

LIKHITE ENERGY SYSTEMS(P) LTD

YOUR QUALITY OUR COMMITMENT

Unit-I: PlotNo.633&635, APIIC, Growth Centre, Gundlapally (V), Maddipadu (M), Prakasham (D), Andhra Pradesh-523211,

Unit-II:Survey # 103, Thammavaram, BodduvaniPalem(V),

Korisapadu(M), Prakasham(D), Andhra Pradesh-523212

Mail id: likhita.energy@gmail.com,info@likhitagroup.com



MD's MESSAGE

"LIKHITA GROUP, has come into existence to create new pathways in the field of steel structures and lead the way by setting example for others to follow. Our Aim and endeavor is to scale greater and newer peaks in global competitive environment, with a firm resolve of following the path of ethics, values and transparency in the Sectors of Thermal, Wind and Solar Energy.

We are supporting the Pharma Industry by giving World class Reactors of the Industry needs. We sincerely support to protect our Nation Resources and convert it into Energy by supporting Wind and Solar Energy with Best Quality of Fabrication Structures with in house Hot Dip Galvanizing Facility.

Dedication, devotion to responsibilities and excellence in management with enhanced social responsibilities are basis of our foundation.

LIKHITA has had many challenges coming its way, but we converted them into earning opportunities and steadfastly overcome each one of them to come out with flying colors successfully because of our Operational efficiency and excellent Human Capital management.

The quality of our manufactured products and highest customer satisfaction are the direct derivatives of our sincere efforts and commitments. The company is on accelerated growth with a motto to celebrate life by saving environment and spreading green growth.

About Management

Executive Summary

Directors of "Likhita Group" are highly qualified & motivated Engineering professionals who are passionate about providing exceptional quality and support. With more than 30 years of rich and diversified experience in design, develop and manufacturing of various mechanical components, Construction and Pharmaceutical drugs. We have stringent internal quality processes that ensure the highest level of quality standards in the final product.

Executive Profiles:

T Y Reddy - Managing Director:

Mr. T Y Reddy having more than 30 years experience in Fabrication Industry. He is the founder and Managing Director (MD) of Likhita Group of Companies. In addition to his technical expertise, he has an exceptional record of leadership and management in corporate environments. Much of his focus is on design, develop and manufacturing of equipment for the chemical industry. He has designed and finely tuned the equipment's like chemical reactors, heat exchangers etc., and also extensively involved in sheet metal fabrication for building systems.

He was involved in designing & planning of chemical plant (for M/s"Nifty Labs Pvt. Ltd.") and manufactured all the chemical equipment (like Rectors, Heat Exchangers, Condensors etc.) and implemented in the Plant. He is one of the Promoter and Director of the M/s Nifty Labs Pvt Ltd. He graduated in Mechanical Engineering from the University of Marathwada in India. His passion is to maintain quality in all aspects of his business and taking care of his clients.

About Management

Prabhkar Tatiparthi - Executive Director:

Mr. Prabhkar has over a decade of experience in architecture, design and development of large-scale distribution systems. Prior to moving over to "Likhita Process industries" he has been working as Microsoft Certified System Administrator and Cisco Network Architect in various companies in the USA from 1998 to 2007. He has hands full experience in design and implementation of world-class data centers. He has worked on a broad range of Hardware Platforms and other Networking Hardware for companies like CISCO, HP, DELL and IBM.

He graduated in Electronics & Communication Engineering from the Institution of Engineers, Calcutta, India. And also he holds a degree in Bachelor of Sciences (B.Sc. Maths.) from Nagarjuna University in Guntur, India. His passion is to maintain business relationship with the clients. When he was in California (USA), he maintain ed and led the customer support department for worldwide clients

QUALITY POLICY

☐ To earn reputation as manufacturer of high quality heavy fabrication complying to international standards. ■ To meet total customer satisfaction and trust. ☐ To pursue continual improvement in the quality of processes, products and services. ☐ To develop a committed and quality conscious team. ☐ To achieve business growth & profitability through team work and innovations ☐ To comply with all the applicable statutory and regulatory requirements



