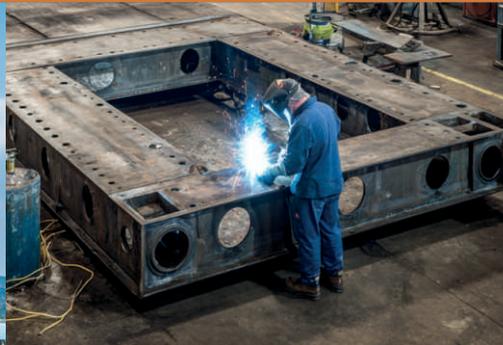




D & H INDIA LTD

# SUPERCORE<sup>®</sup> 71-T1

AWS A5.20-E 71T-1C (FLUX CORED WIRE)



[www.dnhindia.com](http://www.dnhindia.com)





# D & H INDIA LTD

**D & H INDIA LIMITED** is an established, publicly listed company that has been engaged in the manufacturing of an exhaustive range of welding consumables for more than three decades, We currently operate three manufacturing facilities located in Indore (M.P.), Dhar (M.P.), and Durg (C.G.) in India. D & H India Limited is dedicated to delivering the best quality products, supported by the fastest possible technical services through our qualified and experienced team, We are committed to being a trustworthy, solution-oriented partner to core industries,

Our in-house, Government of India-Recognized R&D facility is equipped with advanced quality systems and technical expertise, allowing us to develop customized products for various Applications,

D & H India Limited has established a modern and sophisticated unit for the production of FCAW wires (A "Made in India" product), boasting the highest manufacturing capacity in India to date, Our Flux Cored Wire – E71T1 is approved by BIS, DNV, LRS, IRS, ABS, BV, CE, BHEL, JSW, JSPL, IBR, Thermax, RDSO etc,

Our flux-cored wires are widely used in applications involving mild steel, low alloy steel, stainless steel, and hard-facing. More than 200 reputed PEB companies along with prestigious fabricators trust and are associated with us for their flux-cored wire needs. Our commonly selling FCAW products conform to standards such as AWS E71T-1C / E71T-1M / E71T-5C / E81T1-B2C, & E110T5-K4 etc, as well as various grades of stainless steel flux-cored wires and application-specific hard-facing flux-cored wires,

Our comprehensive range of welding consumables, including **Electrodes, MIG wires, TIG wires, FCAW wires, and SAW wires & fluxes**, are well-accepted by various industries. D & H India is an approved vendor for companies such as L&T, JSW, SAIL, BHEL, NTPC, HPCL, IOCL, BPCL, RDSO etc, as well as many steel, cement, and heavy engineering companies,

Thank you for your continued trust, We assure you of our best services at all times,

With Warm Regards,

SAURABH VORA  
Director  
D & H India Limited

**Head Off. & Correspondence Address** : Plot 'A', Sector 'A', Industrial Area, Sanwer Road, **INDORE** - 452 015 (M.P.) INDIA **Ph.:** +91 2973101 & 2974501 **Email:** ho@dnhindia.com

**Regd. Off.:** A-204, Kailash Esplanade, Opp. Shreyas Cinema, L.B.S. Marg, Ghatkopar (W) **MUMBAI** - 400 086 (MH) INDIA **Ph.:** +91 22 25006441, **Website:** www.dnhindia.com

CIN : L28900MH1985PLC035822





## Index

Sr. No.	Description	Page No.
1	Technical Literature	1
2	Specimen Lab Test Certificate	2
3	ISO Certificate	3
4	BIS Certificate	4
5	CE Certificate	5
6	ABS Approval Certificate	6
7	BV Approval Certificate	7
8	DNV Approval Certificate	8
9	IRS Approval Certificate	9
10	LRS Approval Certificate	10
11	BHEL Approval Certificate	11
12	Approval Certificate from Inspector of Boilers	12-13
13	RDSO Approval Certificate	14
14	Thermax Approval Certificate	15
15	JSPL Approval Certificate	16
16	JSW Steel Approval Certificate	17
17	Mazagon Dock Shipyard Purchase order	18
18	Cochin Shipyard Purchase Order	19
19	HSL Purchase Order	20
20	BHEL Trichy purchase order	21-22
21	APEX BUILDSYS Limited	23
22	BHEL Bhopal purchase order	24
23	N. E. Railway purchase order	25
24	Eastern Railway purchase order	26
25	LNT Power purchase order	27-28
26	DEE Development Engg purchase order	29-30
27	ARCEDGES Building India Llp	31
28	Zamil Steel Building Solution purchase order	32
29	ISGEC purchase order	33-34
30	Nuberg Purchase Order	35
32	G R Infra Project Purchase Order	36
33	GS PEB Civil Works Purchase Order	37
34	BHEL Trichy Report	38-50
35	NABL Lab test Certificate	51-62



## Flux Cored Wire – Carbon steel

### SUPERCORE 71 T-1

#### Flux Cored Wire

#### Classification

AWS A5.20- E 71T-1C

AWS A5.20M - E491T-1C



#### Description

SUPERCORE-71 T1 is a superior quality flux cored wire suitable for welding in all position on wide range of welding current under CO2 shielding. The wire is further characterized by smooth arc, easy slag detachability and produce X-ray quality weld with exceptional impact strength at sub-zero temperature down to - 20°C,

#### Application

SUPERCORE-71 T1 is recommended for single and multi pass welding of mild steel and carbon steel, and suitable for joining steel conforming to ASTM SA-36/SA-36M and SA-283/SA 283M (A,B,C,D Grades) and SA-414/SA 414M, like storage vessels, ship building, earth moving equipments, piping, heavy machinery, bridges tower, structural fabrication, vehicles and chemical plants machinery structures etc,

#### Chemical Composition of All Weld Metal (%)

Element	C %	Mn %	Si %	S %	P %
Specification Required	0.12 Max	1.75 Max	0.90 Max	0.03 Max	0.03 Max
Typical Values	0.06	1.25	0.35	0.010	0.017

#### Mechanical Properties of All Weld Metal

Properties	U.T.S. (N/mm <sup>2</sup> )	Y.S (N/mm <sup>2</sup> )	Elongation (L=4d) %	CVN Impact At - 30°C (J)
Specification Required	490 - 670	390 Min	22 Min	27 Min
Typical Values	560	490	27	50

#### Welding Parameter ( DC Positive +)

Welding Parameter ( DC Positive +)			Welding Conditions	
Welding Position Diameter 1.20 (mm)	Voltage (V)	Current (A)	Welding Position	F, H, V-UP, OH, VD, H
Flat	22-28	180-300	Diameter	1.2 mm
Vertical-Up	22-26	150-260	Shielding Gas	100% Co <sub>2</sub>
Over Head	23-26	150-250	Interpass Temp	150 ± 15°C
			Polarity	DC +

**Approvals:** CE, ABS, DNV, BV, IRS, LR, BIS, BHEL, RDSO, MN DASTUR

**Packing:** 15 Kgs. Vacuum packing in plastic spools



## TEST CERTIFICATE

Brand Name : SUPERCORE 71-T1 Serial No. : 04451  
 Size (mm) : 1.20 MM  
 Batch No. : FCW-0336H  
 Date of Mfg. : 14-02-2025

### Chemical Composition of Wire (%):

C	Mn	Si	S	P	Cr	Ni	Mo	V	Nb
0.048	1.201	0.410	0.010	0.016	0.026	0.016	0.012	0.009	--
Cu	Fe	Ti	Zr	Al	W	Co	N		
0.014	--	--	--	--	--	--	--		

### Mechanical Properties of all weld metal :

Y.S. : (0.2 % offset) (MPa)	U.T.S. (MPa)	Elong. (%)	R.A (%)	CVN Impact Energy (Joules) Test Temp. at -20 °C	Hardness (As welded)
480.60	578.80	27.90	--	68,66, 66,62,60	---

Diffusible Hydrogen (ml / per 100 gms of weld metal)	2.80	PWHT at	--
Moisture Content (%)	--	Fillet Weld Test	SATISFACTORY
Ferrite	--	Bend Test	--
Radiography	SATISFACTORY		

Special Requirements :

Issued to:  
SPECIMEN TEST CERTIFICATE

Test Conducted as per : AWS/SFA : 5.20 E 71T1-C  
EN ISO 17632-A : T 42 2 PC 1 H5

As per EN 10204 Type : 3.1

We certify that the supply made against this TC confirms to all requirements of ASME Section II Part-C latest addition in all respect **2023**

**Officer (Q.A.)**  
(LAB/R04)

**Head (Q.A.)**

CERTIFICATE OF COMPLIANCE



**INTERNATIONAL CERTIFICATION SERVICES PVT. LTD.**

This is to certify that the  
**QUALITY MANAGEMENT SYSTEM** of

**D & H INDIA LTD**

Regd. Office & Unit - I : Sector-A, Plot - A, Sanwer Road, Industrial Area, Indore - 452015,  
Madhya Pradesh, India.

Unit II : Village Sejvaya, Ghatabillod, Dist. Dhar, Madhya Pradesh, India.

Unit III : Plot No. 115 and 116, Zone-B, Industrial Growth Centre, Village Borai, Post -  
Rasmada, Dist. Durg – 491001, Chhatisgarh, India.

has been assessed and registered as complying with the requirements of the following International Standard:

**ISO 9001:2015**

The Quality Management System applicable to:

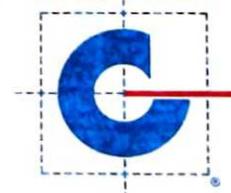
**Scope:**

**Manufacture and Supply of Welding Electrodes, Submerged Arc Fluxes and Wires, CO2 Welding Wires, Filler Wires (Like : Nickel and Nickel Base, Stainless Steel, Low Alloy and Non-Ferrous TIG (Tungsten Inert Gas) / MIG (Metal Inert Gas) Wires), Flux Cored Wires and Metallurgical Cored Wires**

Registration No. : RQ91/1287  
Registered Date : 05<sup>th</sup> December, 2002  
Reassessment Date : 06<sup>th</sup> December, 2023  
Issue Date : 11<sup>th</sup> December, 2023  
Expiry Date : 04<sup>th</sup> December, 2026



**JAS-ANZ**



[www.jas-anz.org/register](http://www.jas-anz.org/register)



**Director (Technical)**

**International Certification Services Pvt. Ltd.**

**Accredited by Joint Accreditation System of Australia and New Zealand**

*Validity of this certificate is based on periodic audits of the management system defined by the above scope and is contingent upon prompt, written notification of significant changes to the management system and/or its components thereof shall be immediately communicated to ICS.*

*Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2015 requirements may be obtained at [www.icsasian.com](http://www.icsasian.com)/[www.icspl.org](http://www.icspl.org)*

**For any other  
communication**

**Address:** Bhopal Branch Office-  
Commercial cum Office  
Complex, Manakalya, Opp.  
Dushera Maidan, E-5 Area  
Colony, Bittan Market, Bhopal,  
BHOPAL, MADHYA  
PRADESH, 462016

**Phone:** 0755-2443449, 2423452,  
2423454

**Fax:** 07552723451

**E-Mail:** bpbo@bis.gov.in

**Web:** www.bis.org.in,  
www.manakonline.in

## BUREAU OF INDIAN STANDARDS

### Attachment to Licence No. CM/L- 8200150198

CM/L-No	Name of the Licensee with the Factory Address	Name of the Product	Indian Standard No.
8200150198	D&H INDIA LIMITED - VILLAGE SEJVAYA, GHATABILLOD, DIST. DHAR (M.P.) , , GHATABILLOD : 454773	Flux cored (tubular) electrodes for gas shielded and self-shielded metal welding of carbon or carbon- manganese steel	IS 15769 : 2008

### Endorsement No. 1 Dated 09-Sep-2023

Whereas, the licence was valid upto Third October Two Thousand Twenty Three.

Now, consequent upon renewal, the validity of the licence given in schedule of has been extended from Third October Two Thousand Twenty Three to Second October Two Thousand Twenty Six

Other terms and conditions of licence remain same.

Branch Head (Bhopal Branch Office)

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002. ,9 Bahadur Shah Zafar Marg, ,DELHI,110002

**Contact No:** +91 11 23230131, 23233375,  
23239402

**Fax:** +91 11 23234062, 232

**Email:** info@bis.gov.in

# CERTIFICATE

of Conformity of the Factory Production Control

**1922 - CPR - 2239**

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

**Welding consumables - General product standard for filler metals and fluxes for fusion welding of metallic materials.**

(For list of products see Annex I to 1922-CPR-2239 that is an inseparable part of this certificate)

placed on the market under the name or trade mark of

**D & H INDIA LTD**

**Plot-A, Sector-A, Industrial Area, Sanwer Road, Indore-452015(M.P.) INDIA**

and produced in the manufacturing plants

**D & H INDIA LTD**

**UNIT I: Plot-A, Sector-A, Industrial Area, Sanwer Road, Indore-452015 (M.P.) INDIA**

**UNIT II: Village Sejvaya, Ghatabillod, Dist Dhar-454773 (M.P) INDIA**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

**EN 13479:2017**

under system 2+ are applied and that the factory production control is assessed to be in conformity with the applicable requirements.

This certificate was first issued on 07.08.2024 and will remain valid until 07.08.2025 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body. The certificate is supported through annual surveillance audit and is reissued after each surveillance audit. The validity of the certificate may be confirmed in the CE register at the web address [www.dedal-bg.net](http://www.dedal-bg.net).



Manager: *Anna Vasileva*  
dipl. eng. Anna Vasileva

Issued:  
Burgas, 07 August 2024  
Ref. No. 01-00



# WELDING CONSUMABLE CERTIFICATE

Certificate No.: 487698-6899213-001\_\_\_\_\_

Report No.: 6899213\_\_\_\_\_

Port of: Mumbai, India\_\_\_\_\_

Date: 21-APRIL-2025\_\_\_\_\_

## THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF D&H INDIA LIMITED, ATTEND THEIR PLANT AT VILLAGE SEJVAYA, DHAR ROAD, GHATABILLOD, DISTRICT DHAR, M.P - 454773, INDIA, ON THE 13 DAY OF MARCH, 2025 AND ON SUBSEQUENT DATES, IN ORDER TO CARRY OUT A PLANT SURVEY OF FACILITIES AND ASSOCIATED QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND TO WITNESS AND REPORT ON THE ANNUAL APPROVAL TESTING OF WELDING CONSUMABLES; AND,

THAT THE FACILITY IS CONSIDERED CAPABLE OF PROVIDING AN ACCEPTABLE UNIFORM PRODUCT, AND THAT EACH WELDING CONSUMABLE LISTED BELOW WAS FOUND IN COMPLIANCE WITH THE SPECIFICATION INDICATED AND IS ELIGIBLE TO BE PLACED ON THIS BUREAU'S APPROVED WELDING CONSUMABLES LIST IN THE FLUX CORED ARC WELDING SECTION:

<u>TRADE NAME</u>	<u>SPECIFICATION</u>	<u>GRADE OR CLASS</u>	<u>SHIELDING GAS</u>	<u>POSITION</u>	<u>CURRENT/ POLARITY</u>	<u>SIZE</u>
SUPERCORE 71 T-1	ABS	3Y SA C1 H5	CO2	ALL	DCEP	1.20-1.60 MM



RAHUL VIDYADHAR BHAT SURVEYOR

Note: This Certificate evidences compliance with one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a fuller description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.



Certificate number : WM 142001/02/C.0

File number : 142001 N 2023

## TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Marine & Offshore Classification Rules

This certificate is issued to

**D & H INDIA Limited**

Indore - INDIA

for the product

**Flux-Cored Wire for Semi-Automatic or Automatic Welding with Shielding Gas**

**Designation** : SUPERCORE 71T-1  
**Grade** : SA3YM HH  
**Description** : Gas Shield CO2 100%  
**Diameter** : 1.2-1.6 mm  
**Welding current** : DC+  
**Welding position** : All positions for butt and fillet welding including vertical downwards (PA, PF, PG, PB, PC, PE, PD)  
**Remark** : NIL

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of Bureau Veritas Marine & Offshore Rules on Materials and Welding for the Classification of Marine Units.*

**This certificate will expire on: 06 Jun 2026**

**For Bureau Veritas Marine & Offshore,**

Local office: BV MUMBAI (BOMBAY)

Issued on 18 Jun 2025

Surveyor: N. KANAWADE

***This certificate was created electronically and is valid without signature***



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The Electronic Version is available at: <https://www.veristarp.com/veristarnb/jsp/viewPublicPdfWelding.jsp?id=fsceip5zqa>

BV Mod. Ad.E 537 June 2017



Certificate no.:  
**TAW00005S8**

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**that the Flux Cored Wire/Gas combination**

with trade name  
**SUPERCORE-71-T1 / C1**

Manufacturer  
**D & H India Limited**  
**Ghatabillod, Madhya Pradesh, India**

is found to comply with  
**DNV rules for classification – Ships**  
**DNV class programme DNV-CP-0069 – Type approval – Welding consumables**

with this approval

<b>Grade</b>	<b>III YMS H5</b>
<b>Current</b>	<b>DC(+)</b>
<b>Approved diameter</b>	<b>1.2 mm - 1.6 mm</b>
<b>Positions</b>	<b>All, including vertical downwards</b>
<b>Remarks</b>	

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.**

Issued at **Hamburg** on **2024-06-05**

This Certificate is valid until **2029-06-04**.

DNV local unit: **India CMC MES**

Approval Engineer: **Dietmar Liebich**

for **DNV**



Digitally Signed By:  
**Martin Wenning**  
Location: **DNV Hamburg,**  
**Germany**

Any significant change in design or construction may render this Certificate invalid.  
LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: WELD 1421a

Revision: 2023-09

www.dnv.com



# Indian Register of Shipping

Certificate No.: BHP24WC004

## CERTIFICATE OF APPROVAL OF WELDING CONSUMABLES FOR USE IN SHIP CONSTRUCTION

This is to certify that the electrode described below has been tested in accordance with the Society's rule requirements and is being included in the approved list of consumables for Welding in Ship Construction.

