.5	38.0	48.0	7	HCLW 35-8
P0510	10.5	7.0	21.0	1.3	12.0	13.5	34.5	46.5	8	HCLW 16-10
P1006	6.4	10.0	19.0	2.9	8.0	8.5	36.0	44.0	9	HCLW 35-6
P1010	10.5	10.0	20.0	2.7	12.0	13.5	41.0	53.0	10	HCLW 35-10
P1912	13.2	13.5	25.0	3.9	16.0	17.5	53.5	69.5	11	HCLW 70-12
P0208	8.4	4.6	15.0	1.3	10.0	10.5	24.5	34.5	12	HCLW 10-8
P0508	8.4	7.0	18.0	1.5	10.0	10.5	31.5	41.5	13	HCLW 16-8
P0004	4.3	1.8	6.5	1.0	5.0	5.5	16.0	21.0	14	HCLW 0.5-1-4
P2410	10.5	15.2	28.5	4.2	12.0	13.5	51.0	63.0	15	HCLW 95-10
P1412	13.2	11.3	22.0	3.1	16.0	17.5	47.0	63.0	16	HCLW 50-12
P1410	10.5	11.3	21.0	3.3	12.0	13.5	43.0	55.0	17	HCLW 50-10
P1908	8.4	13.5	25.0	3.9	10.0	10.5	46.5	56.5	18	HCLW 70-8
P1910	10.5	13.5	25.0	3.9	12.0	13.5	49.5	61.5	19	HCLW 70-10
P3012	13.2	16.7	31.5	4.7	15.0	16.0	61.0	76.0	20	HCLW 120-12
P0205	5.3	4.6	10.0	2.0	6.0	6.0	20.0	26.0	21	HCLW 10-5
P3010	10.5	16.7	31.5	4.7	12.0	13.0	58.0	70.0	22	HCLW 120-10
P0015	5.3	2.4	8.5	1.0	6.0	6.5	18.0	24.0	23	HCLW 1.5-2.5-5
P0105	5.3	3.6	9.0	1.1	6.0	6.0	19.0	25.0	24	HCLW 4-6-5
P3710	10.5	19.2	35.5	5.1	12.0	13.0	65.0	77.0	25	HCLW 150-10
P0014	4.3	2.4	7.5	1.1	5.0	5.5	17.0	22.0	26	HCLW 1.5-2.5-4
P0708	8.4	8.9	17.0	2.8	10.0	10.5	34.0	44.0	27	HCLW 25-8
P0106	6.4	3.6	11.0	1.0	8.0	8.5	21.5	29.5	28	HCLW 4-6-6
P0005	5.3	1.8	7.5	0.8	6.0	6.5	17.0	23.0	29	HCLW 0.5-1-5
P0505	5.3	7.0	14.0	2.2	6.0	6.0	27.0	33.0	30	HCLW 16-5
P0108	8.4	3.6	14.0	0.7	10.0	10.5	23.5	33.5	31	HCLW 4-6-8
P1408	8.4	11.3	21.0	3.3	10.0	10.5	40.0	50.0	32	HCLW 50-8
P0210	10.5	4.6	18.0	1.0	12.0	13.5	27.5	39.5	33	HCLW 10-10B
P0206	6.4	4.6	11.0	1.8	8.0	8.5	22.5	30.5	34	HCLW 10-6
P0706	6.4	8.9	17.0	2.8	8.0	8.5	32.0	40.0	35	HCLW 25-6
P3712	13.2	19.2	35.5	5.1	15.0	16.0	68.0	83.0	36	HCLW 150-12
P0204	4.3	4.6	10.0	2.0	6.0	6.0	20.0	26.0	37	HCLW 10-4
P4820	21.0	21.1	39.0	6.0	23.0	24.0	82.0	105.0	39/49	HCLW 185-20
P0016	6.4	2.4	9.0	0.9	8.0	8.5	20.0	28.0	45	HCLW 1.5-2.5-6
P0710	10.5	8.9	19.0	2.4	12.0	13.5	37.0	49.0	46	HCLW 25-10
P2408	8.4	15.2	28.5	4.2	10.0	10.5	48.0	58.0	47	HCLW 95-8
P4812	13.2	21.1	39.0	6.0	15.0	16.0	74.0	89.0	48	HCLW 185-12
P1406	6.4	11.3	21.0	3.3	10.0	10.5	40.0	50.0	50	HCLW 50-65
1 1400	0.4	11.3	21.0	0.0	10.0	10.5	40.0	30.0	30	HOLW JU-03