> MAJOR CUSTOMERS











LARSEN & TOUBRO

















































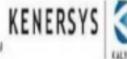














RESOURCES

COVERED AREA - 15000Sq.Mtrs
UNCOVERED AREA- 30000Sq.Mtrs





> Certifications **FACTORY LICENCE** REGISTER NUMBER: 98593



PRESCRIBED UNDER RULE 4 (4) LICENCE TO WORK A FACTORY

Licence Number

: 17500 A (72)

Registration Number

98593

3. Full Name of Factory

: LIKHITA ENERGY SYSTEMS -

- PYT LTD

4. Full Address/Iocation of factory

PLOT NO 6338635

5. Full Postal address for communications relating to the factory

I.4.C. GUNDLAPALLIW HADDIPADU CO

PRAKASAH (Pt)

6. Maximum horse power installed regular/

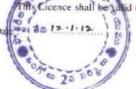
345-5

Maximum number of workers to be employed: 50

ST THAT I PARTHI YELLA HAMPA Full name, father's name, age & residential S/O RAGHAVA REDDY address of the occupier and his position in the company/firm/Government factory/local fund factory/nzzamper ROAD, KUKATPOLLY

Licence is hereby granted to the factory at 3 above for the premises stated at 4 above for use as a region, within the limits stated in 6 and 7 above subject to the provisions of the Factories Act of 948 and the rules made thereunder.

this Cicence shall be valid until it has been duly cancelled.



"ENDORSEMENTS"



> Certifications SSI PART II

ENTERPRENUERS MEMORANDUM NUMBER -280181200376 PART II

14. 4M NO 01B100389

ACKNOWLEDGEMENT

00376

"PART-II"

. MIS LIKHITA ENERGY SYSTEMS PVILITO.

HAS FILED

MEMORANDUM FOR A Manufacturing ENTERPRISE AT THE ADDERSS Survey / Plot No. 1

633,635, Guijdra Pelle (vr)egg), (Town), Medd padd (Mandel) , Prakasam (Orstrict) ANDHRAPRADESH (State), 5232, 1

SMALL

FOR THE ITEM / ITEMS INDICATED BELOW AS PER THE FACIS STATED IN FORMINO, **Q18100389**

St. No litterns of Manufacture / type of service to be rendered	Capacily (r sase of manufacture One Onits	Initial date of production animomoment of serving	
1 Tetaliculion		19000 noonly	26404/2011	
II. – DETAILS OF PLANT AND MALITIMERY AS PER	DATE-WISE INVESTM	LVI		
Season entire (takks)		Date of Invest	ment	
Plant and Machinery	200 00	260 (OF/MM//YY)		
едирателтя	0.06	15/07/	2010	
(add additional sheet ir required)				
IT SUBMISHED TO SUBMISHED TO SUBMISHED UNDER T BENDER STATLEDRY OBLIGATION STEMLATED UNDER T GOVERNELADY OF ADMINISHED HONORY COURT ORDER 5. DATE OF CHANGE OF CATEGORY FROM MICRO Y SMALL TO SMALLY MEDIUM ON VICE VERSA.	THE AWS DECENTRAL C	,OVERNMENT,STATE		
6. DATE OF INSUL		-201-		
 NATURE OF ACTIVITY 				
(MANJIMO(URING-1, SERVICES-2)	1			
S CATEGORY OF EVILEPRISE				
(MICRO 1, RMALL O, MI DIOM-3)	2			
9 ENTERMINUES MEFORANDEY NUMBER	2801	в I Z О ::	PART-II	
(fursings tokes are for Sham/Junian Terribal) code, no boxes are ranked epoly of enterance (sixth box for India adicating mension small or medium) and lear tive box-	asting manufacturing on	service and seventh dox (c		
DATE 14-00I-2011 SEC IS 1.0		رنون		
PLACE: Ongole				
// S. 60000	1570	CENERAL MAI	VAGER	



DISTRICT INDIDSTRIBSCENTRE ONGOLE



> Certifications

NSIC REF NO. - NSIC/GP/VIJ/2017/56106



राष्ट्रीय लघु उद्योग निगम लिमिटेड THE NATIONAL SMALL INDUSTRIES CORPORATION LIMITED

(A Government of India Enterprise)

Sr. No. 97087 S.No. VIJ-0001013

Branch Office: Door No.59A-8/8-6B/1, 3rd Floor, Main Road, Gurunanak Colony, Vijayawada,