NAME & ADDRESS OF MANUFACTURER : D & H INDIA LIMITED  
VILLAGE SEJVAYA, GHATABILLOD  
DHAR ROAD  
DISTRICT DHAR 454773  
MADHYA PRADESH  
INDIA

TYPE OF ELECTRODE : FLUX CORED WIRE

TRADE NAME : SUPERCORE 71-T1

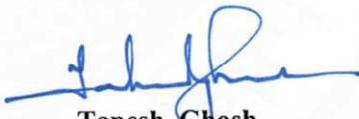
WELDING POSITIONS : All Positions

GRADE : 3Y S H5

SIZE (dia.) mm : 1.20 MM, 1.60 MM

CURRENT TYPE : DC (+ ve)

Place : Mumbai  
Date : 13/02/2024



Tapesh Ghosh

Head of Department  
Ships and Technical Services  
Indian Register of Shipping

The validity of this certificate is subject to Annual Approval being carried out in October every year and the attachment to this certificate being endorsed by the society's Surveyors.

*See overleaf for conditions of issue of this certificate*



## CERTIFICATE OF APPROVAL OF WELDING CONSUMABLE FOR SHIP CONSTRUCTION

This certificate is issued to the company named below. The welding consumable or combination described has been tested in accordance with the requirements of Lloyd's Register for use in ship construction. This approval is subject to annual tests being carried out in accordance with the requirements of Lloyd's Register. The continued validity of this approval will be confirmed by appropriately dated Annual Reapproval Certificates issued to the company.

<b>Company</b>	<b>D&amp;H India Limited</b>
<b>Address</b>	Sector A Plot A, Sanwer Road Industrial Area, Indore, 452012, India
<b>Type of welding consumable</b>	Section 5 - Flux-Cored Wire/Gas Shield
<b>Trade name</b>	Supercore 71-T1/CO2
<b>Welding Process</b>	Flux Cored Arc Welding
<b>Grade &amp; Technique</b>	3YS
<b>Welding Positions</b>	Downhand, horizontal-vertical, vertical upward and downward, and overhead.
<b>Weld Type</b>	Butt and Fillet Welding.
<b>Diameter (mm)</b>	1.2 -1.6
<b>Current</b>	DC(+)
<b>Remarks</b>	Approved also for automatic multirun welding in the downhand position only. Approved low hydrogen consumable, conforming to standard H5.

**Jaspal Nirankari**

Welding Team Leader to Lloyd's Register  
EMEA  
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Ref: SDC/MM/WELD CONS

Date: 23.01.2023

Enlistment Letter

To  
 M/s D & H INDIA LIMITED,  
 PLOT-A, SECTOR-A, INDUSTRIAL AREA,  
 SANWER ROAD, INDORE - 452015  
 MADHYA PRADESH

Dear Sir/Madam,  
 Ref: Your SRF No: 2110003028.

We are pleased to inform that we have registered your Firm with BHEL / Trichy for supply of following item(s): Your Supplier Code: 13211.

SL No	Item Description	Item Code	Nature
01	WELDG.WIRE: FLUX CORE Spec: E71T-1, Welding: Pressure parts Sizes: 1.6 mm ; Brand : SUPERCORE71T-1	WCF01	PERMANENT

Your works address at: D & H INDIA LIMITED, PLOT-A, SECTOR-A, INDUSTRIAL AREA, SANWER ROAD, INDORE – 452015, MADHYA PRADESH is also updated in our System vide Vendor Code: 13211.

Please note that this registration does not guarantee award of any contract/ order for the supply of above item(s).

BHEL-Monogram or any connected references shall not be exhibited for any commercial exploitation of the product including on the product, packaging and letterhead. Performance feedback on the supplies made to our sub-contractors, site shall be submitted to SDC every year.

While this registration is based on evaluation of your concern on capability to produce/supply the materials /components as per the governing standards, you will be additionally required to meet the specific requirements mentioned in each tender such as Technical Specification, Pre Qualifying Requirements, Technical Delivery Conditions etc. to qualify in that tender.

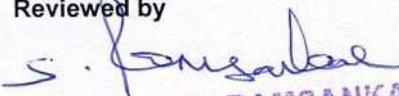
Any changes in the product range, location of Works/ Sales Office/ Management/ Organization structure/ address, phone/ email etc., shall be intimated to us immediately along with relevant documents for our updating of Database. BHEL/Trichy will not be responsible for any communication lapses at a later stage due to failure in intimation of changes referred above in time. Your performance will be periodically reviewed for continuation of your enlistment. The enlistment is for the above mentioned material category(s) only.

Your firm will be Re-evaluated based on the following aspects:

1. Performance rating with 'C' or 'D'
2. Adverse quality feedback from user side
3. Not taking part in 4 consecutive Enquiries
4. Every 5 years from the date of registration

Best Wishes,  
 For Bharat Heavy Electricals Ltd., Trichy

Reviewed by

  
**S. RAMSANKAR**  
 (S. Ramsankar) Deputy Manager  
 Manager / SDC Materials Management / SDC  
 BHEL, TRICHY - 620 014.

Contacts: 0431-2577992 (Mr. Satish Chandra Singh)

Approved by

  
 (P. Samuthirapandi) 23/01/23  
**AGM/MM**  
 पी. समुत्तिरपांडी / P. SAMUTHIRAPANDI  
 अपर महाप्रबंधक / Addl. General Manager  
 सामग्री प्रबंधन / Materials Management  
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड  
 Bharat Heavy Electricals Limited  
 तिरुचिरापल्ली / Tiruchirappalli, तमिल नाडु / Tamil Nadu

**GOVT.OF MADHYA PRADESH  
OFFICE OF THE DIRECTOR OF BOILERS,  
QR.NO.3 & 4, TYPE- IV  
B-SECTOR, PIPLANI, BHEL TOWNSHIP,  
BHOPAL-462 021,M.P. 0755-2757384, 2502528**

NO.DB/Electrodes/ 2135 /2024,  
To,

BHOPAL, DATED 24/07/2024

M/s. D & H India Ltd,  
Plot -A, Sector-A, Industrial Area,  
Sanwer Road,  
Indore-452 015 ( M.P.).

Sub:- Periodic approval of Electrodes .

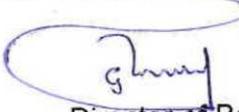
Ref:- Your letter No. D&H/QC/0024, Dated 23.07.2024.

With reference to above, the periodical check test of following Electrodes were carried out by the Departmental Inspector on **23.07.2024** as required under Indian Boiler Regulations,-950.

**(1) SUPER- CR-1 (2) SUPER- CR-2 (3) SUPERCORE 71 T-1 & (4) SUPERCORE 71 T-5**

The results of test were found satisfactory as prescribed in the said Regulation. As per Regulation 98, this certificate is valid up to from **15.07.2024 to 14.07.2025** .

It is advised to offer Electrodes for periodic check test after expiry of this certificate. A slip of corresponding date of expiry of this approval should exhibited in all the packing without fail as valid for the batches Mfgd as above testing date . If next periodic check test are not offered on or before **14.07.2025** the above brand will not be permitted for use in Indian Boiler Regulations applications.

  
Director of Boilers,  
Madhya Pradesh, Bhopal

**GOVT.OF MADHYA PRADESH  
OFFICE OF THE DIRECTOR OF BOILERS,  
QR.NO.3 & 4, TYPE- IV  
B-SECTOR, PIPLANI, BHEL TOWNSHIP,  
BHOPAL-462 021,M.P. 0755-2757384, 2502528**

NO.DB/Electrodes/ 1286 /2025,  
To,

BHOPAL, DATED... 23/05/2025

M/s. D & H India Ltd,  
Plot -A, Sector-A, Industrial Area,  
Sanwer Road,  
Indore-452 015 ( M.P.).

Sub:- Initial approval of Electrodes .

Ref:- Your letter No. Nil, Dated Nil.

With reference to above, the periodical check test of following Electrodes were carried out by the Departmental Inspector on **25.04.2025** as required under Indian Boiler Regulations-1950.

**(1)SUPERMIG 80S-B2 (2)SUPERCORE-81T1-B2 (3) SUPERMIG 70S-A1  
(4)SUPERMIG 80S-G(5)SUPERMIG-90S-B91&(6) SUPERMIG-304H.**

The results of test were found satisfactory as prescribed in the said Regulation. As per Regulation 98, this certificate is valid up to from **25.04.2025 to 24.04.2026** .

It is advised to offer Electrodes for periodic check test after expiry of this certificate. A slip of corresponding date of expiry of this approval should exhibited in all the packing without fail as valid for the batches Mfgd as above testing date . If next periodic check test are not offered on or before **24.04.2026** the above brand will not be permitted for use in Indian Boiler Regulations applications.

  
Director of Boilers,  
Madhya Pradesh, Bhopal.

भारत सरकार  
GOVERNMENT OF INDIA



रेल मंत्रालय  
MINISTRY OF RAILWAYS

Validity unknown

Digitally signed by  
TIRUNAVASANTHI  
KUMAR/A P  
Date: 2024.02.13  
16:21:04 IST  
Reason: Sign Final  
Approval  
Location:

ICF  
( MECH DESIGN, Mechanical )

Final Decision Letter

Letter No - ICF/108/1901/00042295

Dated 13/02/2024

To  
M /s D AND H INDIA LIMITED-INDORE  
PLOT A, SECTOR A, INDUSTRIAL AREA, SANWER ROAD, INDORE, Madhya Pradesh - 452015, India

**Sub:** Decision of Resubmission Request

**Ref:** Your registration request ID 20310 Dated 04/07/2023

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 D AND H INDIA LIMITED-INDORE
Registered Address of the Firm	PLOT A, SECTOR A, INDUSTRIAL AREA, SANWER ROAD, INDORE, Madhya Pradesh - 452015, India
Mfg. Unit Details	WORK-2, Village Sejevaya, Dhar Road Ghatabillod Dhar, Madhya Pradesh - 454773, India

Items for which request is approved

Item ID: 2300251, Flux cored MIG/MAG Welding Filler Wire with shielded gas			
#	Sub Item	Category	Capacity(Per Annum)
1	ID: 2300251001, Flux cored MIG/MAG Welding Filler Wire with shielded gas, Class I	Developmental	600000
2	ID: 2300251002, Flux cored MIG/MAG Welding Filler Wire with shielded gas, Class IV	Developmental	600000
3	ID: 2300251005, Flux cored MIG/MAG Welding Filler Wire with shielded gas, Class III	Developmental	600000

Date of Decision	13/02/2024
Next Quality Audit Due on	

**Mfg. Level Remarks (For Vendor Directory)**

Remark	Type : Class I, Brand Name : SUPERCORE 71T-1 ; Type : Class III, Brand Name : SUPERCORE 91T1 - D1C ; Type : Class IV, Brand Name : 81T1-W2C
--------	---



**Ref.: WED/CA/2023-24/11**

**Date: 21.06.2023**

To,  
D & H India Limited  
Plot-A, Sector-A, Industrial Area,  
Sanwer Road, Indore  
Madhya Pradesh, – 452015.

**Subject: Approval for your Brand SUPERCORE 71-T1 (E-71T-1C).**

Kind Attention: Mr.Sandal Singh

Dear Sir,

We have tested above mentioned Flux cored wire, details of which are as per given below.

Diameter in mm	AWS Classification	AWS Specification	Batch No.
1.2	E-71T-1C	AWS 5.20	FCW-0016

Testing was carried out as per SFA 5.20 ASME Sec II Part C Edition 2021.

We are glad to inform you that test results meet the requirements of said code.

**The above mentioned welding consumable Brand for Flux cored wire is approved & validity of approval is up to 21-06-2025**

Please note that you have to strictly adhere to all requirements of SFA 5.20 of ASME section II Part C latest edition.

Also you must keep validity of third party approval & same to be send to us for our record.

Printing /using of Thermax name or monogram on the any product package or letter should not be done. Also Thermax can check your product at our vendor places at any time.

Any deviation to Thermax quality compliance will not be tolerated & approval will be withdrawn.

Regards,  
For Thermax Ltd.

Mr. Vivek Kulkarni  
Manager -Welding Engg. Dept  
C & H Division, Thermax Ltd

Ref. No:- JSPL/ANG/WC/D&H-IND/PQT/006

Date: 25.05.2023

To,

**M/s D&H INDIA LTD.**

H.O. & Works: Plot-'A' Sector-'A' Industrial Area, Sanwar Road, Indore-452015, (M.P) India.

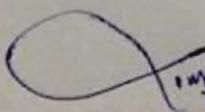
**Subject: Use of D&H India Ltd. Makes Welding Consumables E7018, E71T-1C & F7A2-EM 12K**

A Electrodes Qualification Test had been conducted at SSD-Angul Plant by using M/s D&H India Ltd. make consumables i.e. E7018, E71T-1C & F7A2-EM 12K.

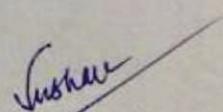
The electrode consumables test for the below brands had been conducted successfully. Accordingly, the use of same brand had been accepted for SSD Captive project.

Description.	Brand.	Batch No.	Date.	AWS Class.	Size.
ELECTRODE,MS,	SUPER-LH	C14013	10-Jan-23	AWS 5.1 E7018	3.15X450 MM
ELECTRODE,MS,	SUPER-LH	C14102	03-Jan-23	AWS 5.1 E7018	4.00X450 MM
FLUX COREDWIRE,	SUPERCORE-71-T-1	FCW1004	24-Aug-22	AWS 5.20 E71T-1C	1.20 MM
SAW WIRE	SUPERMELT-12-K	SA1192	11-Jan-23	AWS 5.17 EM12K	4.00 MM
SAW FLUX	SUPERMELT-II (SPL)	F224	26-Dec-22	AWS 5.17 F7A2-EM12K	.....

We hereby confirm that the usage of welding consumables **D&H India Ltd.** make is acceptable in our SSD captive project subjected to Electrodes qualification test as per ASME Sec II Part-C for each batch.




Quality Head  
(Rajvir Singh Bhasin)  
DGM



Plant Head.  
(Subhash Jain)  
VP-SSD, Angul



12 October 2023

To  
D&H India Limited,  
Plot-A, Sector-A, Industrial Area,  
Sanwer Road, Indore,  
Madhya Pradesh – 452 015,

Sub: Approval of D&H brand Welding Consumables Regarding,

Dear sir,

Based on your existing product performance & the NABL –ISO/IEC 17025 Accredited & Govt. approved laboratory test result, the following consumables are approved.

Sr. No.	AWS Code	Brand Name	Remarks
1	E-7018-1	SUPER-LH (SPL)	Welding Electrodes
2	E-7018-A1	SUPER-MO	Welding Electrodes
3	EL-8	SUPERMELT GR-A	Saw Wire, EL-8
4	EM-12K	SUPERMELT-12K	Saw Wire, EM-12K
5	Flux	SUPERMELT-II	Saw Flux for EL-8
6	Flux	SUPERMELT-II (SPL)	Saw Flux for EM-12K
7	ER-70S6	MIGARC WS-6	MIG Welding Wire, ER-70S6
8	FCAW	SUPERCORE-71-T1	Flux Cored Welding Wire

The consumables can be used from 12/10/2023 to 11/10/2024 for the fabrication purpose of structural jobs at M/s JSW & JVML projects.

However, if we receive any quality complaints, this approval will be withdrawn. Hence you have to maintain consistent quality for all the batches.

Regards,

  
Appanna Pinna,  
VP Structural department



## CONTRACTS

माझगांव डॉक शिपबिल्डर्स लिमिटेड  
(भारत सरकार का उपक्रम)  
**MAZAGON DOCK SHIPBUILDERS LIMITED**  
(Formerly known as Mazagon Dock Limited)  
(A Govt. of India Undertaking)  
CIN: L35100MH1934GOI002079  
Dockyard Road, Mumbai 400 010  
Website- [www.mazagondock.in](http://www.mazagondock.in)  
Certified - ISO 9001: 2008 for Shipbuilding Division  
GST ID : 27AAACM8029J1ZA

Vendor :1016393  
D & H INDIA LIMITED  
PLOT A, SECTOR A, INDUSTRIAL AREA,  
SANWER ROAD,  
INDORE-452015  
Madhya Pradesh, India  
Telephone:+(91)022 2973101  
Fax : + (91)  
GSTIN: 23AAACD1999C2ZW  
Kind Attn :

Purchase Executive Sanjay Kumar  
Department MATERIAL-PURCHASE  
Tele+91 (22) 23763247  
Fax +91(22) 23738151  
email : kumarsanjay@mazdock.com  
Contract No **5000000683**  
Contract Date 04.04.2024  
Valid From 04.04.2024 Valid To 03.04.2025  
Version No: 0  
Version Date: 04.04.2024

Our Reference ARC/FCAW

Your Reference BID-404912

Inco terms : Delivery at MDL

Payment Terms : Pay within 15-20 Days

Subject Supply of FCAW electrodes E71T-1C, 1.2mm on Annual Rate Contract Basis (ARC) against Tender No GM(M)/SK/ARC/FCAW/2024-25. Subsequent confirmatory purchase orders shall be issued by MDL against this annual rate contract.

Dear Sir / Madam ,

We are pleased to confirm our order for supply of the following materials / services as per terms and conditions enclosed :

ItemNo	Material Number Material Description	HSN/SAC Code	Quantity Unit of Measure	Cur	Unit rate	Total value
--------	---	--------------	-----------------------------	-----	-----------	-------------

10	11701155		75,000 Kilogram	INR		
----	----------	--	--------------------	-----	--	--

The FCAW electrode shall conform to specification SFA 5.20/ AWS A5.20 E-71T-1C of size 1.2mm diameter. The electrode shall be in hermetically sealed vacuum packaging of 15 Kgs net weight in spool form. The electrode shall have any of the valid International Association of Classification Societies (IACS) approval certificate.

Base Amount  
IN: Integrated GST 18.00  
Subtotal

Total Order Value in INR

In Words:

Taxes and Duties. 18% IGST

Price Escalation clauses & ERV The prices shall remain firm and fixed during the Currency of the Contract.

COCHIN SHIPYARD LTD.  
(A GOVERNMENT OF INDIA ENTERPRISE)  
KOCHI - 682 015, INDIA



कोचीन शिपयार्ड लिमिटेड  
(भारत सरकार का उद्यम)  
कोच्ची - 682 015, भारत

## PURCHASE ORDER

GST No. : 32AAACC6905B1ZD  
PAN No. : AAACC6905B

D & H INDIA LIMITED  
Plot-A, Sector-A

Indore 452015

Purchase Order No. : **SCO/4040001540** Dated 03.08.2024  
CSL contact person's name & Designation : GANESH K R  
(SENIOR MANAGER (MECHANICAL))  
8129270928  
ganesh.raghavan@cochinshipyard.in  
Supplier Ref. Code : 1106739  
Your Ref./ Quote No. : MAT/SCO/2024/80 Dated 29.07.2024

### FLUX CORED GMA (CO2) WELDING WIRE 1.2MM

Further to your offer number mentioned above, CSL hereby places order on you for the FLUX CORED GMA (CO2) WELDING WIRE 1.2MM as per the terms and conditions mentioned in this document.