Specification No: CLW/ES/3/0130



CLW LUGS

BUS BAR FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material : Electrolytic Copper **Finish :** Tinned Plated

CLW	STUD			DIMEN	SIONS		CLW	PRODUCT		
POS NO.	HOLE E	D	D1	F	G	Н	I	J	FIG. No.	CODE
P0001	13.0	40.0	20.0	3.0	20.0	23.0	40.0	170.0	38	HC BB 0001

Specification No: CLW/ES/3/0130

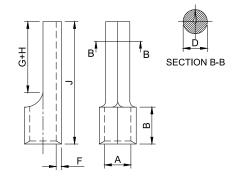
2X45° 2X45° 2X45° 2X45°

PIN TYPE CABLE LUGS FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material : Electrolytic Copper **Finish :** Tinned Plated

CLW		DIN	IENSIO	NS IN N	ИΜ		CLW	PRODUCT
POS NO.	Α	D	F	В	G+H	J	FIG. No.	CODE
P0002	2.3	1.9	0.8	5.0	10.0	17.0	40	HCP 2.5

Specification No: CLW/ES/3/0130

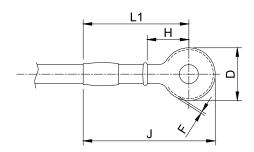


INSULATED CABLE LUGS FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material: Electrolytic Copper Finish: Tinned Plated

CLW		DIMEN	SIONS	CLW	PRODUCT		
POS NO.	D	F	Н	L1	J	FIG. No.	CODE
P0012	5.5	0.8	4.0	13.8	16.5	42	HCRI 0012
P0014	7.9	0.8	7.1	17.1	21.0	43	HCRI 0014
P0023	8.7	0.8	7.1	18.9	21.3	44	HCRI 0023

Specification No: CLW/ES/3/0130

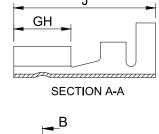


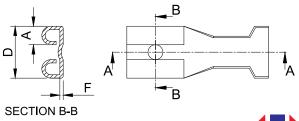
SNAP ON TYPE CABLE LUGS FOR WAG-9 & WAP-5 ELECTRIC LOCOMOTIVES

Material: Electrolytic Copper Finish: Tinned Plated

CLW		DIMEN	SIONS	ONS IN MM CLW		CLW	Product	
POS NO.	J	GH	D	Α	F	FIG. No.	Code	
P0511	19.1	7.7	6.5	2.3	0.44	51	HCSP 0511	

Specification No: CLW/ES/3/0130



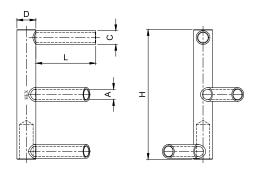


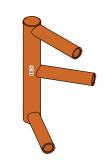
HIGH SPEED RAIL CONNECTORS

CRIMP CORNER CONNECTOR FOR PILLAR FOUNDATION EARTHING

Material: Electrolytic Copper
Finish: Natural / Tinned Plated

CABLE		DIMEN		PRODUCT		
SIZE MM ²	Α	C	L	D	Н	CODE
60.0	10.3	13.8	60.0	19.0	130.0	HSRC 60-CC
100.0	13.5	19.0	60.0	19.0	130.0	HSRC 100-CC

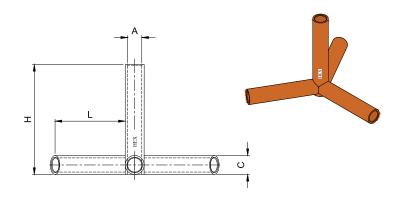




CRIMP MIDDLE CONNECTOR FOR PILLAR FOUNDATION EARTHING

Material: Electrolytic Copper
Finish: Natural / Tinned Plated

CABLE	DIN	IENSIO	NS IN N	/IM	PRODUCT
SIZE MM ²	Α	C	L H		CODE
60.0	10.3	13.8	60.0	80.0	HSRC 60-MC
100.0	13.5	19.0	60.0	80.0	HSRC 100-MC