Krishna District, Andhra Pradesh-520 008

Ph: 0866-2541055 Fax: 0866-2545055

GOVERNMEN Temali: bovij ayawada@nstc.co.in STM EWebsite: www.risic.co.in ATE

Renewal Certificate (Valid From 03/10/2021 to 02/10/2023)

Ref.No NSIC/GP/VIJ/2017/56106

Factory Address: Date: 11/11/2021

M/s. LIKHITA ENERGY SYSTEMS PVT LTD PLOT NO.633 & 635. APIIC GROWTH CENTRE, GUNDLAPALLE, MADDIPADU, ONGOLE PRAKASAM. ANDHRA PRADESH- 523211 PLOT NO:633 & 635, APIIC GROWTH CENTRE, GUNDLAPALLE, MADDIPADU, ONGOLE PRAKASAM, ANDHRA PRADESH -523211
 Survey # 103, Thamavaram (V), Boduvanipalem, Korisapadu, Mandal, Ongole PRAKASAM, ANDHRA PRADESH -523212

Name of the Directors 1.SRI T. YELLAMANDA REDDY 2.SRI T. PRABHAKAR REDDY 3.SRI A.S.G.S. SANDILYA

Constitution: Private Limited Udyam Registration Enterprise Social Class: Number UDYAM-AP-13- GENERAL

Special Category: GENERAL

0003758

GOVERNMENT PURCHASE REGISTRATION NO: NSIC/GP/VIJ/2016/0028582

Monetary Limit: * 1415 lakhs (* One Thousand Four Hundred Fifteen Lakh Only)
TURNOVER (Rupees in Lakhs)

Financial Year Annual Turnover
2017-18 1447.84
2018-19 2828.28
2019-20 2131.08
Monetary Limit 1415

MSEs registered with NSIC are exempted from deposit of Earnest Money irrespective of value of Monetary Limit.

Your name has been registered as a MSE Unit eligible for participation in the Central Government Store Purchase Programme as per the Single Point Registration Scheme for the following Item(s)/Store(s)/Service(s).

Name of the Store(s)/ Specification(s) Qualitative Capacity Quantitative Capacity P.A.

"As per List Attached" (15 litem only)

Disclaimer:- The purchasing agencies are advised to satisfy themselves with the store details in the certificate while doing the Technical Evaluation stage before placing the tenderlorder on the units, certified by NSIC.

M/s LIKHITA EN TAGY SYSTEMS PVT LTD
"Authentisity of the ce tificate can be co

N.PANNEER
Senior Branch Manage
THE NATIONAL SHALL INDUSTRIES COMMUN.

Gurunanak Golony, VIJAYAWADA-520 008

CIN: U74140DL1955GO1002481

Conditions overleaf.



> CERTIFICATE OF INCORPORATION

CORPORATE IDENTITY NUMBER: U29248AP2010PTC069033



Mailing Address as per record available in Registrar of Companies offic LIKHITA ENERGY SYSTEMS PRIVATE LIMITED

PLOT NO A 15/PART, IDA, KUKATPALLY, GANDHI NAGAR IDA, HYDERABAD - 500072.

Andhra Pradesh, INDIA

米米米米米米米米米米米米米米米米米米米米米米





MSME Registration No. AP13B0026423



प्रकार स्टब्स् Govt. of India सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES





उद्योग आधार



Udyog Aadhaar

B

UAN	AP13B00	AP13B0026423			
Services	D	E	F		
Manufacturing	A	В	С		
Type of Enterprise	Micro	Small	Medium		

Udyog Aadhaar Memorandum

 1. Aadhaar Number
 947383664229

 2. PAN Number
 AABCL8136A

Name of Entrepreneur THATIPARTHI YELLAMANDA REDDY

Social Category of Entrepreneur GENERAL
 Gender Male

Physically Handicapped No
 Name of Enterprise LIKHITA ENERGY SYSTEMS PVT LTD

9. Location of Plant Details

SN	Flat/Door/Block No.	Name of Premises/Building Village	Road/Street/ Lane	Area/Locality	City	Pin	State	District
1	UNIT-1, # 633 & 635	APIIC, Industrial Growth Centre	Gundlapalle	Maddipadu	Ongole	523211	ANDHRA PRADESH	PRAKASAM
2	Unit-2, Survey# 103	Thamavaram (V)	Boduvanipalem	Korisapadu Mandal	Ongole	523212	ANDHRA PRADESH	PRAKASAM