Please return one copy of this order duly signed and stamped with appropriate seal on each page including annexure as a token of your acceptance of the purchase order.

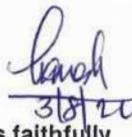
Item	Material	HSN.Code	Description	Quantity	UoM	Unit Price	Cur	Net Amount	Delivery Date
10	8181210106##		FLUX CORED GMA (CO2) WELDING WIRE 1.2MM	6,000.000	KG		INR		17.08.2024
	Brand: SUPERCORE-71T-1								
	Taxes (Total) Input : IGST (18%)								

Total Gross Value \_\_\_\_\_  
Taxes (Total) \_\_\_\_\_

Total Order Value in INR \_\_\_\_\_

Incoterm : Door Delivery CSL Stores  
Delivery store : Gen.Store Common  
Mode of despatch : By Road  
Payment terms : 30 days

Annexures For Order  
1.Conditions of Purchase

  
Yours faithfully

For Cochin Shipyard Ltd.

गणेश के आर / GANESH K R  
वरिष्ठ प्रबंधक/Senior Manager  
कोचीन शिपयार्ड लिमिटेड  
Cochin Shipyard Ltd.  
कोच्ची /Kochi - 15



**Hindustan Shipyard Limited**  
 ( A Govt.of India Undertaking - Ministry of Defence )  
 Gandhigram, Visakhapatnam Andhra Pradesh - 530005,INDIA  
 www.hslvizag.in CIN : U74899AP1952GOIO711 Fax No. : 0891/ 2577502 / 2577356  
 An ISO 9001 : 2015 EMS 14001 : 2015 OHSMS 45001 : 2018 Company

**PURCHASE ORDER**

Vendor code : 107763 D & H INDIA LIMITED PLOT -A, SECTOR-A, INDORE Madhya Pradesh India 452015 GST NO : 23AAACD1999C2ZW	<b>PO Number</b> : 5000002341 <b>PO Date</b> : 03.10.2024 <b>Currency</b> : INR <b>E Mail ID</b> : SIVAPRIYAN.K588@HSLVIZAG.IN <b>Contact No.</b> : 9493792253 <b>Created By</b> : Lt Cdr Sivapriyan S
--	---

<b>Ship To :</b> HINDUSTAN SHIPYARD LIMITED GANDHIGRAM VISAKHAPATNAM ANDRAPRADESH INDIA 530005	<b>Bill To :</b> HINDUSTAN SHIPYARD LIMITED VISAKHAPATNAM ANDHRA PRADESH India. Pin : 530005 GSTIN No : 37AAACH4275P1Z2
--	---

**Header Text :**  
FIRM TO SUBMIT 10% PBG AS PER HSL FORMAT IN 15 DAYS

S.No	Material No	Material Description	UoM	Delivery date	Per Unit	Unit Price	PO Qty	Basic Value
00010	1200005083	1.2MM DIA FLUX CORED WELDING FILLER WIRE	KG	02.07.2025	1		39,000	
<b>Item Text :</b> 1.2MM DIA FLUX CORED WELDING FILLER WIRE AS PER THE ENCLOSEDSPECIFICATIONS.					<b>Net Price =</b>			
<b>WBS Element :</b>					<b>Int. GST-Input</b>		<b>18</b>	
<b>Item Total Value :</b>								

Inco terms : FOR HSL Stores - Domestic	<b>Total Net Value :</b>
Inco terms Description :	<b>Total Condition Amount :</b>
Payment Description :	<b>Total Tax Value :</b>
	<b>PO Total Value :</b>

**PO VALUE IN WORDS :**

**TERMS AND CONDITIONS FOR Purchase Order** : 5000002341      **DATE** : 03.10.2024

Terms of Delivery : HSL STORES	Class Cert. Charges : Not Applicable
Mode Of Delivery : ROAD	Time of Delivery : AS PER PO
Price Type : Firm & Fixed	LD Min percent : 0.5%
Freight : Vendor Account	LD Max Percent : 10%
Transit Insurance : Vendor Account	Serv Engr (Free Days) : NA
GST Applicable : Applicable	Serv Engr(cost/day) : NA

अनुबंध | Contract



अनुबंध क्रमांक | Contract No: GEMC-511687786812290

अनुबंध तिथि | Generated Date : 21-May-2024

बोली/आरए/पीबीपी संख्या | Bid/RA/PBP No.: GEM/2024/B/4757149

<b>संगठन विवरण   Organisation Details</b> प्ररूप   Type : Central PSU मंत्रालय   Ministry : Ministry of Heavy Industries and Public Enterprises विभाग   Department : Department of Heavy Industry संगठन का नाम   Organisation Name : Bharat Heavy Electricals Limited (BHEL) कार्यालय क्षेत्र   Office Zone : 10140027-HPBP Trichy	<b>खरीदार विवरण   Buyer Details</b> पद   Designation : MMWCPUR1 संपर्क नंबर   Contact No. : 0431-2577597- ईमेल आईडी   Email ID : buycon206.bhelb.tn@gembuyer.in जीएसटीआईएन   GSTIN : 33AAACB4146P2ZL HIGH PRESSURE BOILER PLANT, BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPPALLI - 620014. पता   Address : TAMILNADU, INDIA., TIRUCHIRAPPALLI, TAMIL NADU-620014, India
---	---

<b>वित्तीय स्वीकृति विवरण   Financial Approval Detail</b> आईएफडी सहमति   IFD Concurrence : No प्रशासनिक अनुमोदन का पदनाम   Designation of Administrative Approval: DGM / MM वित्तीय अनुमोदन का पदनाम   Designation of Financial Approval: DGM / FINANCE	<b>भुगतान प्राधिकरण विवरण   Paying Authority Details</b> Role: PAO भुगतान का तरीका   Payment Mode: BHEL पद   Designation : PAYMENT AUTHORITY ईमेल आईडी   Email ID : pao7.bhelb.tn@gembuyer.in जीएसटीआईएन   GSTIN : - HIGH PRESSURE BOILER PLANT, BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPPALLI - 620014. पता   Address: Tiruchirappalli, TAMIL NADU-620014, India Payments shall be made to the seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10-days time as provided in clause 12 of GeM GTC)
--	---

<b>विक्रेता विवरण   Seller Details</b> जेम विक्रेता आईडी   GeM Seller ID : 2D2D190000931927 कंपनी का नाम   Company Name : D & H INDIA LIMITED संपर्क नंबर   Contact No. : 08269000672 ईमेल आईडी   Email ID : dnhenquiry@gmail.com पता   Address : Plot-A, Sector-A, Industrial Area, Sanwer Road, Indore, MADHYA PRADESH-452015, - एमएसएमई पंजीकरण संख्या   MSME Registration number : - जीएसटीआईएन   GSTIN: 23AAACD1999C2ZW (R)
---

\*जिसके नाम के पक्ष में GST/TAX इनवॉइस पेश किया जाएगा | GST / Tax invoice to be raised in the name of - Buyer

वितरण निर्देश | Delivery Instructions : NA

उत्पाद विवरण | Product Details

#	आइटम विवरण   Item Description	आइटम विवरण   Ordered Quantity	इकाई   Unit	इकाई मूल्य (INR)   Unit Price (INR)	कर विभाजन (INR)   Tax Bifurcation (INR)	मूल्य (INR में सभी शुल्क और कर सहित)   Price (Inclusive of all Duties and Taxes in INR)
1	उत्पाद का नाम   Product Name: SUPERCORE-81T1-B2 - 1.60 mm ब्रांड   Brand : D & H India Limited ब्रांड प्रकार   Brand Type : Registered Brand कैटलॉग की स्थिति   Catalogue Status: Catalogue not verified by OEM कैसे बेचा जा रहा है   Selling As : Reseller not verified by OEM श्रेणी का नाम और चतुर्थांश   Category Name & Quadrant : SUPERCORE-81T1-B2 - 1.60 mm (Q3) मॉडल   Model: D & H INDIA LIMITED एचएसएन कोड   HSN Code: HSN not specified by seller	76,250	kilogram		NA	
कुल ऑर्डर मूल्य   Total Order Value (in INR)						

परेषिती विवरण | Consignee Detail

क्र.सं.   S.No	परेषिती   Consignee	वस्तु   Item	लॉट नंबर   Lot No.	मात्रा   Quantity	दिनांक के बाद डिलीवरी शुरू करना है   Delivery Start	वितरण पूरा कब तक करना है   Delivery To Be Completed

## अनुबंध | Contract



अनुबंध क्रमांक | Contract No: GEMC-51 1687707122322

अनुबंध तिथि | Generated Date : 26-Feb-2025

बोली/आरए/पीबीपी संख्या | Bid/RA/PBP No.: [GEM/2025/B/5866884](#)

<b>संगठन विवरण   Organisation Details</b> प्ररूप   Type: Central PSU मंत्रालय   Ministry: Ministry of Heavy Industries and Public Enterprises विभाग   Department: Department of Heavy Industry संगठन का नाम   Organisation Name: Bharat Heavy Electricals Limited (BHEL) कार्यालय क्षेत्र   Office Zone: 10140027-HPBP Trichy	<b>खरीदार विवरण   Buyer Details</b> पद   Designation: MMWCPUR1 संपर्क नंबर   Contact No.: 0431-2577597- ईमेल आईडी   Email ID: buycon206.bhelb.tn@gembuyer.in जीएसटीआईएन   GSTIN: 33AAACB4146P2ZL पता   Address: HIGH PRESSURE BOILER PLANT, BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPPALLI - 620014, TAMILNADU, INDIA, Tiruchirappalli, TAMIL NADU-620014, India
--	--

<b>वित्तीय स्वीकृति विवरण   Financial Approval Detail</b> आईएफडी सहमति   IFD Concurrence: No प्रशासनिक अनुमोदन का पदनाम   Designation of Administrative Approval: SM वित्तीय अनुमोदन का पदनाम   Designation of Financial Approval: NA	<b>भुगतान प्राधिकरण विवरण   Paying Authority Details</b> Role: PAO भुगतान का तरीका   Payment Mode: BHEL पद   Designation: PAYMENT AUTHORITY ईमेल आईडी   Email ID: pao7.bhelb.tn@gembuyer.in जीएसटीआईएन   GSTIN: - पता   Address: HIGH PRESSURE BOILER PLANT, BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPPALLI - 620014, TAMILNADU, INDIA, Tiruchirappalli, TAMIL NADU-620014, India भुगतान समयसूची   Payment Timelines: Payments shall be made to the seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10-days time as provided in clause 12 of GeM GTC)
--	---

<b>विक्रेता विवरण   Seller Details</b> जेम विक्रेता आईडी   GeM Seller ID: 2D2D190000931927 कंपनी का नाम   Company Name: D & H INDIA LIMITED संपर्क नंबर   Contact No.: 08269000672 ईमेल आईडी   Email ID: dnhenquiry@gmail.com पता   Address: Plot-A, Sector-A, Industrial Area,,Sanwer Road,,Indore, Indore, MADHYA PRADESH-452015, - एमएसएमई पंजीकरण संख्या   MSME Registration number: - जीएसटीआईएन   GSTIN: 23AAACD1999C22W (R)	खरीदार द्वारा मूल्यांकित एमआईआई स्थिति   MII Status as evaluated by buyer: Verified खरीदार द्वारा सत्यापित एमएसएमई स्थिति   MSME Status as verified by buyer: Not Verified
---	---

\*जिसके नाम के पक्ष में GST/TAX इनवॉइस पेश किया जाएगा | GST / Tax invoice to be raised in the name of - Buyer

वितरण निर्देश | Delivery Instructions : NA

#	आइटम विवरण   Item Description	आइटम विवरण   Ordered Quantity	इकाई   Unit	इकाई मूल्य (INR)   Unit Price (INR)	कर विभाजन (INR)   Tax Bifurcation (INR)	मूल्य (INR में सभी शुल्क और कर सहित)   Price (Inclusive of all Duties and Taxes in INR)
1	उत्पाद का नाम   Product Name : E 71 T-1 FCAW WIRE DIA 1.2 MM ब्रांड   Brand : SUPERCORE 71 T-1 - 1.20 mm ब्रांड प्रकार   Brand Type : NA कैटलॉग की स्थिति   Catalogue Status: NA कैसे बेचा जा रहा है   Selling As: NA श्रेणी का नाम और चतुर्थी   Category Name & Quadrant : NA (-) मॉडल   Model: D & H INDIA LIMITED - SUPERCORE 71 T-1 - 1.20 mm एचएसएन कोड   HSN Code: HSN not specified by seller	4,000	kilogram		NA	

कुल ऑर्डर मूल्य | Total Order Value (in INR)

<b>परिचिती विवरण   Consignee Detail</b>	वितरण पूरा कब
---	---------------

## PURCHASE ORDER

Submitted

<b>To</b> <b>MARK ENGINEERING CORPORATION</b> 302-A, SamajBhushan Gruh Nirman Sanstha, Wadi-Katol Bypass, Wadi, Oppsite Pooja Weighbridge,, Nagpur, Maharashtra, India - 440023 GST No. : 27ABQFM6317H1ZW  Email: markenco.ngp@gmail.com	<b>PO No : 250117</b> <span style="float: right;">Rev :R0 ( )</span> Date : 06-05-2025 Transport : <span style="float: right;">Insurance :</span> Penalty Clause : N/A Reference No :  Freight : <span style="float: right;">Freight Included - Under Vendor scope</span>																											
<b>Billing At:</b> <b>APEX BUILDSYS LIMITED- NAGPUR</b> Plot No. D3 MIDC Industrial Area UMRED, Nagpur, Maharashtra, India - 441203 GST No. : 27AAACE0280B1ZA	<b>Delivery At:</b> <b>APEX BUILDSYS LIMITED- NAGPUR</b> Plot No. D3 MIDC Industrial Area UMRED, Nagpur, Maharashtra, India - 441203 GST No. : 27AAACE0280B1ZA																											
Please supply the following as per terms mentioned below.																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Sr.</th> <th style="width: 40%;">Item Description</th> <th style="width: 10%;">Del. Date</th> <th style="width: 10%;">Qty</th> <th style="width: 5%;">Unit</th> <th style="width: 10%;">Rate</th> <th style="width: 5%;">Dis%</th> <th style="width: 5%;">GST</th> <th style="width: 10%;">Amount</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>FLUX CORE WELDING WIRE 1.2 MM @15KG SPOOL Item Code : P14653 Indent No : 2500152</td> <td style="text-align: center;">09-May-25</td> <td style="text-align: center;">8500.00</td> <td style="text-align: center;">Kgs</td> <td></td> <td style="text-align: center;">0.00</td> <td style="text-align: center;">18.0%</td> <td></td> </tr> <tr> <td colspan="5" style="text-align: right;"><b>8,500.00</b></td> <td colspan="2"><b>Sub Total</b></td> <td></td> <td></td> </tr> </tbody> </table>	Sr.	Item Description	Del. Date	Qty	Unit	Rate	Dis%	GST	Amount	1	FLUX CORE WELDING WIRE 1.2 MM @15KG SPOOL Item Code : P14653 Indent No : 2500152	09-May-25	8500.00	Kgs		0.00	18.0%		<b>8,500.00</b>					<b>Sub Total</b>				
Sr.	Item Description	Del. Date	Qty	Unit	Rate	Dis%	GST	Amount																				
1	FLUX CORE WELDING WIRE 1.2 MM @15KG SPOOL Item Code : P14653 Indent No : 2500152	09-May-25	8500.00	Kgs		0.00	18.0%																					
<b>8,500.00</b>					<b>Sub Total</b>																							
<b>Remarks</b> MTC required along with material. Delivery 2-3 week after order placement.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td><b>Others :</b></td><td></td></tr> <tr><td><b>Freight :</b></td><td></td></tr> <tr><td><b>Taxable Value</b></td><td></td></tr> <tr><td><b>Total GST</b></td><td></td></tr> <tr><td><b>Grand Total</b></td><td></td></tr> </table>	<b>Others :</b>		<b>Freight :</b>		<b>Taxable Value</b>		<b>Total GST</b>		<b>Grand Total</b>																	
<b>Others :</b>																												
<b>Freight :</b>																												
<b>Taxable Value</b>																												
<b>Total GST</b>																												
<b>Grand Total</b>																												
<b>Payment Terms</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Payment Type</th> <th style="width: 15%;">Pay On</th> <th style="width: 15%;">Pay(%)</th> <th style="width: 15%;">Pay Days</th> <th style="width: 10%;">BG</th> <th style="width: 25%;">Remarks</th> </tr> </thead> <tbody> <tr> <td>30 DAYS CREDIT</td> <td style="text-align: center;">Net Amount</td> <td style="text-align: center;">100.00</td> <td style="text-align: center;">15</td> <td style="text-align: center;">N</td> <td></td> </tr> </tbody> </table>		Payment Type	Pay On	Pay(%)	Pay Days	BG	Remarks	30 DAYS CREDIT	Net Amount	100.00	15	N																
Payment Type	Pay On	Pay(%)	Pay Days	BG	Remarks																							
30 DAYS CREDIT	Net Amount	100.00	15	N																								
<b>Terms and Conditions</b> 1. All disputes and differences arising out or connected with this Purchase order failing an amicable settlement, shall be referred to the court of competent jurisdiction situated in Cha Sambhaji Nagar. Any suit or proceedings to enforce the rights of either party shall only be instituted in the courts of ordinary civil jurisdiction in the city of Cha Sambhaji Nagar. 2. Any loss during transit will be on seller account. 3. The prices shall remain firm till execution of the order. 4. All goods related to this PO should comply with all quality Standard 5. All materials and goods shall be subject to purchaser's inspection and approval after delivery and, if rejected, the seller shall remove the rejected goods within 6 days from the receipt of intimation at his own cost, or the buyer shall take action on discursion. The buyer shall not be responsible for or be held liable for any loss or deterioration of the rejected goods. The seller shall pay to the buyer storage charges for such rejected goods for the period exceeding 6 days as aforesaid. 9. The goods shall conform to the description and specifications thereof in full detail and must be delivered within stipulated time, otherwise same shall be liable to be rejected and the seller shall be LIQUIDATED DAMAGES. 11. An invoice must be submitted in 2 copies bearing reference of purchase order to this offer for payment after delivery of the goods, duly supported by the copy of this purchase order, signed delivery challan, packing list, excise gate pass and other documents as required. 12. b) Payment shall be normally made after 30 days of receipt and approval of the materials or as per terms agreed.																												