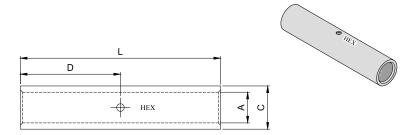


IN - LINE CRIMP CONNECTOR

Material: ETP Copper

Finish : Natural / Tinned Plated

CABLE	DIN	1ENSIO	/IM	PRODUCT	
SIZE MM ²	Α	C	C L D		CODE
60.0	10.3	13.8	76.0	38.0	HSRC 60-IC
100.0	13.5	19.0	88.0	44.0	HSRC 100-IC





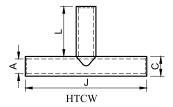
HIGH SPEED RAIL CONNECTORS

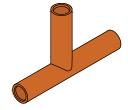
T-CONNECTORS

Material: Electrolytic Copper
Finish: Natural / Tinned Plated

CABLE	DIN	IENSIO	PRODUCT		
SIZE MM ²	A C J		J	L	CODE
60.0	10.3	13.8	85.0	35.0	HTCW - 60
100.0	13.5	19.0	95.0	38.0	HTCW - 100

^{*} Add 'T' after Product Code for Tinned Connectors



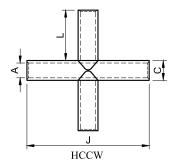


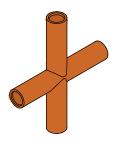
CROSS - CONNECTORS

Material: Electrolytic Copper
Finish: Natural / Tinned Plated

CABLE	DIN	IENSIO	NS IN N	ЛM	PRODUCT
SIZE MM ²	Α	A C		L	CODE
60.0	10.3	13.8	85.0	35.0	HCCW - 60
100.0	13.5	19.0	95.0	38.0	HCCW - 100

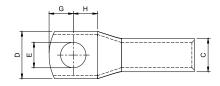
^{*} Add 'T' after Product Code for Tinned Connectors

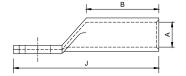


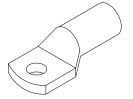


TUBULAR COMPRESSION CABLE LUGS

Material: Electrolytic Copper
Finish: Natural / Tinned Plated







CABLE			DIM	ENSION	IS IN MI	VI			PRODUCT
SIZE MM ²	E	Α	C	D	G	Н	В	J	CODE
60	10.5	10.3	13.8	19.5	10.0	10.0	30.0	60.0	HUTD 60-10
60	21.0	10.3	13.8	30.0	20.0	20.0	30.0	80.0	HUTD 60-20
60	23.0	10.3	13.8	30.0	20.0	20.0	30.0	80.0	HUTD 60-22
100	10.5	13.5	19.0	27.0	12.0	14.0	40.0	76.0	HUTD 100-10
100	21.0	13.5	19.0	30.0	20.0	20.0	40.0	90.0	HUTD 100-20
100	23.0	13.5	19.0	30.0	20.0	20.0	40.0	90.0	HUTD 100-22



BHOPAL METRO APPROVAL

DB GEODATA Louis Berger

M/s KPTL-GULERMAK JV Lead Member: M/s Kalpataru Power Transmission Ltd. B-5, 4th Floor, Tower - 3, Okaya Centre, Sector -62 Noida - 201309 (Uttar Pradesh), India Tel: 01206742500

Bhopal & Indore Metro General Consultant **Bhopal Smart City** 1st Floor, BMC Building Sector A, Berkheda Bhopal, 462022 Madhya Pradesh India

14-July-2023

Engineering supply, Erection Testing and Commissioning of Power supply Receiving

Sub Station (RSS), Traction Sub-Station (TSS), Auxiliary Sub-Station (ASS), 750V DC Third Rail and SCADA System" for Bhopal Metro Rail Project. LoA No. 1351/

MPMRCL/2022, dated:05.09.2022

BH-08: Submission of Manufacturing Documentation (GA & GTP) of HD lug from

M/s HEX

Reference: BH-08-BIG-PST-LTR-00959

Reference BH-08-KPTL-GUL-CID-LTR-01037 Dated 09.06.2023 BH-08-KPTL-GUL-CID-LTR-01187 Dated 13.07.2023 Communication:

Kind Attention: Mr. Nikesh Verma (Contractor's Representative)

Dear Sir,

Contract:

Subject:

Please Find attached Engineer's DRS for following;