Official Address of Enterprise

M/S. LIKHITA ENERGY SYSTEMS PVT LTD UNIT -1 & 2, PLOT NO:633 & 635, APIIC GROWTH CENTRE, GUNDLAPALLE,

MADDIPADU, ONGOLE

10. District PRAKASAM State ANDHRA PRADESH PIN 523211

Mobile No: 9849008414 Email: info@likhitagroup.com

11. Date of commencement 21/06/2010

12. Previous Registration details-if any EM-2 :: 280181200376

 Bank Details
 IFS Code
 ANDB0000089

 3.
 Bank Account
 008913100002917

14. Major Activity MANUFACTURING

SI	N NIC 2 Digit	NIC 4 Digit	NIC 5 Digit Code	Activity Type	
1	25 - Manufacture of fabricated metal products, except machinery and equipment	2511 - Manufacture of structural metal products	25112 - Manufacture of metal frameworks or skeletons for construction and parts thereof ((towers, masts, trusses, bridges etc.)	Manufacturing	
2	25 - Manufacture of fabricated metal products, except machinery and equipment	2512 - Manufacture of tanks, reservoirs and containers of metal	25121 - Manufacture of metal containers for compressed or liquefied gas	Manufacturing	
3	25 - Manufacture of fabricated metal products, except machinery and equipment	2512 - Manufacture of tanks, reservoirs and containers of metal	25122 - Manufacture of metal reservoirs, tanks and similar containers	Manufacturing	
5	25 - Manufacture of fabricated metal products, except machinery and equipment	2512 - Manufacture of tanks, reservoirs and containers of metal	25129 - Manufacture of other containers n.e.c.	Manufacturing	
	30 - Manufacture of other transport equipment	3020 - Manufacture of railway locomotives and rolling stock	30203 - Manufacture of railway or tramway rolling stock, not self-propelled (passenger coaches, goods vans tank wagons, self-discharging vans and wagons, workshop vans, crane vans, tenders etc.	Manufacturing	
	25 - Manufacture of fabricated metal products, except machinery and equipment	2599 - Manufacture of other fabricated metal products n.e.c.	25999 - Manufacture of other fabricated metal products n.e.c.	Manufacturing	

17. Persons employed

18. Investment (Plant & Machinery / 483(Rs. In Lakhs)

19. District Industry Centre PRAKASAM

Declaration

I hereby declare that information given above is true to the best of my knowledge. Any information, that may be required to be verified, shall be provided immediately before the concerned authority.

MMsme Mobile App (Beta Version) is available now for download, https://play.google.com/store/apps/details?id=msme.mymsme





GSTIN. - 37AABCL8136AIZS



Government of India Form GST REG-06

[See Rule 10(1)]

Registration Certificate

Registration Number: 37AABCL8136A1ZS

1.	Legal Name	LIKHITA ENERGY SYSTEMS PRIVATE LIMITED				
2.	Trade Name, if any	M/S LIKHITA ENERGY SYSTEMS PRIVATE LIMITED				
3.	Constitution of Business	Private Limited Company				
4.	Address of Principal Place of Business	Plot No.633,635, APIIC GROWTH CENTRE, GUNDLAPALLI, MADDIPADU MANDAL, Prakasam, Andhra Pradesh, 523211				
5.	Date of Liability	01/07/201	01/07/2017			
6.	Period of Validity	From	01/07/2017	То	NA	
7.	Type of Registration	Regular				
8.	Particulars of Approving Authority					
Signa	ature	207				
Nam	e					
Designation						
Juris	dictional Office	17				
9. Date of issue of Certificate 21/		21/09/2017				
Note	The registration certificate is re	quired to be prominen	tly displayed at al	l places of b	usiness in the State.	

This is a system generated digitally signed Registration Certificate issued based on the deemed approval of the application for registration





CERTIFICATE

Management system as per

ISO 9001: 2015

In accordance with TÜV INDIA procedures, it is hereby certified that

LIKHITA ENERGY SYSTEMS PVT. LTD.