PO NO : 250117

## अनुबंध | Contract



अनुबंध क्रमांक | Contract No: GEMC-511687764545905

अनुबंध तिथि | Generated Date : 06-Sep-2024

बोली/आरए/पीबीपी संख्या | Bid/RA/PBP No.: [GEM/2024/B/5125236](#)

<b>संगठन विवरण   Organisation Details</b> प्ररूप   Type : Central PSU मंत्रालय   Ministry : Ministry of Heavy Industries and Public Enterprises विभाग   Department : Department of Heavy Industry संगठन का नाम   Organisation Name : Bharat Heavy Electricals Limited (BHEL) कार्यालय क्षेत्र   Office Zone : HEP Bhopal	<b>खरीदार विवरण   Buyer Details</b> पद   Designation : 351DM02 संपर्क नंबर   Contact No. : 0755-2503432- ईमेल आईडी   Email ID : buyer206.bhelb.mp@gembuyer.in जीएसटीआईएन   GSTIN : - पता   Address : BHARAT HEAVY ELECTRICAL LTD, PIPLANI, Bhopal, MADHYA PRADESH-462022, India
---	--

<b>वित्तीय स्वीकृति विवरण   Financial Approval Detail</b> आईएफडी सहमति   IFD Concurrence : No प्रशासनिक अनुमोदन का पदनाम   Designation of Administrative Approval: AGM वित्तीय अनुमोदन का पदनाम   Designation of Financial Approval: MANAGER	<b>भुगतान प्राधिकरण विवरण   Paying Authority Details</b> Role: PAO भुगतान का तरीका   Payment Mode: BHEL पद   Designation : DGM ईमेल आईडी   Email ID : pao107.bhelb.mp@gembuyer.in जीएसटीआईएन   GSTIN : 23AAACB4146P1ZN पता   Address : BHARAT HEAVY ELECTRICAL LTD, PIPLANI, Bhopal, MADHYA PRADESH-462022, India भुगतान समयसीमा   Payment Timelines: Payments shall be made to the seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10-days time as provided in clause 12 of GeM GTC)
---	--

<b>विक्रेता विवरण   Seller Details</b> जेम विक्रेता आईडी   GeM Seller ID : 2D2D190000931927 कंपनी का नाम   Company Name : D & H INDIA LIMITED संपर्क नंबर   Contact No. : 08269000672 ईमेल आईडी   Email ID : dnhenquiry@gmail.com पता   Address : Plot-A, Sector-A, Industrial Area, Sanwer Road, Indore, Indore, MADHYA PRADESH-452015, - एमएसएमई पंजीकरण संख्या   MSME Registration number : - जीएसटीआईएन   GSTIN: 23AAACD1999C2ZW (R)	
---	--

\*जिसके नाम के पक्ष में GST/TAX इनवॉइस पेश किया जाएगा | GST / Tax invoice to be raised in the name of - Consignee

वितरण निर्देश | Delivery Instructions : NA

### उत्पाद विवरण | Product Details

#	आइटम विवरण   Item Description	आइटम विवरण   Ordered Quantity	इकाई   Unit	इकाई मूल्य (INR)   Unit Price (INR)	कर विभाजन (INR)   Tax Bifurcation (INR)	मूल्य (INR में सभी शुल्क और कर सहित)   Price (Inclusive of all Duties and Taxes in INR)
1	उत्पाद का नाम   Product Name : SUPERCORE 71 T-1 - 1.60 mm ब्रांड   Brand : D & H India Limited ब्रांड प्रकार   Brand Type : Registered Brand कैटलॉग की स्थिति   Catalogue Status: Catalogue not verified by OEM कैसे बेचा जा रहा है   Selling As : Reseller not verified by OEM श्रेणी का नाम और चतुर्थांश   Category Name & Quadrant : SUPERCORE 71 T-1 - 1.60 mm (Q3) मॉडल   Model: D & H INDIA LIMITED एचएसएन कोड   HSN Code: HSN not specified by seller	22,500	kilogram		जीएसटी   GST (18%) : 448,451.695 जीएसटी उपकर 1   GST Cess 1 (0%) : 0 जीएसटी उपकर 2   GST Cess 2 (0 per accounting unit) : 0 जीएसटी पर इनपुट टैक्स क्रेडिट (आईटीसी)   Input Tax Credit (ITC) on GST I (100%) : 448,451.695 जीएसटी उपकर पर आईटीसी 1   ITC on GST Cess 1 (100%) : 0 जीएसटी उपकर पर आईटीसी 2   ITC on GST Cess 2 (100%) : 0	
कुल ऑर्डर मूल्य   Total Order Value (in INR)						

### परिषेती विवरण | Consignee Detail

क्र.सं.   S.No	परिषेती   Consignee	वस्तु   Item	लॉट नंबर   Lot No.	मात्रा   Quantity	दिनांक के बाद डिलीवरी शुरू करना है   Delivery Start	वितरण पूरा कब तक करना है   Delivery To Be Completed

Signature Not Verified

NORTH EASTERN RAILWAY		PURCHASE ORDER (STOCK) [DEVELOPMENT]		Digitally signed by AKSHAY MISHRA Date: 2024.05.21 18:44:16 IST Reason: Signed P.C. Location: IREPS-CRIS			
<b>P.O.No.: 28240932101260 dated 21-MAY-24</b>							
To, D AND H INDIA LIMITED-INDORE Village Sejrava, Dhar Road, , Ghatabillo Dist Dhar, Madhya Pradesh , India, 454773 ( vcode::22843 ) ( Industry type : Other Industries ) Ph.: 07316633501,918269000672 Email: sv@dnhindia.com		From, PRINCIPAL CHIEF MATERIAL MANAGER Office N E Railway Gorakhpur 273012 Ph.:05512200533 Website: <a href="https://www.ireps.gov.in/">https://www.ireps.gov.in/</a>					
With reference to your Bid Id No.16609525 dated 25/04/24 (LOA No. STORES / 28240932A / 931224 dt.08-MAY-24) against this office Tender No.28240932A opened on 29/04/24, please deliver to the Consignee(s) mentioned below, the under mentioned articles free of incidental charges subject to Indian Railways Standard Conditions of Contract (Latest Edition) and General Conditions of Contract for the Stores Department of this Railway and to the addendum to the same subject applicable to this Contract.							
Total Order Value:							
<b>SVC :APPLICABLE, PVC :NOT APPLICABLE, Safety : NO, Option Clause : NOT APPLICABLE, Time Preference : NOT APPLICABLE</b>							
PL No : 76115902		Item Qty : 5608 Kgs.		Inspection agency : Third Party Agency ( INTERTEK INDIA PRIVATE LIMITED-NEW DELHI )			
<b>Description</b> : Flux cored MIG/MAG welding filler wire with shielded gas, class IV (Spec. no. IRS: M-46/2020, grade E81T1-W2C as per AWS: A 5.29-10) Size 1.2 mm. Make/Brand- D & H India Ltd / SUPERCORE-81 T1-W2C.							
<b>Basic Rate: Rs.</b>							
Consignee	PO Sr.	DELIVERY SCHEDULE			S.Tax/VAT	Freight Charges	Other Charges II
		Commence	Complete	Ordered Qty.			
General Stores Depot Izzatnaga	001		21/08/24	741.000	GST @ 18 %	--	--
		Commencement : Within 1 Month of issue of Contract, Completion : Within 3 Month					
General Stores Depot Gorakhpur	002		21/08/24	4,867.000	GST @ 18 %	--	--
		Commencement : Within 1 Month of issue of Contract, Completion : Within 3 Month					
<b>Other Terms and Conditions</b>							
1 Inspection: TPI Agency.							
2 Payment Terms: 95% payment against inspection certificate issued by the nominated inspection agency as specified in the contract, and proof of dispatch/delivery of the material to consignee, and balance 5% after receipt, inspection and acceptance of the goods by the consignee. In case of despatch by rail, unqualified Railway Receipt/Parcel Way Bill will be taken as the proof of despatch. In case of despatch by other means such as road transport, receipted challan signed by the gazetted officer at consignee's end will be taken as proof of delivery.							
3 Delivery Schedule Commencement : Within 1 Month of issue of Contract, Completion : Within 3 Months.							
4 Delivery Terms: Free at Destination							
5 Mode of Despatch/Delivery: by ROAD / RAIL							
6 Security Deposit EXEMPTED being firm is ICF approved source.							
[PO.Key: 5941421; ;]				Digitally Signed by AKSHAY MISHRA, DYCMM/G dycmmg@ner.railnet.gov.in for PRINCIPAL CHIEF MATERIAL MANAGER for and on behalf of the President of India			

Signature Not Verified  
 Digitally signed by SHEKHAR BISWAS  
 Date: 2024.07.05 12:41:31 IST  
 Reason: Signed P.C.  
 Location: IREPS-CRIS

<b>P.O.No.: 07245009103600 dated 05-JUL-24</b>		<b>EASTERN RAILWAY PURCHASE ORDER (NON-STOCK) [DEVELOPMENTAL]</b>					
To, D AND H INDIA LIMITED-INDORE Village Sejvaya, Dhar Road, , Ghatabillo Dist Dhar, Madhya Pradesh , India, 454773 ( vcode::22843 ) ( Industry type : Other Industries ) Ph.: 07316633501,918269000672 Email: sv@dnhindia.com		From, Office of Principal Chief Materials Manager Eastern Railway, Fairlie Place Kolkata 700001 Ph.:03322316401 Website: <a href="https://www.ireps.gov.in/">https://www.ireps.gov.in/</a>					
This is an auto-generated Purchase Order based on online tender decision.							
With reference to your Bid Id No.16609641 dated 25/04/24 (LOA No. STORES / 07245009A / 930871 dt.07-MAY-24) against this office Tender No.07245009A opened on 29/04/24, please deliver to the Consignee(s) mentioned below, the under mentioned articles free of incidental charges subject to Indian Railways Standard Conditions of Contract (Latest Edition) and General Conditions of Contract for the Stores Department of this Railway and to the addendum to the same subject applicable to this Contract.							
Total Order Value:							
<b>SVC :APPLICABLE, PVC :NOT APPLICABLE, Safety : NO, Option Clause : NOT APPLICABLE, Time Preference : NOT APPLICABLE</b>							
PL No : 761100750017	Item Qty : 5200 Kgs.	Inspection agency : Third Party Agency ( BUREAU VERITAS INDIA PRIVATE LIMITED-MUMBAI )					
<b>Description</b> : Flux cored MIG/MAG Welding Filler Wire with shielded gas, Class I (Spec. No. IRS: M - 46/20, Grade E71T-12 as per AWS: A5.20/ A5.20M:2005 (R2015), SIZE-1.2 mm Dia. ( <b>Warranty Period</b> : Upto 12 months from the date of supply)							
<b>Basic Rate: Rs.</b>							
Consignee	PO Sr.	DELIVERY SCHEDULE			S.Tax/VAT	Freight Charges	Other Charges II
		Commence	Complete	Ordered Qty.			
SSE/WLD/JAMALPUR	001	0 days	05/10/24	5,200.000	GST @ 18 %	--	--
<b>Other Terms and Conditions</b>							
1 FOR Destination							
2 Mode of Despatch By Road.							
3 Payment Terms 100% against R/note.							
4 Security Money Waived being PO value less than Rs.25 Lakhs. In this case, if the supplier fails to supply the goods as per conditions of contract, Eastern Railway, General Tender Condition as amended from time to time, purchaser shall have right to levy damages from the supplier for failing to comply with the contractual conditions, not by way of penalty, an amount equal to SD amount (5% of contract value), as would have been applicable if the contract was with a non-exempted vendor. These damages shall be treated as recoveries outstanding against the vendor and dealt with accordingly.							
5 Standard Governing Conditions IRS Conditions of Contract: The contract shall be governed by latest version (along with all correction slips) of IRS conditions of contract, and all other terms and conditions incorporated in the tender documents.							
Digitally Signed by Shekhar Biswas, AMMP/HQ-II ammphq2@er.railnet.gov.in for Principal Chief Materials Manager, Eastern Railway for and on behalf of the President of India							
[PO.Key: 5948423; ;Autogenerated PO(non-editable)]							



**Larsen & Toubro Limited**  
**L&T Energy-Power**  
 L&T Knowledge City Gate No.1  
 NH-8, Ajwa-Waghodia Crossing  
 Vadodara 390019 Gujarat INDIA

# PURCHASE ORDER TEST PREVIEW

**PO NO. :EPC/E77/21001-56744/  
 ANNEXURE - I**  
 Page No:2 of 16

Item No	Material/ Service Code HSN/SAC Code	Material / Service Description HSN/SAC Code Description	Total PO Quantity	Unit	Rate / Unit (INR)	Item Total Value (INR)	Scheduled Quantity	Delivery Date
1	6M32M004F000000 83112000	FLUX-CORED ARC WELDING (FCAW) WIRE ; CLA FLUX-CORED ARC WELDING (FCAW) WIRE ; CLASSIFICATION :- E-71T1; BRAND :- AUTOMIG FC 121; DIAMETER :- 1.2 mm; FLUX-CORED ARC WELDING (FCAW) WIRE ; CLASSIFICATION :- E-71T1; DIAMETER-1.2 mm;SUPERCORE 71 T-1 With BTC	16,000,000	kg			16000.000	30.05.20

Tax: GST: ICGST 18% Ded

**Subtotal(Inc.Tax):**

**Summary:**

Total Gross Price  
 Total IN: Integrated GST

**Total Value (Rounded off to) :           INR**  
**Rupees -**

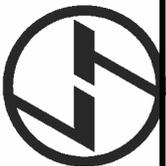
**For Larsen & Toubro Limited  
 L&T Energy-Power**

**SAMUDRAMAN BANDOPADHYAY  
 Head - Supply Chain Management, L&T Power**

Continue..

L.C.: 22.03.2023 14:44:31

Our Reference :



**Larsen & Toubro Limited**  
**L&T Energy-Power**  
 L&T Knowledge City Gate No.1  
 NH-8, Ajwa-Waghodia Crossing  
 Vadodara.390019 Gujarat INDIA

# PURCHASE ORDER

**PO NO. :EPC/E74/21001-56086/ PB**  
**ANNEXURE - I**  
 Page No:2 of 16

Item No	Material/ Service Code HSN/SAC Code	Material / Service Description HSN/SAC Code Description	Total PO Quantity	Unit	Rate / Unit (INR)	Item Total Value (INR)	Scheduled Quantity	Delivery Date
1	6M32M002S000001 83112000	FLUX-CORED ARC WELDING (FCAW) WIRE ; DI FLUX-CORED ARC WELDING (FCAW) WIRE;CLASSIFICATION:-E-71T1;BRAND:-SUPERCORE-71-T1 ;DIAMETER:-1.2 mm Flux Cored Arc Welding (FCAW) Wire dia 1.2mm E71 T1 D&H India Make Brand Name SUPERCORE 71-T1 along with BTC. Standard Pack Size : 15Kg Spool	9,000.000	kg			9000.000	31.03.20

		<b>Tax: GST: CGST + SGST 18% Ded</b>		<b>Subtotal(Inc.Tax):</b>			
2	6M32M004D000000 72299016	GAS METAL ARC WELDING (MIG) WIRE; CLASSI GAS METAL ARC WELDING (MIG) WIRE; CLASSIFICATION :- ER70S6; BRAND :- AUTOMIG 70S - 6; DIAMETER :- 1.2 mm; ER 70 S6 Size 1.2mm D&H India Make Brand Name : MIGARC WS-6 along with BTC. Standard Pack Size : 15Kg Spool	9,000.000	kg		9000.000	31.03.20

**Tax: GST: CGST + SGST 18% Ded**      **Subtotal(Inc.Tax):**

**Summary:**

Total Gross Price  
 Total IN: CENTRAL GST  
 Total IN: STATE GST

**Total Value (Rounded off to) :**      **INR**  
**Rupees -.**

**For Larsen & Toubro Limited**  
**L&T Energy-Power**

**PANCHANAN BEHERA**  
**Asst. General Manager**

This Document is Electronically Authorised &  
 does not require Signature.

Continue..

L.C.: 01.03.2023 17:43:55

Our Reference :



**DRAFT CONSUMABLES**

Format No. : DEE/PUR/F02 Rev00

Page No : 1 of 5

<b>Invoice to</b> <b>DEE DEVELOPMENT ENGINEERS LIMITED</b> ASAWOTI ROAD, TATARPUR, DISTT. PALWAL - 121102 GST No. : 06AACCD0207H1ZA Phone No.: 288960 Fax No.: 91-01275-248314 Email: info@deepiping.com	<b>Order No.</b> <b>PO/23-24/005501</b>		<b>Dated</b> <b>10-01-24</b>	
	Material Against Form		Test Certificate Req.- Type/Routine	
	Order Prepared By DDEL\DHIVESH.VASUDEVA		Approved By: DDEL\DHIVESH.VASUDEVA	
	<b>Price Basis</b> Delivered Duty Paid			
	<b>Transport Method</b>		<b>Tolerance</b> <b>ve</b>	0.00
Road		<b>Tolerance -</b> <b>ve</b>	0.00	
<b>Terms of Payment</b> 100% Payment within 90 days after material receipt				
Requisition Raised By Requisition Raised For PO Currency Amendment No. & Date 0 Requested Delivery Date 31-01-2024				

Remarks : Deliveries as per given schedules only.