Sr No.	Description	DRS No.	Revision	Status
1	BH-08: Submission of Manufacturing Documentation (GA & GTP) of HD lug from M/s HEX	BH-08-BIG-PST-DRS-0368	1	SONO

Yours Faithfully,

Bunpa Pankaj Agrawal

K SLIFFON

Dy. Project Director (Systems)

Bhopal Metro Rail Project

Copy to: 1. GM (Rolling Stock), MPMRCL

2. Additional Director (Technical), MPMRCL

Enclosure: BH-08-BIG-PST-DRS-0368 (R1)

Page 1 of 1

INDORE METRO APPROVAL



To,

KPTL-GULERMAK JV

Lead Member: M/s Kalpataru Power Transmission Ltd, Tower 3, IV floor, Okaya Centre B-5,

Sector 62, Gautam Buddha Nagar, Noida,

Uttar Pradesh - 201309

Bhopal & Indore Metro General Consultant 10th Floor, Apollo Premier, Near Vijay Nagar Square, Indore, 452010 Madhya Pradesh, India

Date: 15th July 2023

Contract:

MPMRCL/Indore Metro/Package IN-09

Subject:

Submission of GA, GTP for 1.1 & 3.3 kV 400 Sq.mm Lugs M/s. HEX.

Letter Reference:

IN-09-BIG-PST-LTR-00555

Reference Communication:

1) IN-09-KPTL-GUL-COM-LTR-00896, dated: 10.07.2023 2) IN-09-KPTL-GUL-COM-LTR-00925, dated: 14.07.2023

3) IN-09-BIG-PST-LTR-00550, dated 14.07.2023

Kind Attention:

Mr. Anjay Kumar Singh Deo

Dear Sir,

Please find the Engineer's DRS for the following:

Sr. no.	Description	DRS No.	Status
1	Submission of GA, GTP for 1.1 & 3.3 kV 400 Sq.mm Lugs M/s. HEX.	IN-09-BIG-PST-DRS-0144 (R1)	SONO

Yours Faithfully,

vind Kumar Singh Dy. Project Director

Indore Metro Rail Project

Enclosure: Document Review Sheet.

Copy to:

1. Additional Director (Technical), MPMRCL

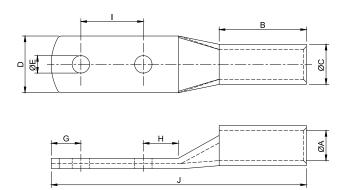
2. General Manager (Rolling Stock), MPMRCL

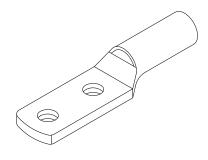
3. AGM, Traction, MPMRCL

METRO LUGS

CRIMPING TYPE 2 HOLE TINNED COPPER CABLE TERMINAL ENDS

Material : Copper Finish : Electro Plated

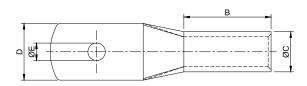


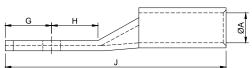


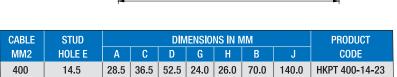
CABLE	STUD			PRODUCT						
MM2	HOLE E	Α	С	D	G	Н		В	J	CODE
400	14.5	28.5	36.5	52.5	18.0	18.0	44.5	84.0	185.5	HKPT 400-2E-14

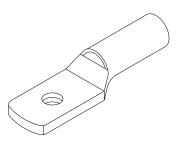
CRIMPING TYPE TINNED COPPER CABLE TERMINAL ENDS

Material : Copper Finish : Electro Plated











भारत सरका र GOVERNMENT OF INDIA



रेल म**ं**व्यय MINISTRY OF RAILWAYS

RDSO

(Signal, S AND T)

Final Decision Letter

Letter No - RDSO/108/1901/00023807

Dated 18/08/2022

То

M /s BRASS COPPER AND ALLOY INDIA LIMITED-MUMBAI 2ND FLOOR, A/2, MEHTA MAHAL, PADMAKAR L KHANDKE MARG, MATHEW ROAD, OPERA HOUSE, MUMBAI MUMBAI, Maharashtra - 400004, India

Sub: Decision of Fresh Registration Request

Ref: Your registration request ID 13510 Dated 19/05/2021

Your application under reference has been processed.