Unit I: Plot No: 633 & 635, APIIC Growth Centre, Gullapalle(V), Maddipadu(M), Prakasham District, Andhra Pradesh - 523 211 Unit II: Survey # 103, Thamavaram(V), Boduvanipalem, Korisapadu Mandal, Prakasam Dist, Ongole - 523 212, Andhra Pradesh, India



applies a management system in line with the above standard for the following scope

Manufacture and Supply of Heavy Structural Steel Fabrications Steel Fabrication for Airport & Architecturally Exposed Structural Steel (AESS), Coach Components for Indian Railways, Module Mounting Structures for Solar Power Plants, Electrical and Other related Works for up to 220KV Transmission Lines, Pressure Vessels, Storage Tanks and Chemical Plant Equipments, Wind Mill Towers & Tower Internals.

Certificate Registration No. QM 06 00364 Audit Report No. Q 8730/2018 Valid until 07.06.2024 Valid from 08.06.2021 Initial Certification 08.06.2018

Certification Body at TÜV INDIA PVT. LTD. Issue 20.05.2021 Place : Mumbai

This certification was conducted in accordance with the TÜV INDIA auditing and certification procedures & shall be valid subject to regular Surveillance Audits.

TUV India Pvt. Ltd., 801, Raheja Plaza – 1, L.B.S. Marg, Ghatkopar (W), Mumbai - 400 086, India cert helpdesk@tuvindia co.in





➤ ACCREDITATIONS:
ISO 9001–2015

QUALITY MANAGEMENT SYSTEM



> ACCREDITATIONS:

ISO 14001:2015

ENVIRONMENT MANAGEMENT SYSTEM

ISO 45001:2018

OCCUPATIONAL HEALTH, SAFETY AND SYSTEM



TUV INDIA PRIVATE LIMITED

304 & 304 A, 3rd Floor, Ashok Bhoopal Chambers S. P. Road,

Secunderabed - 500003, India CIN: U74140MH1989PTC052930 Phone:: (040) 42021220

Toll Free: 1800-209-0902 |Email: hyd@tuv-nord.com | Website: www.tuv-nord.com/in

TO WHOM SO EVER IT MAY CONCERN

6th September 2021

M/s. LIKHITA PROCESS INDUSTRIES & LIKHITA ENERGY SYSTEMS PVT LTD

DOOR NO: 02-158/16/4NR, SY NO.90,91,92&93, OPP.

JYOTHI MILLS DIARY,

SURARAM(V), QUTHUBULLAPUR(M), RR(Dt),

TELANGANA-500013,

Unit 1: LIKHITA ENERGY SYSTEMS PVT LTD,

PLOT NO: 633&635, APIIC GROWTH CENTRE, GUNDLAPALLY,

MADDIPADU(M), PRAKASAM(D), ONGOLE, ANDHRA PRADESH-523211

Unit 2: LIKHITA ENERGY SYSTEMS PVT LTD

Survey # 103, Bodduvanipalem(V), Thammavaram Road, Korisapadu(M),

Prakasam(D), Ongole, Andhra Pradesh-523212

Sub.: ISO 14001:2015, ISO 45001:2018 Re-Certification Audit

Dear Sir,

This is with reference to the certification audit of your organization for standards ISO 14001:2015, ISO 45001:2018 performed on date 2nd to 4th September 2021 (Recertification). The assessments covered the above location.

The Company has furnished proof that it has implemented and maintained the system in accordance with the above mentioned standards. The team of auditors have recommended the certificates can be issued, subject to approval by the certification body, TUV INDIA & TUV TN CERT Germany.

The scope of Quality Management System is as follows: -

"LIKHITA ENERGY (UNIT1 & UNIT2): "MANUFACTURE AND SUPPLY OF WIND MILL TOWERS & TOWER INTERNALS MANUFACTURE AND SUPPLY OF PRESSURE VESSELS,

STORAGE TANKS AND CHEMICAL PLANT EQUIPMENTS,

MANUFACTURE AND SUPPLY OF COACH COMPONENTS FOR INDIAN RAILWAYS,

MANUFACTURE AND SUPPLY OF MODULE MOUNTING STRUCTURES FOR SOLAR POWER PLANTS*

LIKHITA PROCESS INDUSTRIES: MANUFACTURE AND SUPPLY OF WIND MILL TUBULAR TOWER INTERNALS, SOLAR ENERGY FABRICATED SUPPORTING STRUCTURES AND GENERAL FABRICATION JOBS"

Yours faithfully, For TUV India Private Limited.,

KVV Satyanarayana

KVV Satyanarayana Head - AP & Telangana Region Certification & Training



Registered & Head Office: 801, Raheja Plaza - 1, L.B.S. Marg, Ghatkopar (W), Mumbai 400 086.