SNo	Description of Goods	HSN/SA C No.	Qty	UO M	Rate/Base (per unit)	LineAmt	Disc	GSTBase	CGST	SGST	IGST	Tot Amt
									Rate	Rate	Rate	
1	C3FCWE347T11.2M M	8311200 0	510.00	KG					0	0		
	.. , Flux Cored Wire E347T-1-1, 1.2mm, , MAKE:D&H INDIA											
	Remark:											
2	C3FCWE71T1M1.2 MM	8311200 0	2,002.0 0	KG					0	0		
	.. , Flux cored wire, E71T-1M,1.2MM, , MAKE:ROYAL ARC											
	Remark:											
3	C3FCWE81T1M211. 2MM	8311200 0	255.00	KG					0	0		
	.. , Flux cored ,E81T1- M21PY 1.2MM, A1 H8, MAKE-D&H INDIA											



**DRAFT CONSUMABLES**

Format No. : DEE/PUR/F02 Rev00

Page No : 1 of 5

<b>Invoice to</b> <b>DEE DEVELOPMENT ENGINEERS LIMITED</b> ASAWOTI ROAD, TATARPUR, DISTT. PALWAL - 121102 GST No. : 06AACCD0207H1ZA Phone No.: 288960 Fax No.: 91-01275-248314 Email: info@deepiping.com	<b>Order No.</b> <b>PO/23-24/001986</b>		<b>Dated</b> <b>23-07-23</b>		
	Material Against Form		Test Certificate Req.- Type/Routine		
	Order Prepared By DDEL\DHIVESH.VASUDEVA		Approved By:		
	<b>Price Basis</b> Delivered Duty Paid				
	<b>Transport Method</b> Road		<b>Tolerance</b> <b>ve</b>	0.00	
			<b>Tolerance -</b> <b>ve</b>	0.00	
	<b>Terms of Payment</b> 90 days PDC from date of invoice.				
Requisition Raised By Requisition Raised For PO Currency Amendment No. & Date 0 Requested Delivery Date 30-08-2023					

**Remarks : Deliveries as per given schedule only**

SNo	Description of Goods	HSN/SA C No.	Qty	UO M	Rate/Base (per unit)	LineAmt	Disc	GSTBase	CGST	SGST	IGST	Tot Amt
									Rate	Rate	Rate	
1	C3FCWEE81T1B61. 2MM	7229	510.00	KG					0	0		
	,, , FLUX CORED WIRE E-81T1-B6 1.2 MM, , MAKE:D&H INDIA											
	<u>Remark:</u>											
2	C3FCWEE81T1B81. 2MM	7229	510.00	KG					0	0		
	,, , FLUX CORED WIRE E-81T1-B8 1.2 MM, , MAKE:D&H INDIA											
	<u>Remark:</u>											
3	C3WEE70182.5MM	8311100 0	5,000.0 0	NOS					0	0		
	,, , Welding Electrode, E7018-2.5MM, , MAKE:D&H INDIA											



# ARCEDES BUILDING INDIA LLP

4,5,6&16, SABAR INDUSTRIAL PARK, ASAL, NEAR SHAMLAJI, ARAVALLI (DT), GUJARAT - 383250

GSTIN : 24ABFFA9036L1ZA

Email : -

Phone No :0120-4229960

## PURCHASE ORDER

Approved

To  
**DEVANG STEEL**  
306, HARIPURA GAM., OP. ABHISHEK COMPLEX, CIVIL ROAD,  
AHMEDABAD, AHMEDABAD, Gujarat, India - 380015  
GST No. : 24AGGPP9533K1ZZ

Email: saikrupasteel@yahoo.com  
Contact : DEVANGBHAI PATEL (9825042450)

Please supply the following as per terms mentioned below.

**PO No : 241637**

Date : 24-Mar-2025 Rev :R0

Transport : Road  
Insurance : Included  
Penalty Clause : N/A  
Reference No : AS PER MAIL OFFER ON DATE - 17-03-2025  
Department : Production  
Freight : F.O.R AT OUR SHAMLAJI PLANT

Sr.	Item Description	Del. Date	Qty	Unit	Rate	Dis %	Tax	Amount
1	FLUX CORE WIRE 1.2MM - D&H INDIA WIRE DIA - 1.2 MM Grade - E71T1 Packing - 15 Kgs 1 PALLATE = 1080 KGS Make : D&H INIDA	30-Jun-2025	58,320.00	Kgs		0.00	18.0%	

58,320.00 Sub Total

Delivery At: **ARCEDES BUILDING INDIA LLP**  
4,5,6&16, Sabar Industrial Park, Near. Shamlaji, Asal, Dist-Aravalli,  
Asal, Gujarat, INDIA - 383250  
GST No. : 24ABFFA9036L1ZA

**Others :**

**Freight :**

**Taxable Value**

**Total GST**

Billing At: **ARCEDES BUILDING INDIA LLP**  
4,5,6&16, Sabar Industrial Park, Near. Shamlaji, Asal, Dist-Aravalli, Asal,  
Gujarat, INDIA - 383250  
GST No. : 24ABFFA9036L1ZA

**Grand Total**

**Remarks** MTC MUST BE REQUIRED ALONG WITH MATERIAL.  
DELIVERY - F.O.R AT OUR SHAMLAJI PLANT.

SPECIAL NOTE FOR OPEN ORDER.

1) THIS IS OPEN ORDER ONLY FOR 3 MONTH. MATERIAL TO BE SENT AGAINST THIS ORDER AS AND WHEN REQUIRED BY MAIL DISPATCH CLEARANCE ONLY.

2) PRICES ARE VALID FOR UP TO JUNE -2025

3) ARCEDES HAVE ALL THE RIGHT TO CANCEL THIS ORDER AS AND WHEN REQUIRED WITHOUT GIVING YOU INTIMATION.

4) PAYMENT WILL BE DONE ONLY AFTER OUR QC/PRODUCTION APPROVAL.

5) PLEASE SEND US NECESSARY TC & PACKING LIST ALONG WITH THE MATERIAL.

6) YOU HAVE TO SEND NECESSARY DOCUMENTS LIKE INVOICE, E-WAY BILL, AND DISPATCH DETAILS LR COPY OVER MAIL ONLY.

7) D.O.P CERTIFICATE, CPR CERTIFICATE & 3.1 TEST CERTIFICATE MUST BE REQUIRED ALONG WITH MATERIAL.

8) WE NEED THE SAME MATERIAL IN 6 LOTS. ( PER MONTH 2 LOTS )

DELIVERY - FOR AT SHAMLAJI PLANT.

### Payment Terms

Payment Type	Pay On	Pay(%)	Pay Days	BG	Remarks
Bills	Net	100.00	90	N	90 DAYS

### Terms and Conditions

- Any suit or proceedings to enforce the rights of either party shall only be instituted in the courts of ordinary civil jurisdiction in the city of Himatnagar.
- Any loss during transit will be on seller account.
- The prices shall remain firm till execution of the order.

PO NO : 241637



**ZAMIL STEEL BUILDINGS INDIA PRIVATE LIMITED**  
 Plot No: B-32/2,  
 MIDC,  
 Ranjangaon Industrial Area,  
 Pune,  
 Maharashtra- 412209.

**PURCHASE ORDER**

Page: 1 Of 4

Vendor Code : 5658 GST No: 23AAACD1999C2ZW  
 Vendor Name : D & H INDIA LIMITED  
 Attn. :  
 Address : Plot-A, Sector-A, Industrial Area, Sanwer Road,  
 Indore y 452015 (M.P.) India  
 City / Pin : Indore-452015  
 State : Madhya Pradesh  
 Country : India  
 Tel :  
 Emai :  
 Po Comment : Material Description:WELDING WIRE FLUX CORED 1.6 MM E71-T1C AS  
 PER AWS A5.20 (15 Kg Spool)

PO Number : 40414 Rev : 0  
 PO Date : 29-FEB-24 Date : 29-FEB-24  
 Buyer : AMRUT KATKAR  
 PO Type : ZSI-PUR-SEL  
 Shipped To : Zamil Steel Buildings India Pvt. Ltd.(Factory) Plot  
 No- B -32 /2, MIDC Ranjangaon MIDC 412209 --  
 -India  
 Payment Terms : 30 Days Credit  
 Freight Terms : CIF  
 Goods Origin :  
 Billed To : Zamil Steel Buildings India Pvt Ltd. (Head  
 Office),Plot No-02, Office No 101,AI-Monte  
 Software Park, 1st Floor,S.No-  
 8,,Kharadi,Pune,411014,MH,IN,Contact No -  
 020 30553000

PR NO. PR DATE

37272 29-FEB-2024

S.No.	Item#/Description Vend. Ship Dt/Note to Supp	HSN/SAC No.	JOB Num.	Delivery Date	Tax Rate(%)	Freight (INR)	Qty	UOM	Unit Price (INR)	Amount (INR)
1.1	10-70*91*PC WELDING WIRE FLUX CORED 1.6 MM E71-T1C AS PER AWS A5.20 (15 Kg Spool)  D & H Make	7214	CPPRJ	02-MAR-24	18		5040	KG		
Total:						<b>5,040.0000</b>	KG		Total :	
1	FRT_PURCH_1									.00
2	IGST_Rec_Domestic_18 PC									
<b>Grand Total :</b>										

**ZAMIL TAX DETAILS :-**

1. PAN NO : AAACZ1758R
2. TAN NO : PNEZ01938G
3. GST NO : 27AAACZ1758R1ZJ

**TERMS AND CONDITIONS :**

Terms and Conditions:

1. IMS (Integrated Management System - ISO 9001, ISO 14001 & ISO 45001) adherence -  
 Zamil Steel Buildings India Pvt. Ltd. is IMS (Integrated Management System) certified organization.  
 As a responsible organization to save our ecology and safety, Zamil Steel want to our all business associates to implement and follow the guidelines of IMS into their & our works premises and for direct & indirect deliverables.  
 For credential kindly visit to our website link : <https://www.zamilsteel.co.in/products/quality-assurance/>

APPROVAL DEATILS \*\*\* This is System Generated PO, Signature is not required \*\*\*



# PURCHASE ORDER

DRAFT

<b>ISGEC HEAVY ENGINEERING LTD.</b>		TEL: 01732-661298
VILL. RATTANGARH, YAMUNANAGAR, HARYANA - 135002, Haryana		Mobile No. 9813970680
Vendor Code: 1000001358		E-mail: sunder.atr@isgjec.com
<b>D &amp; H INDIA LIMITED</b>	<b>PURCHASE ORDER NO. / DATE</b>	<b>OUR GSTIN NO : 06AAACT5540K1ZB</b>
<b>GSTIN No :</b> 23AAACD1999C2ZW	M05 / 4500443130	<b>OUR CIN NO : L23423HR1933PLC000097</b>
	<b>Dated :</b> 17.07.2024	<b>PAN NO. : AAACCT5540K</b>
<b>PLACE OF SUPPLY</b> 06-Haryana		
<b>PLANT</b> 9005		
<b>LOCATION</b> HARYANA		

With reference to your offer under reference above, and all related correspondence, please arrange to supply the following items as per terms and conditions, including all the enclosures to this Purchase Order.

Sr. no.	MATERIAL CODE	DESCRIPTION OF ITEMS	HSN/TDC/SKETCH/MAKE	Rev	Quantity	UOM	Rate(INR)	Discount	P&F Charges	IGST/CGST (%)	SGST/UGST (%)	Delivery Date
10	WCD0GXG309LT012	FLUX CORED WIRE E309LT0-1 DIA 1.2MM	PR No-300008275 HSN Code - 83112000		100	KG		NIL		18	0	17-08-2024
	Item Detail		TDC No - Sketch No-									
	Remarks		QAP No - Job No - Order -									
	Make											
	Hold											
	Material Long Text	FCAW WIRE E309LT0-1 As per technical specification TDOA-E309LT0-1 R5, Dated 31-12-2021, Size 1.2mm Dia. AWS A5.22 : E309LT0-1/4 EN ISO 17633-A : T 23 12 L R C1 M21 3 EN ISO 17633-B : TS 309L-F C1/M21 0										

**Remarks**

100% within 30 days of receipt and inspection

Term of payment

Price reduction clause

<b>PAYMENT MODE</b>	<b>INSURANCE</b>	<b>INSPECTION</b>	<b>FREIGHT</b>	<b>NET BASIC</b>	<b>P&amp;F</b>	<b>Testing Charge</b>	<b>OTHER CHARGES</b>	<b>GST</b>	<b>FREIGHT TO SUPPLIER</b>
RTGS	BY SUPPLIER		BY SUPPLIER		0	0	0		0

**Max Invoice Value** INR

**Amount in Words**

ISGEC HEAVY ENGINEERING LTD.

Mr. Sunder Atri

A) TERMS AND CONDITIONS MENTIONED IN ATTACHED ANNEXURE I ARE INTEGRAL PART OF THIS PO AND GOODS ARE TO BE STRICTLY SUPPLIED AS PER TERMS AND CONDITIONS OF THIS PO.  
 B) THE PRICES ARE FIRM TILL THE EXECUTION OF THE ORDER, UNLESS OTHERWISE AGREED IN WRITING. REPLACEMENTS FOR REJECTIONS ARE TO BE SENT WITHIN 15 DAYS.  
 C) ORDER ACK. CONFIRMING ALL TECH. CONDITIONS, DEL. PERIOD & ALL OTHER DETAILS INCLUDING DESCR., QUANTITY AND VALUE SHOULD BE SENT TO US WITHIN 7 DAYS OF THIS ORDER.

FOLLOWING DOCUMENTS (as applicable) ARE TO BE SENT ALONG WITH CONSIGNMENT

1. Original Tax Invoice ( Please mention our Material Codes along with HSN Codes.
2. Single Bill against multiple PO's are not allowed
3. Test Certificate / Guarantee Certificate



# PURCHASE ORDER

<b>ISGEC HEAVY ENGINEERING LTD.</b>		TEL: 01732-661298										
VILL. RATTANGARH, YAMUNANAGAR, HARYANA - 135002, Haryana		Mobile No. 8930111661										
Vendor Code: 1000001358		E-mail. sanjeev.kamth@isgjec.com										
<b>D &amp; H INDIA LIMITED</b>		<b>INCOTERMS: FOB / FOT ISGEC;</b>										
GSTIN No: 23AAACD1999C2ZW		Yamuna Nagar-ISGEC RATTANGARH										
PLOT -A, SECTOR-A, INDL AREA, SANWER ROAD, INDORE 452015		OUR GSTIN NO : 06AAACT5540K1ZB										
Madhya Pradesh India - Region : 23		OUR CIN NO : L23423HR1933PLC000097										
E-mail : DINESHKUMAR@DNHINDIA.COM		PAN NO. : AAAC15540K										
Phone No : 9650216032		MODE OF DESPATCH										
With reference to your offer under reference above, and all related correspondence, please arrange to supply the following items as per terms and conditions, including all the enclosures to this Purchase Order.												
Sr. no.	MATERIAL CODE	DESCRIPTION OF ITEMS	HSN/TDC/SKETCH/MAKE	Rev	Quantity	UOM	Rate(INR)	Discount	P&F Charges	IGST/CGST (%)	SGST/UGST(%)	Delivery Date
10	WCD0CXG81T1B 212	FLUX CORED WIRE E81T1-B2C DIA 1.2MM	PR No-300014353 HSN Code - 83112000		300	KG		NIL		18	0	10-04-2025
	Item Detail		TDC No -									
	Remarks		Sketch No-									
	Make		QAP No-									
	Hold		Job No -									
	Material Long Text	FCAW WIRE ASME SEC II PART C 2019 SFA-5-29 E81T1-B2C BS EN ISO 17634-A : T(CrMo1) PCT OR BS EN ISO 17634-B : T55ZT1-1C-1CM AS PER TECH.SPEC.TDQA/E81T1-B2C REV.4 DATED 31.12.2021 SIZE 1.2 MM.	Order -									
20	WCA04EXE7018 25	E7018 SMAW ELECTRODE, Dia 2.4/2.5MM	PR No-300014353 HSN Code - 83111000		6,250	EA		NIL		18	0	10-04-2025
	Item Detail		TDC No -									
	Remarks		Sketch No-									
	Make		QAP No-									
	Hold		Job No -									
	Material Long Text	SMAW ELECTRODES E7018 DIA 2.5MM	Order -									



**NUBERG EPC**  
Making Ideas Happen

**Nuberg Engineering Ltd.**  
Plot no.679, Road no.07,,GIDC Estate, Jhagadia, Bharuch,Gujarat,393110  
GSTIN No.:24AAACN3523A1Z9 CIN No.:U74210DL1996PLC079817

**PURCHASE ORDER**

Vendor Details		Reference Details	
Code	:11002886	PO. No.	:4500019608 Date:17.07.2024
Name	:D & H INDIA LTD	Amendment No.	:0 Date:17.07.2024
Address	UNIT I , PLOT 'A' SECTOR 'A' INDUSTRIAL AREA , SANWER ROAD INDORE Madhya Pradesh 452015	P.R. No.	:1000010682 Date:13.07.2024
		Contact Person	:HFD-MUNEND-MUNENDRA RAGAV
Contact Person	:MR SK GUPTA	Telephone	:1202406475-77
Contact No.	:7669432894	Email ID	:munendra@nuberg.in
Email	:	PO Currency	:INR-Rupee
GSTIN	:23AAACD1999C2ZW	Inco Terms	:EXW-INDORE
		Purchase Group	:NBEL-HFD
		Material Group	:CO0001-Consumables

Dear Sir,  
We are pleased to place our order for the following material(s) subject to terms and conditions and instructions specified in this PO. Please address all bills and correspondence mentioning our order. Kindly mentioned our item code & Purchase order No. with applicable HSN Code on the Invoice.