After detailed processing, competent authority has decided the inclusion of your name in the Vendor directory as per the following details: -

Name of the firm	M /s BRASS COPPER AND ALLOY INDIA LIMITED-MUMBAI					
Registered Address of the Firm	2ND FLOOR, A/2, MEHTA MAHAL,PADMAKAR L KHANDKE MARG, MATHEW ROAD,OPERA HOUSE, MUMBAI MUMBAI,Maharashtra - 400004, India					
Mfg. Unit Details	Unit-1, Plot No-11, At Vadkhambha, Tal.:- Kaparada undefined Valsad, Gujarat - 396126, India					

Items for which request is approved

lt	Item ID: 3100250, Code of practice for earthing and bonding system for signaling equipment							
#	Sub Item	Category	Capacity(Per Annum)					
1	ID: 3100250001, Code of practice for earthing and bonding system for signaling equipment	Developmental	636360					

Date of Decision	18/08/2022
Next Quality Audit Due on	

Additional Remarks

#	Details			
	No remarks added			

Attached Documents

#	Description	File Name
1	Approved QAP	ApprovedQAPBrass.pdf
2	Terms and Condition	termsandconditionbrass.pdf

Digitally Signed by AVADHESH KUMAR YADAV **Director Sig 3**

EARTHING & BONDING SYSTEM

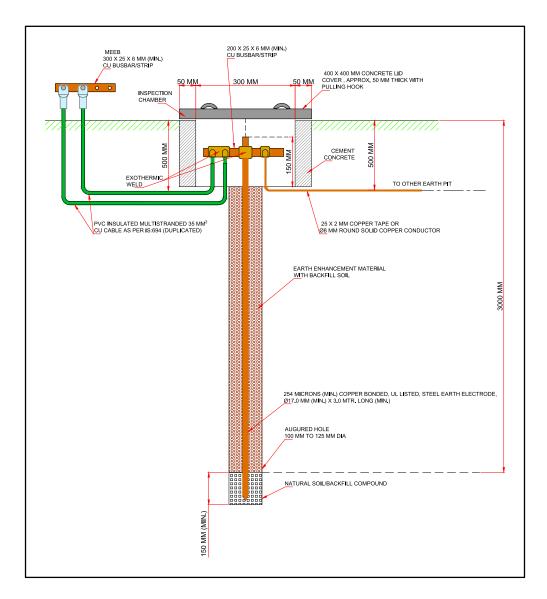
AS PER RDSO/SPN/197, VERSION 1.0

This RDSO Code of Practice for the Earthing & Bonding of Signaling Equipment emphasizes the importance that should be accorded to an Earthing system.

It's scope covers the Earthing & Bonding system to be adopted for Signaling Equipment with solid state components which are more susceptible to damage due to surges, transients and over voltages being encountered in the system due to lightning, substation switching etc. These signaling equipment include Electronic Interlocking, Integrated Power supply equipment, Digital Axle counter, Data logger etc.

HEX has successfully developed the Earthing & Bonding System as per this specification. RDSO has approved the same & hence we have been included in RDSO's Vendor Directory.

The components of this Earthing & Bonding system are: Earth Electrode, Earth Enhancement Material, Earth Pit Chamber, Equipotential Earth Busbar, Connecting Cables & Tape/Strip and other associated accessories. The same can be seen in the following diagram.