Phone: (022) 6647 70000 • Fax: (22) 6647 7009 • E-mail: mumbai@tuv-nord.com • Website: www.tuv-nord.com/int0rword.com/



Intertek Total Quality, Assured

CERTIFICATEOF REGISTRATION

> <u>ACCREDITATIONS:</u> ISO 3834–2–2005

JALITY REQUIREMENTS FOR FUSION WELDING
OF METALLIC MATERIALS, COMPREHENSIVE
OUALITY REQUIREMENTS.

This is to certify that the Quality Management System for Welding of:

LIKHITA ENERGY SYSTEMS PVT LTD

Main Site: PLOT: 633 & 635, APIG-Growth Centre, Ongole, Prakasham Dist, Andhra Pradesh, 523211, India

Secondary site:

Secondary Site: 103, Thamavaram, Boduvanipalem, Korisapadu Mandal, Ongole, Prakasam Dist, Andhra Pradesh, 523212, India

has been assessed by Intertek as conforming to the requirements of:

ISO 3834-2:2005

QUALITY REQUIREMENTS FOR FUSION WELDING OF METALLIC MATERIALS. COMPREHENSIVE QUALITY REQUIREMENTS...

The Welding Quality Management System is applicable to:

Manufacture and Supply of Boiler Components, Heavy Fabricated Structures, Solar Components, Wind Mill Towers Railway Coach Components/Products, Steel Fabrication for Airport and Architecturally Exposed Structural Steel (AESS) using material group of 1, 7 and 8 by SMAW, SAW, GMAW, FCAW and GTAW process.

IAF 17

The validity of this certificate is subject to periodic surveillances

Certificate Number:

1816449

Initial Certification Date:

28 November 2018

Certification Decision Date:

14 January 2022

Certificate Issue Date:

14 January 2022

Certificate Expiry Date:

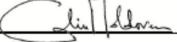
27 November 2024



ACCREDIA ,

500 N° 044A

Membro degli Accordi di Nutuo Riconoscimento EA, IAF e ILAC



afin Moldovean

President, Business Assurance

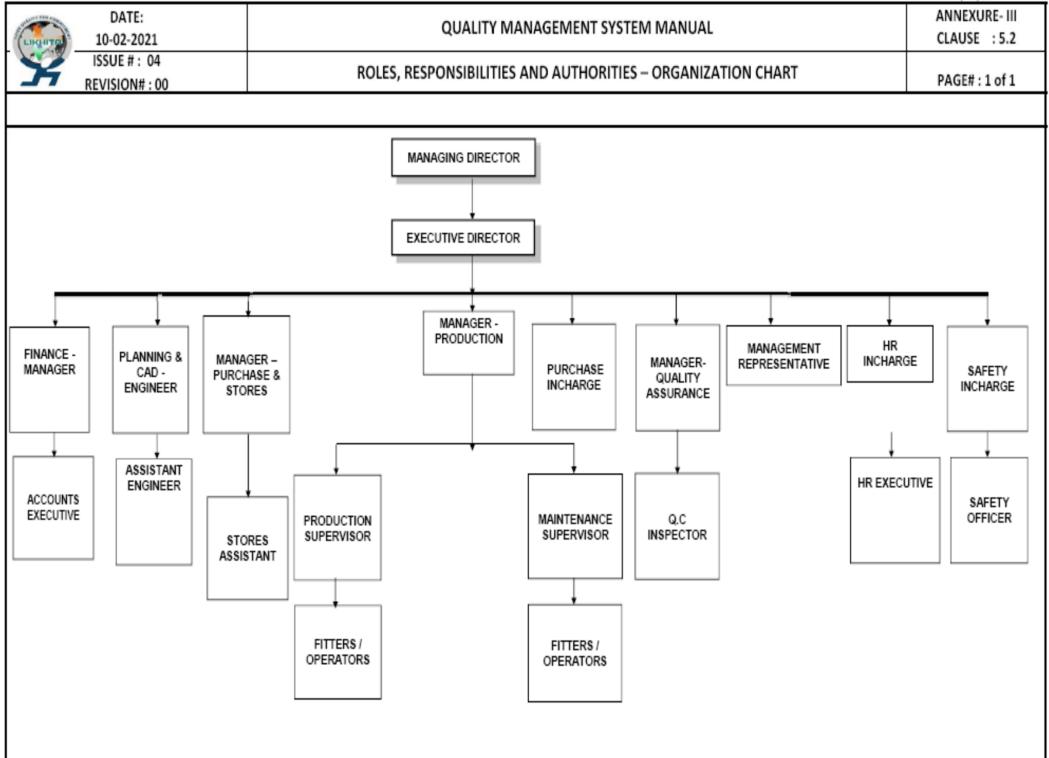
INTERTEK ITALIA SPA. Via G. Miglioli 2/A