Sno.	Material Code/HSN Material Description Tag No./Item Text Project	Quantity UOM Delivery Date	Unit Price	Gross Value
1	90004544/8311 FCAW WIRE SPOOL, E309LMOT1-4, 1.2MM DIA 1231 ALL TAG FCAW WIRE SPOOL,E309LMoT1-4, 1.2MM DIA Make: D&H secheron, Ador, Bohler, Superon etc. 1231	100.000 KG 20.07.2024		
2	90002909/8311 FCAW WIRE SPOOL, E316LT1-4, DIA-1.2 1231 ALL TAG FCAW WIRE SPOOL,E316LT1-4, 1.2MM DIA Make: D&H secheron, Ador, Bohler, Superon etc. 1231	150.000 KG 20.07.2024		
		<b>Discount</b>		
		<b>Total Gross Value</b>		

**Terms & conditions**  
Terms Of Payment: 45 DAYS PDC  
  
Insurance:  
  
Freight: EXTRA AT ACTUAL  
  
Dispatch Mode: BY ROAD

**Pricing Components**  
Subtotal 1  
**Tax Components**  
IGST 18.000  
Subtotal 2

Amount in Words:

Total Value (INR)

Remarks:

Prepared By *[Signature]*

Checked By *[Signature]*

Authorized By *[Signature]*

Corp.Office: A-38H Nuberg House, Sector-64, Noida-201301 (INDIA)  
Regd.Office: 204, Second Floor, Vardhaman Sunrise Plaza, Vasundhara Enclave, Delhi- 110096

Page 1 of 2  
17/07/2024

## PURCHASE ORDER

Approved On: 30.12.2024

**G R INFRAPROJECTS LIMITED**

(CIN:L45201GJ1995PLC098652)

**Registered Office:** Revenue Block No. 223, Old Survey No. 384/1, 384/2 Paiki and 384/3, Khata No. 464, Kochariya, Ahmedabad, Gujarat -382220, India Email: info@grinfra.com

**Corporate Office:** Novus Tower, 2nd Floor Plot No-18, Sector 18 Gurugram-122015, Haryana, India Ph: +91-124-6435000, Email: delhi@grinfra.com, Website: www.grinfra.com

**Vendor Details****Vendor Code:** 338644

GSTN No : 23AAACD1999C2ZW

M/s D&amp;H INDIA LIMITED

Plot A Sec A, Industrial Area, Sanwer Road

INDORE- 452015, Madhya Pradesh, India

**Tel. No:** 9839077939**Email:** enquiry@dnhindia.com**PO No:** 3600199603**Date:** 26.12.2024**PR No:** 130143722**Date:** 20.12.2024**Plant Code:** BAAR (BANDIKUI-JAIPUR)**Buyer Name:** Ranjeet Kumar**Buyer Mob:** 9257046738**Buyer Ph:****Vendor Ref:****Billing Address**

G R INFRAPROJECTS LIMITED

Khasra No.211/1,212/1,212/7,212/9,269/212, 215/4,272/212,

Village- Borai, Patwar Halka- Nangalbohra, Tehsil- Bassi, Borai

Jaipur- 303305, Rajasthan, India

**GSTN NO.:**08AAACG5306N1ZI**Delivery Address**

G R INFRAPROJECTS LIMITED

Khasra No.211/1,212/1,212/7,212/9,269/212, 215/4,272/212,

Village- Borai, Patwar Halka- Nangalbohra, Tehsil- Bassi, Borai

JAIPUR- 303305, Rajasthan, India

**Site Contact Details**

We are pleased to place our order on you for the following materials/services subject to terms &amp; conditions and instructions specified here.

SNo	Item Code / HSN Code Item Description	Delivery Schedule	UOM	Quantity	Rate ₹	Disc (%)	Amount ₹
1	201002369 / 75051999 <b>MIG WIRE</b> FCAW WIRE MAKE-D&H E71-T1- FCW SUPERCORE-7IT-1 Size-1.2mm 15 Kg per Spool (RDSO Approved)	19.01.2025	KG	7,000			

**Remarks:**

Material required of Structure dept. for ROB at BAAR site.

Basic

IGST

Total Order Value

**IGST for Line No. :** 1 has:18.0%**Amount in words:** Rs.**Special Instructions:** Kindly put PO No. in all documents (Invoice, Challan & Lorry Receipt etc.)

Standard terms &amp; conditions as per annexure enclosed.

**Terms & Conditions:****1.Price Basis & Incoterms:** FOR

Camp35

**2.Packing & Forwarding:** Inclusive

In above price

**3.Transportation:** Inclusive, to be borne by supplier**4.GST:** GST Extra shall be applicable as mentioned above.

a) GST Clause - The supplier must provide GST compliant tax invoice containing all the particulars as per GST Act and Rules. As

For **G R INFRAPROJECTS LIMITED**

Authorized Signatory



### Purchase Order

**Invoice To**

GS PEB & Civil Works Pvt. Ltd.  
E01,Village: Loni Deokar, Indapur MIDC, Pune 413132

PO No      POD240890058      PO Date      07/08/2024  
Delivery    As Per Schedule      PO Validty   05/11/2024  
Payment    As Per Terms      PO For      PEB

**Dispatch To**

GSPVLIM  
E01,Village: Loni Deokar, Indapur MIDC, Pune 413132

Contact    Shikharchand      Mobile No    7507779686  
              Udaghale  
GST No     27AAGCG8840H1ZC      PAN No     AAGCG8840H  
Project     GSPVLIM#PRJ23060001

**Supplier**

D and H India Limited#SUP240174  
Plot A Sector A industrial Area Sanwar road Indore MP

GST No     23AAACD1999C2ZW      PAN No     AAACD1999C  
Contact    Mr.Anil Kumar Raut  
Person  
Mobile No   9552374795

No	Part Description	HSN Code	UOM	Qty	Rate	Amount	GST	Total Amount
1	Fluxcore Wire 1.2mm dia AWS A5.20 E71T-1 Specification :- D&H India make	83112000	Kg	5400.000				

Remark  
ok

<b>Amount</b>
Discount
<b>Total Amount</b>
Total CGST
Total SGST
Total IGST
Transport
Tran.CGST   0%
Tran.SGST   0%
Tran.IGST   0%
Other
Other.CGST   0%
Other.SGST   0%
Other.IGST   0%
TCS           0.000

**Note: - Please Refer Below Terms and Conditions.**

**Grand Total**



379-014

# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI - 14

## RADIOGRAPHY TEST REPORT

REGISTRATION NO	NDT/2425/0176	REPORT NO	RTRP/2425/0173
ISSUED TO/SECTION	Weldability Lab	REPORT DATE	15-05-2024
WORK ORDER NO	7-376-115-24001	JOB ID	24001-1
TESTING STANDARD	ASME SEC V	TESTING PROCEDURE	TP NDT RT 04
DIMENSION	350 X 250 X 20 mm	ACCEPTANCE STANDARD	ASME II C/SFA 5.20
MATERIAL	CARBON STEEL	JOB TYPE	PLATE
TECHNIQUE	SWSI	THICKNESS	20 mm
SOURCE USED	IRIDIUM 192	STAGE OF INSPECTION	WELD-COMPLETED
SOURCE SIZE	2.7 X 1.8 mm	FILM	D7
TUBE VOLTAGE	--- kV	SCREEN	LEAD SCREEN
FFD/SFD	500 mm	EXPOSURE	200 Cimin/mamIn
IQI USED	ASTM 25	DENSITY	2 - 3
IQI POSITION	SOURCE SIDE	SENSITIVITY	2/2T

JOB ID	RT NO	SEGMENT	OBSERVATIONS	RESULT
24001-1	RT 0173	0 - 1	SURFACE DEPRESSION	ACCEPTABLE

AUTHORIZED SIGNATURE

**S. GUNASEKAR**  
ASNT NDT Level III - MT, RT, UT  
Certificate No. 191598  
Welding Research Institute  
BHEL, Tiruchirappalli-14

### DISCLAIMER

1. This test report shall not be reproduced, except in full, without the prior approval of WRI.
2. The test results are only specific to the samples and data supplied by customer.
3. This is only a test report and not a test certificate.
4. Except to the extent of the expression of the test results / values as above said, in no event and under no circumstance BHEL shall be liable for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under any body against BHEL at any time arising out of, by reason of, or in any way related to this test report.



# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI - 14

379-014

## RADIOGRAPHY TEST REPORT

REGISTRATION NO	NDT/2425/0177	REPORT NO	RTRP/2425/0174
ISSUED TO/SECTION	Weldability Lab	REPORT DATE	15-05-2024
WORK ORDER NO	7-376-115-24001	JOB ID	24001-2
TESTING STANDARD	ASME SEC V	TESTING PROCEDURE	TP NDT RT 04
DIMENSION	350 X 250 X 20 mm	ACCEPTANCE STANDARD	ASME II C/SFA 5.20
MATERIAL	CARBON STEEL	JOB TYPE	PLATE
TECHNIQUE	SWSI	THICKNESS	20 mm
SOURCE USED	IRIDIUM 192	STAGE OF INSPECTION	WELD-COMPLETED
SOURCE SIZE	2.7 X 1.8 mm	FILM	D7
TUBE VOLTAGE	--- kV	SCREEN	LEAD SCREEN
FFD/SFD	500 mm	EXPOSURE	200 Cimin/mamIn
IQI USED	ASTM 25	DENSITY	2 - 3
IQI POSITION	SOURCE SIDE	SENSITIVITY	2/2T

JOB ID	RT NO	SEGMENT	OBSERVATIONS	RESULT
24001-2	RT 0174	0 - 1	SURFACE DEPRESSION	ACCEPTABLE

AUTHORIZED SIGNATURE

**S. GUNASEKAR**  
ASNT NDT Level III - MT, RT, IR  
Certificate No. 19158v  
Welding Research Institute  
BHEL, Tiruchirappalli

### DISCLAIMER

1. This test report shall not be reproduced, except in full, without the prior approval of WRI.
2. The test results are only specific to the samples and data supplied by customer.
3. This is only a test report and not a test certificate.
4. Except to the extent of the expression of the test results / values as above said, in no event and under no circumstance BHEL shall be liable for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under any body against BHEL at any time arising out of, by reason of, or in any way related to this test report.



379-014

# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI - 14

## RADIOGRAPHY TEST REPORT

REGISTRATION NO	NDT/2425/0259	REPORT NO	RTRP/2425/0256
ISSUED TO/SECTION	Weldability Lab	REPORT DATE	29-05-2024
WORK ORDER NO	7-376-115-24001	JOB ID	24001-1-H
TESTING STANDARD	ASME SEC V	TESTING PROCEDURE	TP NDT RT 04
DIMENSION	270 X 270 X 20 mm	ACCEPTANCE STANDARD	ASME II C / SFA 5.20
MATERIAL	CARBON STEEL	JOB TYPE	WELDED PLATE
TECHNIQUE	SWSI	THICKNESS	20 mm
SOURCE USED	IRIDIUM 192	STAGE OF INSPECTION	WELD-COMPLETED
SOURCE SIZE	2.7 X 1.2 mm	FILM	D7
TUBE VOLTAGE	--- kV	SCREEN	LEAD SCREEN
FFD/SFD	500 mm	EXPOSURE	150 Cimin/mamin
IQI USED	ASTM - 25	DENSITY	2 - 4
IQI POSITION	SOURCE SIDE	SENSITIVITY	2/2T

JOB ID	RT NO	SEGMENT	OBSERVATIONS	RESULT
24001-1-H	RT 0256	0 - 1	NO DEFECT	ACCEPTABLE

  
AUTHORIZED SIGNATURE  
S. GUNASEKAR  
ASNT NDT Level III - RT  
Certificate No. 1255  
Welding Research Institute  
BHEL, Tiruchirappalli

### DISCLAIMER

1. This test report shall not be reproduced, except in full, without the prior approval of WRI.
2. The test results are only specific to the samples and data supplied by customer.
3. This is only a test report and not a test certificate.
4. Except to the extent of the expression of the test results / values as above said, in no event and under no circumstance BHEL shall be liable for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under any body against BHEL at any time arising out of, by reason of, or in any way related to this test report.



379-014

# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI – 14.

Page 1 of 1

## TEST REPORT

### TENSILE TEST REPORT

Report No.	MT 016/ 24-25	Date	07.06.2024
Issued To	Weldability Lab	Work Order No./ Ref. No.	7-376-115-24001
Test Conducted At	Fatigue Testing Lab	Equipment Used	W+B 600kN
Description of Test Item	BM:CS, Filler:E71T1-1C All Weld Tensile specimen	Test Standard / Procedure	AWS B4.0
Identification	AR,AH.		
Date of Receipt of Test Item	07.06.2024	Date / Period of Test	07.06.2024

Room Temperature : 25°C

### TEST RESULTS

Idfn.	Specimen Size in mm	Y.S. in MPa	U.T.S. in MPa	%Elongation (G.L = 50mm)	% RA	Position of Fracture
AR	Ø13.07	481	545	33	74	Center
AH	Ø13.04	466	557	30	69	Center

  
07.06.24  
**M. MADHU**  
Authorised Signatory  
Welding Research Institute  
Bharat Heavy Electricals Ltd.  
Tiruchirappalli - 620 014.

### DISCLAIMER

1. This test report shall not be reproduced, except in full, without the prior approval of WRI.
2. The test results are only specific to the samples and data supplied by customer.
3. This is only a test report and not a test certificate.
4. Except to the extent of the expression of the test results / values as above said, in no event and under no circumstance shall BHEL be liable for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under anybody against BHEL at any time arising out of, by reason of, or in any way related to this report.

 PLANT LABORATORY Bharat Heavy Electricals Limited Tiruchirappalli 620 014 374-219/E 09-05-2024	Report Issued to: MANAGER/WRI Reference No. : ----- Description : IMPACT TEST SAMPLE - 10 No. (Samples drawn by customer)		Dt: 07-06-2024	Lab Ref No: Date: 13-06-2024 Page No: 01 of 01
	MATERIAL TEST REPORT	Material Spec: Filler Size:	PM:CS Ø1.60mm	PROJECT: SO.NO: SL.NO: WO.No:
Project Description: DU No: Lot No	ITEM No: DRG No/MELT. NO: Material Code: Supplier's Name:	----- ----- ----- -----	Pre Heat HT Condition: Welding Process: Consumable:	----- FCAW E71T-1C

SAMPLE RECEIVED ON: 07-06-2024 TEST COMPLETED ON: 13-06-2024 TEST TEMP: 25°C

**1). IMPACT TEST: C'V'N -2.0mm; SIZE: 05X10X55mm; TEST TEMPERATURE(-20°C) (TEST METHOD: ASTM E23-23a)**

Ref	Location	Notch Orientation	ENERGY (joule)
AR 1	Weld	Perpendicular to Weld surface	136.0
AR 2			108.2
AR 3			61.2
AR 4			136.6
AR 5			74.9
AH 1			152.9
AH 2			165.0
AH 3			186.3
AH 4			145.7
AH 5			142.5

Remarks: Is statement of conformity requested: No;

Test as Per: AWS B 4.0	File No: 12	Reviewed & Approved by (for Mechanical)	Reviewed & Approved by (Chemical)
Witnessed by: -----	 Signature of the Plant Laboratory Authority	-----NA----- Signature of the Plant Laboratory Authority	-----NA----- Signature of the Witnessing Officer

THIS REPORT CONSISTS OF PAGES - 1

Plant Laboratory  
 BHEL, Tiruchy - 620 014.

1. This is only a test report and not a test certificate.
2. The results relate only to the item(s) (sample(s)) received and received at Plant Laboratory.
3. The report shall not be reproduced except in full, without the written approval of Plant Laboratory.



# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI – 14.  
DIFFUSIBLE HYDROGEN TEST RECORD SHEET

20/05/2024

Laboratory : Welding Research Institute  
 D.H., NO. : WRI/DH/2024-25/01  
 Requester : ET SECTION/ WRI  
 Internal work order : 7-376-115- 24001  
 Testing Standard : AWS A 4.3  
 Welder's Name : Mr. S SenthilKumar/WRI  
 Welding Process : FCAW  
 Electrode Brand & Class : E71T-1C (SUPERCORE 71-T1)/A 5.20  
 Electrode Batch/ Lot No : FCW-0141 / Apr 2024  
 Electrode Size, mm :  $\Phi$  1.60mm (FCAW)  
 Polarity : DCEP  
 Specimen Stored AT, °C : - 60 °C  
 Atmospheric Humidity(welding) : 80 %  
 Room Temperature, °C(welding) : 28°C  
 Deposition Base Material Spec. : A 36  
 Dimension, mm : 80 x 25 x 12 mm

### Welding Detail:

Sample ID	1	2	3	4
Current(in Amps)	230 A	230 A	230 A	230 A
Voltage(in Volts)	22.6 V	22.6 V	22.6 V	22.6 V
Weld Length(in mm)	128	128	128	128
Arc Time(in sec)	27	27	27	27
Average Heat Input(in J/mm)	1130	1130	1130	1130

Insertion Day & Time : 15.05.2024 / 1130 hrs  
 Measurement Day & Time : 18.05.2024 / 1130 hrs  
 Atmospheric Temperature (Testing): 27°C  
 DH Specimen temperature (72 hrs) : 45°C  
 Barometric Pressure : 757 mm Hg

### Test Results:

Sample ID	Initial Vol. of Gas (ml)	Final Vol. of Gas (ml)	Vol. of Gas (ml)	Initial Weight (g)	After 72 hrs. Final Weight (g)	H Value (mm)	Vol. of Diffusible Hydrogen (ml/100 g)
1	0.0	0.70	0.70	195.77	209.17	285	2.774
2	0.0	0.60	0.60	190.41	204.07	280	2.371
3	0.0	0.55	0.55	191.83	205.78	286	2.106
4	0.0	0.70	0.70	195.55	208.45	285	2.882

Average DH, ml/ 100 g deposit : 2.533

Authorized Signature  
 R. Ravibharath  
 Manager

Welding Research Institute  
 Bharat Heavy Electricals Limited  
 Tiruchirappalli - 620 014.

### DISCLAIMER

1. This test report shall not be reproduced, except in full, without the prior approval of WRI.
2. The test results are only specific to the samples and data supplied by customer.
3. This is only a test report and not a test certificate.
4. Except to the extent of the expression of the test results / values as above said, in no event and under no circumstance shall BHEL be liable for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under anybody against BHEL at any time arising out of, by reason of, or in any way related to this report.



# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI – 14

Report No: MET/03/2024-25

DATE : 13/06/2024

01. Issued to : ELECTRODE TESTING  
02. Work order no. : 7-376-115-24001  
03. Test std. / code : ASME Section II C (SFA 5.20)  
04. Test conducted at : WRI  
05. Description of Test item : Fillet Weld joint  
06. Specimen identification : As given below  
07. Electrode/Filler wire : E 71T1-1C ( $\Phi$  1.60 mm)  
08. Date of receipt of test item : 13/05/2024  
09. Date of testing : 12/06/2024

### Macro and visual examination observation

Sl No	Identification	Fillet weld leg measurements(mm)	Diff. Between fillet weld legs (mm)	Convexity (mm)	Comments/Defects found
01	A3F-1	8.15 & 6.14	2.01	0.97	No significant weld defect observed
02	A3F-2	5.98 & 8.82	2.84	0.67	
03	A4F-1	7.28 & 6.54	0.74	0.64	
04	A4F-2	7.84 & 6.38	1.46	0.87	

  
Dr. D. Ravibharath  
Mgr/WRI  
Manager

Welding Research Institute  
Bharat Heavy Electricals Limited  
Tiruchirappalli - 620 014.