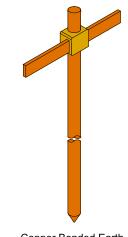




EARTHING & BONDING SYSTEM COMPONENTS

AS PER RDSO/SPN/197, VERSION 1.0

	S.NO.	COMPONENT DESCRIPTION	SIZE	QUANTITY
	1	254 Microns (min.) Copper Bonded, UL listed, Steel Earth Electrode	Ø 17 mm (min.) X Length 3 mtrs. (min.)	1
	2	Copper busbar/strip to be Exothermically welded to the Earth Electrode	200 X 25 X 6 (mm min.)	1
	3	Earth Enhancement Material for the Earth Rod	10 kgs./Bag	Min. 30 kgs/Rod
	4	Earth Enhancement Material for the Interconnecting conductor	10 kgs./Bag	Min. 10 kgs./mtr.
	5	Copper busbar/strip for Main Equipotential Earth Busbar (MEEB)	300 X 25 X 6 (mm min.)	1
	6	Copper busbar/strip for Sub Equipotential Earth Busbar (SEEB)	150 X 25 X 6 (mm min.)	1
*	7	Multi-stranded, single core, PVC insulated, copper cable as per IS:694 for connecting individual equipment to SEEB using tinned copper lugs with stainless steel nuts and bolts.	10 sq. mm	As per site requirement
*	8	Multi-stranded, single core, PVC insulated, copper cable as per IS:694 for connecting SEEB to MEEB using tinned copper lugs with stainless steel nuts and bolts.	16 sq. mm	As per site requirement
*	9	Multi-stranded, single core, PVC insulated, copper cable as per IS:694 for connecting SPD's to MEEB using tinned copper lugs with stainless steel nuts and bolts.	16 sq. mm	As per site requirement
*	10	Multi-stranded, single core, PVC insulated, copper cable as per IS:694 (Duplicated) used for connecting MEEB to the main Earth Electrode.	35 sq. mm	As per site requirement
	11	Copper tape OR Round solid copper conductor to connect Main earth pit to other earth pit in case of loop earth.	25 X 2 mm OR Ø 8 mm	As per site requirement
	12	Exothermic Moulds, Weld Powder & Accessories	_	As per site requirement



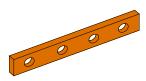
Copper Bonded Earth Electrode with Copper Busbar/Strip



Copper Tape



SEEB 150 X 25 X 6 mm (Min.) Cu Busbar/Strip



MEEB 300 X 25 X 6 mm (Min.) Cu Busbar/Strip



Round Solid Copper Conductor



* Multi standard Single Core PVC Insulted Copper Cable



Earth Enhancement Material



^{*} NOTE : Colour of cable insulation will depend on market availability.

CLASS A ESE LPS APPROVAL

रेल मंत्रालय Ministry of Railways भारत सरकार Govt. of India



मुख्य परियोजना निदेशक Chief Project Director रेल विद्युतीकरण, जयपुर Railway Electrification, Jaipur

CPD/S&T/RE/JP/ EPC-06/Call letters

Date:-05.07.2023

Executive Director, RITES, Mumbai.

Sub.:- Request letter for RITES inspection.

Ref.:- 1.This office letter No. CPD/S&T/RE/JP/101/EPC-06(Mod), Dated 07.06.23 2.This office letter No. CPD/S&T/RE/JP/101/EPC-06(Mod), Dated 08.06.23.

With reference to above, the following material was put up for RITES Inspection vide letter under ref. 1 & 2.

The material is again being put up for physical inspection (for Dimensional check) with test report and invoice of copper cable size 70sq.mm.

The supporting documents enclosed herewith are:-

- 1. QAP documents
- 2. Test Report
- 3. MOU between Brass Copper & alloy & SGI India. Pvt. Ltd
- 4. Dimension
- 5. Test report and invoice of copper cable size 70sq.mm

For necessary action please.

Encl: - 1. QAP documents

- 2. Test Report
- 3. MOU between Brass Copper & alloy & SGI India. Pvt. Ltd
- 4. Dimension
- 5. Test report and invoice of copper cable size 70sq.mm

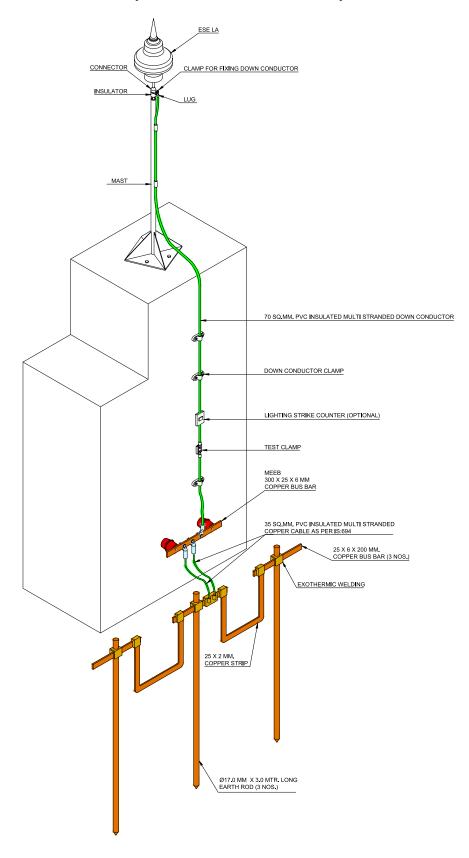
93 NM STEM

Dy.CSTE/RE/JP उप मुख्य संकंत एवं वृ.सं. इंजीनियर Dy. Chief Signal & Telecom Engineer रेल विद्युतीफरण, जयपुर Rallway Electrification, JAIPUR

2nd floor, Rail Nirman Bhavan, Ganga Marg, Jagatpura, Jaipur-302017 Phone No: 0141-2226100, Fax No: 0141-2226110, email: cpmjp@core.railnet.gov.in

CLASS A ESE LPS LAYOUT

ACTIVE LIGHTNING ARRESTOR OF CLASS-"A" FOR BUILDING PROTECTION AS PER STANDARD NFC-17-102 (BASED ON CORE SPECIFICATION)





WELDING MATERIALS FOR TRACK CIRCUIT APPLICATIONS

As per RDSO Standard No. IRS:S 103-2004

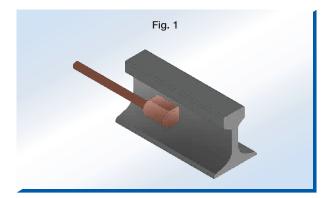
HEXWELD Exothermic welded connections made specifically for the ever-demanding railway applications, can be counted upon to provide the highest level of reliability and performance 24 hours x 7 days x 365 days of the year. The scientifically formulated and tested weld material ensures high quality track circuit connections to the rail with electrical continuity and adequate bonding strength. The final joint is achieved in such a way that molecular bonding of the welded components involved takes place.

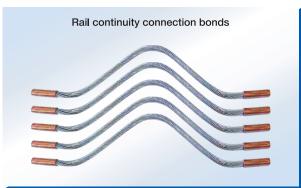
Superior properties of HEXWELD joints: -

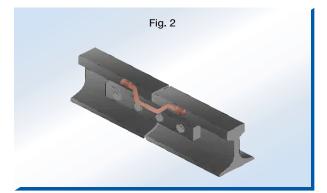
- Permanent, maintenance free and periodical visual inspection only will suffice.
- Not affected by high current surges.
- Will not loosen due to vibrations or corrode at the point of weld.
- Shall be able to sustain physical impacts, which may be experienced under field conditions.
- Electrical resistance and other properties shall not deteriorate with ageing under severe Indian climatic conditions.

These welding systems are useful in the following Railway applications in signaling: -

- Track Lead Junction Box (TLJB) / Bootleg circuit connections to rail. (Fig.1)
- Rail continuity connection bonds.(Fig.2)













Company Policy:

◆ Corporate Goal ▶

Maintain a satisfied customer base with quality products that meet application requirements completely.

We aim to secure the existing customers and concurrently augment new customers to the HEX Family.

◆ Technologies ▶

Employ the latest technologies in manufacturing with the intent to increase quality of product, reduce wastage, meet environmental norms and increase production.

◆ Product Quality ▶

Continuously endeavor to improve product quality and reach a zero defect manufacturing. Contribute to the efficient utilization of the national resources.

◆ Company Culture ▶

A quality product is the result of Company culture. The service, the people behind the product, these are the assets that set us apart from the competition.

◆ Planning ▶

Strict adherence to ABC analysis for production planning and inventory management. We employ ERP tools to integrate our sales, production, purchase and dispatch divisions.

◀ HEX Family - Team Work ▶

At HEX house we instill family values into our working environment. We believe, as the individual spends a major part of his day at work, being in a close knit and congenial environment enhances their productivity.

We extend similar values in our dealings with our distributors and channel partners.

IMPORTANT NOTE

HEX takes every precaution to ensure the performance of its products and recommendations given are in good faith. However, HEX cannot control the installation of our products and therefore cannot give any warranty or result obtained. It is the responsibility of the customer to assume all risks and liabilities incurred in the use of HEX products, whether used alone or in conjunction with other products.

OUR GLOBAL PRESENCE



OVERSEAS OFFICES: UK • Dubai • Malaysia • RSA • Nigeria



BRASS COPPER & ALLOY (I) LTD.

15, Mehta Mahal, 2nd Floor, Mathew Road, Charni Road (E), Mumbai - 400 004.

Tel.: +91 22 4960 8008 • E-mail: railways@hexworldwide.com