 <b>PLANT LABORATORY</b> Bharat Heavy Electricals Limited Tiruchirappalli 620 014 374-219/E 09-05-2024	Report Issued to: Manager/ WRI. Reference No : NIL, Dt: 07-05-2024 Description : TEST PIECE - 1 No.		Lab Ref No: Date: Page No:	MTL:275/2024 11-05-2024 01 of 01
	MATERIAL TEST REPORT Material Spec: Material Size:	Project: W.O. No: Pre Heat HT Condition: Welding Process: Filler:		
Product Description: Welder No: ID No:	TDC No: DRG No/MELT. No: HEAT No: Supplier's Name:		7-376-115-24001 NA --- FCAW E71T-1C	

SAMPLE RECEIVED ON: 07-05-2024 TEST COMPLETED ON: 10-05-2024 TEST TEMP: -

**CONSUMABLE:**

Specification	Size (mm)	Brand	Batch No.
E71T-1C	Dia 1.6 mm	-	-

**1). CHEMICAL COMPOSITION (%): (TEST METHOD: ASTM E415-2021)**

Chem Ref. No.	C	Si	Mn	P	S	Cr	Mo	Ni	V	Al	Cu
0387	0.050	0.565	1.385	0.010	0.010	0.031	<0.007	0.017	0.014	0.011	0.009

Remarks: Is statement of conformity requested : No

Test as Per: ASME SEC.II Part -C-2023, SFA 5.20. Witnessed by: -----	File No.: 04	Signature of the Plant Laboratory Authority -----NA-----	Signature of the Witnessing Officer -----NA-----
Reviewed and Approved by (for Mechanical)		Reviewed and Approved by (for Chemical)	

THIS REPORT CONSISTS OF PAGES - 1

1. This is only a test report and not a test certificate.  
 2. The results relate only to the item(s) [sample(s)] received and received at Plant Laboratory.  
 3. The report shall not be reproduced except in full, without the written approval of Plant Laboratory.



# WELDING RESEARCH INSTITUTE

BHEL, TIRUCHIRAPPALLI – 14.

Page 1 of 1

379-014

## TEST REPORT

### FRACTURE TEST REPORT

Report No.	MT 023 / 24-25	Date	26.06.2024
Issued To	ET Group	Work Order No.	7-376-115-24001
Test Conducted At	FM & MT Lab	Equipment Used	W+B 600kN
Description of Test Item	CS and E71T-1C -FCAW Fillet weld joint	Test Standard / Procedure	SFA 5.20
Identification	A-3F,A-4F.		
Date of Receipt of Test Item	25.06.2024	Date / Period of Test	25.06.2024

### TEST RESULTS

Idfn.	Observation	SKETCH
A - 3F	Fracture at weld center, no significant weld defects seen	
A - 4F	Fracture at weld center, no significant weld defects seen	

*[Signature]*  
 26/06/24  
 Authorised Signatory  
 Deputy Manager  
 Welding Research Institute  
 Bharat Heavy Electricals Ltd.  
 Tiruchirappalli - 620 014.

### DISCLAIMER

1. This test report shall not be reproduced, except in full, without the prior approval of WRI.
2. The test results are only specific to the samples and data supplied by customer.
3. This is only a test report and not a test certificate.
4. Except to the extent of the expression of the test results / values as above said, in **no event and under no circumstance shall BHEL be liable** for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under anybody against BHEL at any time arising out of, by reason of, or in any way related to this report.



**WELDING RESEARCH INSTITUTE  
BHEL, TIRUCHIRAPPALLI – 14.  
Electrode Qualification Test Report**



<b>Report No: WRI: ET:24001</b>	<b>Report Date : 26-06-2024</b>	<b>Page 1 of 4</b>
WRI WO No. & Date:	7-376-115-24001 Dt 10.04.2024	
Brand Name:	"SUPERCORE 71 T-1"	
Flux Cored Electrode Diameter	Ø 1.60 mm	
Batch Number	FCW-0141	
Document / Code of Testing:	Set as per AWS SFA-5.20M & BHEL, Bhopal Technical specification FBW/WD&T/TS11 Rev 10 ( <b>E71T-1C</b> Ø. 1.60 mm Flux Cored Electrode)	
Tests conducted	<ol style="list-style-type: none"> <li>1. Chemical Test</li> <li>2. Radiographic Test</li> <li>3. Tensile Test</li> <li>4. Impact Test</li> <li>5. Fillet Weld Macro Test</li> <li>6. Fillet Weld Fracture Test</li> <li>7. Diffusible Hydrogen Test</li> </ol>	

1

**Test Results:**

**1. Chemical Test**

Test values (Single values specified are Maximum value)

Test Report No.	Current Polarity	Sample ID	C 0.12	Mn 1.75	Si 0.90	P 0.03	S 0.03	Cr 0.20	Ni 0.50	Mo 0.30	V 0.08	Cu 0.35
MTL:275/2024	DCEP	0387	0.050	1.385	0.565	0.01	0.01	0.031	0.017	<0.007	0.017	0.009

**2. Radiographic Test**

Test Report No.	Current Polarity	Identification	Observations	Remark
RTRP/2425/0173	DCEP	24001-1	Surface Depression	Acceptable
RTRP/2425/0174	DCEP	24001-2	Surface Depression	Acceptable
RTRP/2425/0256	DCEP	24001-1H	No defect	Acceptable



**WELDING RESEARCH INSTITUTE  
BHEL, TIRUCHIRAPPALLI – 14.  
Electrode Qualification Test Report**



<b>Report No: WRI: ET:24001</b>	<b>Report Date : 26-06-2024</b>	<b>Page 2 of 4</b>
---------------------------------	---------------------------------	--------------------

**3. Tensile Test**

Test Report No.	Current Polarity	Identification	Y.S in MPa (Min 390)	U.T.S in MPa (Min 490-670)	%EL (Min 22)	Remark
MT 016/24-25	DCEP	AR (as welded)	481	545	33	OK
	DCEP	AH (PWHT)	466	557	30	OK

**4. Impact Test**

Test Report No.	Current Polarity	Identification	Joules	Average, Min 27 J at -20°C	Single Value, Min 20 J at -20°C	Remark
MTL:342/2024	DCEP	AR (as welded)	136, 108, 61, 137, 75	106	61	OK
	DCEP	AH (PWHT)	153, 165, 186, 146, 143	155	143	OK

**5. Macro Test**

Test Report No	Current Polarity (Position)	Identification	Fillet weld Leg Size (mm)	Diff. Between Fillet weld Legs (mm)	Convexity (mm)	Remark
MET/03/2024-25	DCEP (3F)	A3F-1	8.15 & 6.14	2.01	0.97	OK
	DCEP (3F)	A3F-2	5.98 & 8.82	2.84	0.67	OK
	DCEP (4F)	A4F-1	7.28 & 6.54	0.47	0.64	OK
	DCEP (4F)	A4F-2	7.84 & 6.38	1.46	0.87	OK



**WELDING RESEARCH INSTITUTE  
BHEL, TIRUCHIRAPPALLI – 14.  
Electrode Qualification Test Report**



<b>Report No: WRI: ET:24001</b>	<b>Report Date : 26-06-2024</b>	<b>Page 3 of 4</b>
---------------------------------	---------------------------------	--------------------

**6. Fillet Weld Fracture Test**

Test Report No	Current Polarity	Identification	Observations	Remark
MT 023/24-25	DCEP	A-3F	Fracture at center No significant weld defects observed	OK
	DCEP	A-4F	Fracture at center No significant weld defects observed	OK

**7. Diffusible Hydrogen Test**

Test Report No	Current Polarity	Identification	Diffusible Hydrogen Content Average in ml/100 g Deposited Metal		Remark
			Individual Values	Overall Average	
WRI/DH/2024-25/01	DCEP	A	2.774, 2.371, 2.106, 2.882	2.533	OK

Digitally signed  
by  
**RAVIBHARATH  
RAJANBABU**  
Authorized Signatory  
Seal:

**Enclosures:**

Chemical Test Report	MTL:275/2024 Dt: 11/05/2024
Radiography Test Reports	RTRP/2425/0173 Dt: 15/05/2024 RTRP/2425/0174 Dt: 15/05/2024 RTRP/2425/0256 Dt: 29/05/2024
Tensile Test Report	MT 016/24-25 Dt: 07/06/2024
Impact Test Reports	MTL:342/2024 Dt: 13/06/2024
Macro Test Report	MET/03/2024-25 Dt: 13/06/2024
Fillet Weld Fracture Test	MT 023/24-25 Dt: 26/06/2024
Diffusible Hydrogen Test Reports	WRI/DH/2024-25/01 Dt: 20/05/2024



**WELDING RESEARCH INSTITUTE  
BHEL, TIRUCHIRAPPALLI – 14.  
Electrode Qualification Test Report**



<b>Report No: WRI: ET:24001</b>	<b>Report Date : 26-06-2024</b>	<b>Page 4 of 4</b>
---------------------------------	---------------------------------	--------------------

WRI: ET: 1.60/E71T-1C/06/24/01

**The Manager**  
Consultancy  
WRI / BHEL

**SUB:** Testing & Evaluation of **E71T-1C** Ø 1.60 mm Flux Cored Electrode –Reg  
Please find below the details of test results of Brand “**SUPERCORE 71 T-1**”

<b>A. Details of Consumable:</b>	
Type	<b>E71T-1C</b> FCAW Flux Cored Electrode
Reference	<b>AWS SFA-5.20M &amp; BHEL, Bhopal Technical specification FBM/WD&amp;T/TS11 Rev 10</b>
Test details	First Set Test for new approval
Test Report Number & DT	WRI: ET: 24001 Dt: 10/04/24
Brand Name	“ <b>SUPERCORE 71 T-1</b> ” Flux Cored Electrode
Flux Cored Electrode Diameter	Ø 1.60 mm
Batch Number	FCW-0141
<b>B. Evaluation of Test Results</b>	
The sample Flux Cored electrode brand “ <b>SUPERCORE 71 T-1</b> ” received from vendor is tested as per <b>AWS SFA-5.20M &amp; Bhopal Technical specification FBM/WD&amp;T/TS11 Rev 10</b> , Tests carried out are: Chemical Test, Radiographic Test, Tensile Test, Impact Test, Fillet weld of Macro Test, Fillet weld Fracture Test and Diffusible Hydrogen Test in Ø 1.60 mm size in current DCEP.	
<b>C. Conclusion:</b>	
As the brand Ø 1.60 mm size Flux Cored electrode has <b>Passed</b> in Test, the electrode is <b>Qualified</b> for approval.	

Digitally  
signed by  
**RAVIBHARAT  
RAJANBABU**  
(Dr. R. Ravibharat)  
Sr. Manager / WRI

**DISCLAIMER**

- This test report shall not be reproduced, except in full, without the prior approval of WRI
- The test results are only specific to the samples and data supplied by customer.
- This is only a test report and not a test certificate
- Except to the extent of the expression of the test results / values as above said, in **no event and under no circumstance shall BHEL be liable** for, any injuries, losses, damages, liabilities, claims, actions, causes of action, suits, promises, demands, or damages, of whatever nature or kind of legal action, whether based in law or in equity, including any claim for punitive or exemplary damages, that anyone in this regard claiming through or under any body against BHEL at any time arising out of, by reason of, or in any way related to the this test certificate.



TC-6035



PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
Tel: 022-35989348 / 8104723074  
Website: www accuratemetaweldservices.com  
Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
Plot 'A', Sector- 'A' Industrial Area,  
Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
T.C. No. : AM24/02669  
T.C. Date : 30-04-2024  
Sample Recd Date : 14-03-2024

LAB NO	AM24/02669-1	AM24/02669-2
--------	--------------	--------------

Details Given By customer	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: Filler Wire Qualification test for Initial Approval (All Weld Assembly)
Mat. Grade	: <--ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5-->
Size (mm)	: 1.20 1.60
Mat. Id.No.	: ST-12 ST-16
Batch No.	: FCW-0110 FCW-0114
Mfg Date	: 29-01-2024 29-01-2024
Brand Name	: <-----SUPERCORE-71-T1----->
Stamped /Sealed By	: ABS & DNV

Discipline : **Mechanical**  
Group : **Mechanical Properties of Metals - Welds & welded test specimens**  
Test Performed on : **19-04-2024**

Test Parameter	Test Result		Requirement
<b>Tensile as per Test Method</b>	<b>Marine Rules / ISO 6892-1: 2019</b>		
Gauge Dia (mm)	10.02	10.03	
Area (mm <sup>2</sup> )	78.85	79.01	
Gauge Length (mm) 5.65√A	50.00	50.00	
Yield load (N)	44872.63	44604.39	
Ultimate Load (N)	50532	50484	
Final Length (mm)	61.83	61.25	
Final Dia (mm)	5.75	5.15	
Yield stress (N/mm <sup>2</sup> )	569.0885	564.5411	375 min
UTS (N/mm <sup>2</sup> )	640.8624	638.9571	490-660
%Elongation	23.66	22.5	22 min
% Reduction in Area	67.0676	73.6353	
Fracture	W.G.L	W.G.L	
Remark :	<b>Satisfactory</b>	<b>Satisfactory</b>	
<b>Impact (Charpy );(V notch )</b>	<b>Marine Rules / ISO 148-1 : 2016</b>		
Test Method			
Specimen Dimension [mm]	<b>10 x 10 x 55</b>		
Test Temperature, °C	<b>-20°C (Minus Twenty)</b>		
[*] Discarded Value	92.00	98.00	Avg = 47min Joules
	96.00	138.00	
	114.00	144.00	
Average	100.67	126.67	
Remark	<b>Satisfactory</b>	<b>Satisfactory</b>	

\*\*\*\*\*End of Report\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-

Mr. Dattatrya Rohakale of ABS  
for Mr.U.S.Rai of ABS  
Mr. Anil Kumar of DNV  
on 19-04-2024

Checked By:

DOC NO.: AMS/QR7.8/01 ISSUE NO.: 01/15.03.19 REV. NO.: 01/24.01.2022







TC-6035



PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
Tel: 022-35989348 / 8104723074  
Website: www accuratemetaweldservices.com  
Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
Plot 'A', Sector- 'A' Industrial Area,  
Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
T.C. No. : AM24/02669-3,4,5  
T.C. Date : 30-04-2024  
Sample Recd Date : 14-03-2024

LAB NO	AM24/02669-3	AM24/02669-4	AM24/02669-5
--------	--------------	--------------	--------------

Details Given By customer	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: <--Filler Wire Qualification test for Initial Approval (Butt Weld Assembly)-->
Mat. Grade	: <-----ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5----->
Size (mm)	: <-----1.20, 1.60----->
Mat. Id.No.	: ST-F ST-VUP ST-VD
Batch No.	: <-----FCW-0110, FCW-0114----->
Mfg Date	: <-----29-01-2024, 29-01-2024----->
Brand Name	: <-----SUPERCORE-71-T1----->
Stamped /Sealed By	: ABS & DNV

Discipline : **Mechanical**  
Group : **Mechanical Properties of Metals - Welds & welded test specimens**  
Test Performed on : **19-04-2024**

Test Parameter	Test Result			Requirement
<b>Tensile as per Test Method</b>	<b>ISO 6892-1: 2019</b>			
Th / Width (mm)	T-18.43 / 25.01	T-18.07 / W-25.07	T-18.38/ W-25.08	
Area (mm <sup>2</sup> )	460.93	453.01	460.97	
Ultimate Load (N)	228512	232064	230056	
UTS (N/mm <sup>2</sup> )	495.7629	512.2713	499.0694	490 min
Fracture	In Plate	In Plate	In Plate	
Remark	<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Satisfactory</b>	
<b>Bend Test</b>	<-----Face Bend & Root Bend----->			
Test Method	<-----ISO 5173-2009----->			
Thickness ( mm )	<-----20.0mm----->			
Width (mm)	<-----30.0mm----->			
Former Dia (mm) 3T	<-----60.0mm----->			
Angle of Bend	<-----120°----->			
Observation	<-----No Crack observed----->			
Remark :	<-----Satisfactory----->			
<b>Impact (Charpy );(V notch )</b>	<b>ISO 148-1: 2016</b>			<b>Requirement</b>
Test Method	<b>10 X 10 X 55</b>			
Specimen Dimension [mm]	<b>-20° C(Minus Twenty)</b>			
Test Temperature, C				
Energy Absorbed (Joules )	102.00	106.00	108.00	<b>ST-F</b>
	130.00	94.00	86.00	<b>AVG=47 Joules min</b>
	100.00	84.00	96.00	<b>ST-VUP &amp; ST-VD</b>
Average	110.67	94.67	96.67	<b>AVG = 34 Joules min</b>
Remark	<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Satisfactory</b>	

\*\*\*\*\*End of Report\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]  
  
  
 Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
 Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-  
 Mr. Dattatrya Rohakale of ABS  
 for Mr.U.S.Rai of ABS  
 Mr. Anil Kumar of DNV  
 on 19-04-2024  
 Checked By:







TC-6035

**ACCURATE METAWELD SERVICES**  
ISO 17025 NABL ACCREDITED TESTING LABORATORY

PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
Tel: 022-35989348 / 8104723074  
Website: www accuratemetaweldservices.com  
Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
Plot 'A', Sector- 'A' Industrial Area,  
Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
T.C. No. : AM24/02669  
T.C. Date : 30-04-2024  
Sample Recd Date : 14-03-2024

**LAB NO** **AM24/02669-8**

Details Given By customer	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: Filler Wire Qualification test for Initial Approval (Fillet Weld Assembly)
Mat. Grade	: ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5
Size (mm)	: 1.20, 1.60
Mat. Id.No.	: STF-F
Batch No.	: FCW-0110, FCW-0114
Mfg Date	: 29-01-2024, 29-01-2024
Brand Name	: SUPERCORE-71-T1
Stamped /Sealed By	: ABS & DNV

**Discipline** : Mechanical  
**Group** : Mechanical Properties of Metals - Welds & welded test specimens  
**Test Performed on** : 19-04-2024

Hardness - Scale Test Method	Hardness on Vickers Scale (HV10) ISO 6507-1 : 2018						Requirement
	STF-F1		STF-F2		STF-F3		
<b>ID.NO.</b>	<b>1.20</b>	<b>1.60</b>	<b>1.20</b>	<b>1.60</b>	<b>1.20</b>	<b>1.60</b>	<b>For Weld 150 HV 10 MIN</b>
<b>SIZE</b>							
<b>WELD</b>	248	237	247	230	238	233	
	247	238	245	233	249	235	
	245	233	247	235	250	236	
	247	237	248	233	247	235	
	248	238	247	235	248	237	
	248	237	248	234	250	238	
<b>Remark</b>	<b>Satisfactory</b>		<b>Satisfactory</b>		<b>Satisfactory</b>		
<b>HAZ</b>	189	188	188	187	189	187	
	188	187	187	188	188	189	
<b>Base Metal</b>	140		142		138		
	139		141		139		
	141		141		141		
	140		141		139		
<b>Fracture (2 Nos)</b>	<b>Satisfactory</b>						
<b>Macro Test</b>	<b>Macro</b>						
<b>Test Method</b>	<b>ASME SEC IX - 2021</b>						
<b>Echant</b>	<b>Nital</b>						
<b>Observation</b>	Root penetration found satisfactory, freedom from crack, porosity undercut and slag inclusion.						
<b>Remark</b>	<b>Satisfactory</b>						

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

*(Signature)*  
Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-  
Mr. Dattatrya Rohakale of ABS  
for Mr.U.S.Rai of ABS  
Mr. Anil Kumar of DNV  
on 19-04-2024  
Checked By: *(Signature)*





TC-6035

**ACCURATE METAWELD SERVICES**  
 ISO 17025 NABL ACCREDITED TESTING LABORATORY

PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
 Tel: 022-35989348 / 8104723074  
 Website: www.accuratemetaweldservices.com  
 Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
 Plot 'A', Sector- 'A' Industrial Area,  
 Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
 T.C. No. : AM24/02669  
 T.C. Date : 30-04-2024  
 Sample Recd Date : 14-03-2024

LAB NO **AM24/02669-9**

**Details Given By customer**

Customer Ref. / Date : Letter Dt. 14-02-2024  
 Mat Description : Filler Wire Qualification test for Initial Approval (Fillet Weld Assembly)  
 Mat. Grade : ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5  
 Size (mm) : 1.20, 1.60  
 Mat. Id.No. : STF-VUP  
 Batch No. : FCW-0110, FCW-0114  
 Mfg Date : 29-01-2024, 29-01-2024  
 Brand Name : SUPERCORE-71-T1  
 Stamped /Sealed By : ABS & DNV

Discipline : **Mechanical**  
 Group : **Mechanical Properties of Metals - Welds & welded test specimens**  
 Test Performed on : **19-04-2024**

Hardness - Scale	Hardness on Vickers Scale (HV10)						Requirement
	ISO 6507-1 : 2018						
Test Method	STF-VUP1		STF-VUP2		STF-VUP3		For Weld 150 HV 10 MIN
ID.NO.	1.20	1.60	1.20	1.60	1.20	1.60	
WELD	240	220	247	224	246	230	
	245	223	248	226	245	233	
	248	225	247	228	248	235	
	247	225	247	230	249	233	
	247	234	249	234	247	230	
	246	230	248	220	248	236	
Remark	Satisfactory		Satisfactory		Satisfactory		
HAZ	186	187	188	188	186	189	
	188	189	187	189	188	187	
Base Metal	138		140		141		
	137		141		139		
	136		142		139		
	138		140		141		
Fracture (2 Nos)	Satisfactory						
Macro Test	Macro						
Test Method	ASME SEC IX - 2021						
Echant	Nital						
Observation	Root penetration found satisfactory, freedom from crack, porosity undercut and slag inclusion.						
Remark	Satisfactory						

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

*(Signature)*  
 Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadiik  
 Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-  
 Mr. Dattatrya Rohakale of ABS  
 for Mr.U.S.Rai of ABS  
 Mr. Anil Kumar of DNV  
 on 19-04-2024  
 Checked By: *(Signature)*





TC-6035



PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
Tel: 022-35989348 / 8104723074  
Website: www.accuratemetaweldservices.com  
Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
Plot 'A', Sector- 'A' Industrial Area,  
Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
T.C. No. : AM24/02669  
T.C. Date : 30-04-2024  
Sample Recd Date : 14-03-2024

LAB NO **AM24/02669-10**

**Details Given By customer**

Customer Ref. / Date : Letter Dt. 14-02-2024  
Mat Description : Filler Wire Qualification test for Initial Approval (Fillet Weld Assembly)  
Mat. Grade : ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5  
Size (mm) : 1.20, 1.60  
Mat. Id.No. : STF-VD  
Batch No. : FCW-0110, FCW-0114  
Mfg Date : 29-01-2024, 29-01-2024  
Brand Name : SUPERCORE-71-T1  
Stamped /Sealed By : ABS & DNV

Discipline : **Mechanical**  
Group : **Mechanical Properties of Metals - Welds & welded test specimens**  
Test Performed on : **19-04-2024**

Hardness - Scale	Hardness on Vickers Scale (HV10)						Requirement
	ISO 6507-1 : 2018						
Test Method	STF-VD1		STF-VD2		STF-VD3		For Weld 150 HV 10 MIN
ID.NO.	1.20	1.60	1.20	1.60	1.20	1.60	
WELD	248	237	247	230	246	230	
	249	233	249	234	248	229	
	247	233	249	233	246	231	
	247	234	247	236	248	231	
	248	237	248	234	247	234	
	249	236	246	235	246	233	
Remark	Satisfactory		Satisfactory		Satisfactory		
HAZ	189	188	187	189	188	186	
	188	187	186	188	186	187	
Base Metal	142		140		138		
	141		141		139		
	140		139		140		
	141		140		139		
Fracture (2 Nos)	Satisfactory						
Macro Test	Macro						
Test Method	ASME SEC IX - 2021						
Echant	Nital						
Observation	Root penetration found satisfactory, freedom from crack, porosity undercut and slag inclusion.						
Remark	Satisfactory						

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

*[Signature]*  
Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-  
Mr. Dattatrya Rohakale of ABS  
for Mr.U.S.Rai of ABS  
Mr. Anil Kumar of DNV  
on 19-04-2024  
Checked By: *[Signature]*





TC-6035



PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
 Tel: 022-35989348 / 8104723074  
 Website: www.accuratemetaweldservices.com  
 Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
 Plot 'A', Sector- 'A' Industrial Area,  
 Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
 T.C. No. : AM24/02669  
 T.C. Date : 30-04-2024  
 Sample Recd Date : 14-03-2024

LAB NO **AM24/02669-11**

Details Given By customer	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: Filler wire Qualification test for Initial Approval (Fillet Weld Assembly)
Mat. Grade	: ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5
Size (mm)	: 1.20, 1.60
Mat. Id.No.	: STF-OH
Batch No.	: FCW-0110, FCW-0114
Mfg Date	: 29-01-2024, 29-01-2024
Brand Name	: SUPERCORE-71-T1
Stamped /Sealed By	: ABS & DNV

Discipline : **Mechanical**  
 Group : **Mechanical Properties of Metals - Welds & welded test specimens**  
 Test Performed on : **19-04-2024**

Hardness - Scale	Hardness on Vickers Scale (HV10)						Requirement
	ISO 6507-1 : 2018						
Test Method	STF-OH1		STF-OH2		STF-OH3		For Weld 150 HV 10 MIN
ID.NO.	1.20	1.60	1.20	1.60	1.20	1.60	
SIZE	248	224	247	230	248	224	
WELD	241	234	249	233	245	226	
	252	236	251	230	246	230	
	250	228	251	230	246	226	
	249	232	250	231	247	231	
	247	234	251	233	249	226	
Remark	Satisfactory		Satisfactory		Satisfactory		
HAZ	190	188	187	187	184	178	
	188	189	189	188	184	182	
Base Metal	141		140		141		
	140		138		143		
	140		139		140		
	140		139		139		
Fracture (2 Nos)	Satisfactory						
Macro Test	Macro						
Test Method	ASME SEC IX - 2021						
Echant	Nital						
Observation	Root penetration found satisfactory, freedom from crack, porosity undercut and slag inclusion.						
Remark	Satisfactory						

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

*[Signature]*  
 Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
 Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-  
 Mr. Dattatrya Rohakale of ABS  
 for Mr.U.S.Rai of ABS  
 Mr. Anil Kumar of DNV  
 on 19-04-2024  
 Checked By *[Signature]*





TC-6035



PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
Tel: 022-35989348 / 8104723074  
Website: www.accuratemetaweldservices.com  
Email: accuratemetaweld@gmail.com

**TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
Plot 'A', Sector- 'A' Industrial Area,  
Sanwer Road , Indore-452 015 (M.P)

ULR No. : TC603524100000824F  
T.C. No. : AM24/02669  
T.C. Date : 30-04-2024  
Sample Recd Date : 14-03-2024

LAB NO **AM24/02669-12**

Details Given By customer	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: Filler Wire Qualification test for Initial Approval (Fillet Weld Assembly)
Mat. Grade	: ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5
Size (mm)	: 1.20, 1.60
Mat. Id.No.	: STF-H
Batch No.	: FCW-0110, FCW-0114
Mfg Date	: 29-01-2024, 29-01-2024
Brand Name	: SUPERCORE-71-T1
Stamped /Sealed By	: ABS & DNV

Discipline : **Mechanical**  
Group : **Mechanical Properties of Metals - Welds & welded test specimens**  
Test Performed on : **19-04-2024**

Hardness - Scale	Hardness on Vickers Scale (HV10)						Requirement	
	ISO 6507-1 : 2018							
Test Method	STF-H1		STF-H2		STF-H3		For Weld 150 HV 10 MIN	
ID.NO.	1.20	1.60	1.20	1.60	1.20	1.60		
SIZE	249	230	248	234	249	235		For Weld 150 HV 10 MIN
WELD	252	235	249	236	247	236		
	251	232	247	232	246	238		
	250	230	248	230	242	236		
	247	230	247	230	249	237		
	247	226	249	230	247	230		
Remark	Satisfactory		Satisfactory		Satisfactory			
HAZ	189	188	189	188	189	188		
	190	189	188	187	188	187		
Base Metal	140		141		140			
	139		143		141			
	138		141		139			
	140		141		140			
Fracture (2 Nos)	Satisfactory							
Macro Test	Macro							
Test Method	ASME SEC IX - 2021							
Echant	Nital							
Observation	Root penetration found satisfactory, freedom from crack, porosity Undercut and slag inclusion.							
Remark	Satisfactory							

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

*(Signature)*  
Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Witnessed By:-  
Mr. Dattatrya Rohakale of ABS  
for Mr.U.S.Rai of ABS  
Mr. Anil Kumar of DNV  
on 19-04-2024  
Checked By: *(Signature)*



**PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES**

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
 Tel: 022-35989348 / 8104723074  
 Website: www accuratemetaweldservices.com  
 Email: accuratemetaweld@gmail.com

**RADIOGRAPHY TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
 Plot 'A', Sector- 'A' Industrial Area,  
 Sanwer Road , Indore-452 015 (M.P)

**T.C. No.** : AM24/02669  
**T.C. Date** : 30-04-2024  
**Sample Recd Date** : 14-03-2024

<b>LAB NO</b>	<b>AM24/02669-1</b>	<b>AM24/02669-2</b>
---------------	---------------------	---------------------

<b>Details Given By customer</b>	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: All Weld Assembly
Mat. Grade	: <--ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5-->
Size (mm)	: 1.20 1.60
Mat. Id.No.	: ST-12 ST-16
Batch No.	: FCW-0110 FCW-0114
Mfg Date	: 29-01-2024 29-01-2024
Brand Name	: <-----SUPERCORE-71-T1----->
Stamped /Sealed By	: ABS & DNV

**Analysis** : Radiography  
**Test Performed on** : 26-03-2024

Source used & strength	: IR-192 ; 30Curie	Job	: All Weld Assembly.
S.F.D. : 60cm	Technique : SWSI/DWSI/DWDI/PANAROMIC	Film used	: D7
Material thick.	: 20mm x 300	Penetrameter	: ASTM /ASME 1B-11
Lead Intensifying screen	: 0.10 mm	Exposure time	: 1.30 Minutes
Acceptance standard	: As per AWS STANDARD	Film Density	: 2 to 4
		Film size	: 15" X 4"

ID/No.of radiograph	ST-12	ST-16
<b>Location</b>	[A-B]	[A-B]
<b>Observation/Defect</b>	NSD	NSD
<b>Remark</b>	Acceptable	Acceptable

Processing Temp. of Developer, Manual Automatic 20° C Time 5 mts.

\*\*\*\*\***END OF CERTIFICATE**\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]



Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
 Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Reviewed By:-  
 Mr. Dattatrya Rohakale of ABS  
 for Mr.U.S.Rai of ABS  
 Mr. Anil Kumar of DNV  
 on 19-04-2024  
 Checked By: 

**PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES**

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
 Tel: 022-35989348 / 8104723074  
 Website: www.accuratemetaweldservices.com  
 Email: accuratemetaweld@gmail.com

**RADIOGRAPHY TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
 Plot 'A', Sector- 'A' Industrial Area,  
 Sanwer Road , Indore-452 015 (M.P)

**T.C. No.** : AM24/02669-3,4,5  
**T.C. Date** : 30-04-2024  
**Sample Recd Date** : 14-03-2024

<b>LAB NO</b>	<b>AM24/02669-3</b>	<b>AM24/02669-4</b>	<b>AM24/02669-5</b>
---------------	---------------------	---------------------	---------------------

<b>Details Given By customer</b>	
Customer Ref. / Date	: Letter Dt. 14-02-2024
Mat Description	: <--Filler Wire Qualification test for Initial Approval (Butt Weld Assembly)-->
Mat. Grade	: <-----ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5----->
Size (mm)	: <-----1.20, 1.60----->
Mat. Id.No.	: ST-F                      ST-VUP                      ST-VD
Batch No.	: <-----FCW-0110, FCW-0114----->
Mfg Date	: <-----29-01-2024, 29-01-2024----->
Brand Name	: <-----SUPERCORE-71-T1----->
Stamped /Sealed By	: ABS & DNV

**Analysis** : Radiography  
**Test Performed on** : 26-03-2024

Source used & strength	: IR-192 ; 30Curie	Job	: Butt Weld Assembly.
S.F.D. :	60cm	Technique	: SWSI/DWSI/DWDI/PANAROMIC
Material thick.	: 20mm x 300	Film used	: D7
Lead Intensifying screen	: 0.10 mm	Penetrameter	: ASTM /ASME 1B-11
Acceptance standard	: As per AWS STANDARD	Exposure time	: 1.30 Minutes
		Film Density	: 2 to 4
		Film size	: 15" X 4"

ID/No.of radiograph	ST-F	ST-VUP	ST-VD
<b>Location</b>	[A-B]	[A-B]	[A-B]
<b>Observation/Defect</b>	NSD	NSD	NSD
<b>Remark</b>	Acceptable	Acceptable	Acceptable

Processing Temp. of Developer, Manual Automatic 20° C Time 5 mts.

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]



Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
 Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Reviewed By:-  
 Mr. Dattatrya Rohakale of ABS  
 for Mr.U.S.Rai of ABS  
 Mr. Anil Kumar of DNV  
 on 19-04-2024

Checked By: 

**PHYSICAL & CHEMICAL TESTING OF METALS & WELDS (TIG, MIG, SMAW) & MACHINING SERVICES**

5, Vishal Industrial Estate, Opp. Ceat Tyres, Bhandup Village Road, Bhandup (West), Mumbai 400 078  
Tel: 022-35989348 / 8104723074  
Website: www accuratemetaweldservices.com  
Email: accuratemetaweld@gmail.com

**RADIOGRAPHY TEST CERTIFICATE**

To,  
**M/s.D & H India Ltd**  
Plot 'A', Sector- 'A' Industrial Area,  
Sanwer Road , Indore-452 015 (M.P)

**T.C. No.** : AM24/02669  
**T.C. Date** : 30-04-2024  
**Sample Recd Date** : 14-03-2024

<b>LAB NO</b>	<b>AM24/02669-6</b>	<b>AM24/02669-7</b>
---------------	---------------------	---------------------

**Details Given By customer**

Customer Ref. / Date : Letter Dt. 14-02-2024  
Mat Description : <--Filler Wire Qualification for Initial Approval (Butt Weld Assembly)-->  
Mat. Grade : <--ABS Grade-3Y SA C1 H5, DNV Grade III Y MS H5-->  
Size (mm) : 1.20 1.60  
Mat. Id.No. : ST-OH ST-H  
Batch No. : FCW-0110 FCW-0114  
Mfg Date : 29-01-2024 29-01-2024  
Brand Name : <-----SUPERCORE-71-T1----->  
Stamped /Sealed By : ABS & DNV

**Analysis** : Radiography  
**Test Performed on** : 26-03-2024

Source used & strength : IR-192 ; 30Curie	Job : Butt Weld Assembly.
S.F.D. : 60cm	Technique : SWSI/DWSI/DWDI/PANAROMIC
Material thick. 20mm x 300	Film used D7
Lead Intensifying screen 0.10 mm	Penetrameter ASTM /ASME 1B-11
Acceptance standard As per AWS STANDARD	Exposure time 1.30 Minutes
	Film Density 2 to 4
	Film size 15" X 4"

ID/No.of radiograph	ST-OH	ST-H
<b>Location</b>	[A-B]	[A-B]
<b>Observation/Defect</b>	NSD	NSD
<b>Remark</b>	Acceptable	Acceptable

Processing Temp. of Developer, Manual Automatic 20° C Time 5 mts.

\*\*\*\*\*END OF CERTIFICATE\*\*\*\*\*

FOR ACCURATE METAWELD SERVICES [ Authorised Signatory ]

  
Mr. Sudhir Raul / Mrs. Anuya Raul / Mr. Anirudh Mahadik  
Tech. Manager /Asst. Tech Manager / Sr. Mech Engineer

Reviewed By:-  
Mr. Dattatrya Rohakale of ABS  
for Mr.U.S.Rai of ABS  
Mr. Anil Kumar of DNV  
on 19-04-2024  
Checked By: 