20063 Cernusco sul Naviglio (MI)

ITALY



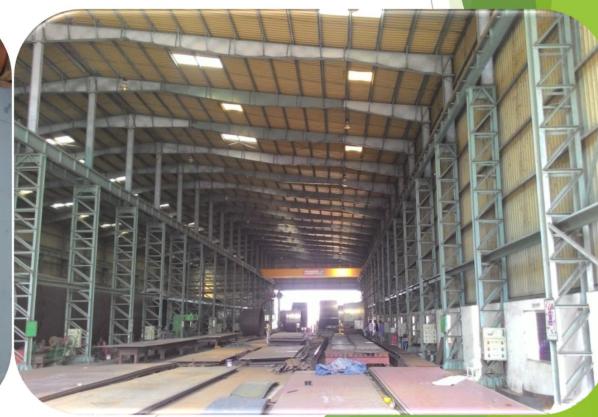






RAW MATERIAL UNLOADING INSPECTION & STACKING

- » Free from heavy rust and pitting
- » Dimensions within spec
- » Grade, Chemical & Mechanical properties meeting spec
- » Plate identification /proper hard punching as per Test Certificate



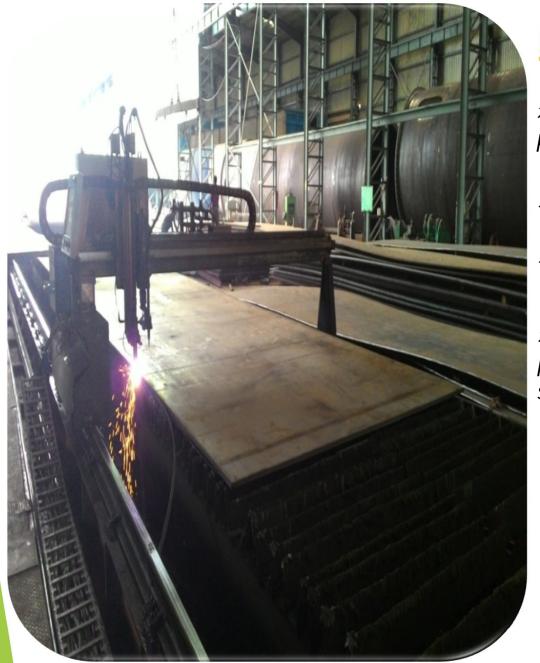


PLATE CUTTING

- » Cutting perpendicular to face as per programmed cutting plan
- » Length within specification
- » Length, width & diagonal within Specification
- » All cut plates shall be identified by hard punched as :Model no., Section no. shell serial no

CNC PLASMA MACHINE - 01Nos BED SIZE - 4MTR x 30MTR (BAY-1)



» Set the cutter angle as per Wps

» Root face, root angle in accordance with approved wps & beveling chart

» Beveled surface should be smooth and rom burrs

BEVELLING MACHINE -02No (BAY-1)
TRANSITION BEVELLING MACHINE-01No



* ROLLING

» pinching pressure w.r.t. thickness as below:

10MM--14MM 15 Bar

15MM--20MM 30 Bar

21MM--26MM 40 Bar

27MM--40MM 50 Bar



» To Check following parameters in accordance with QAP: Profile at both Top & Bottom ends, Peak-in/ Peak-out, Root Gap, Plate edge offset, Circumferential Diameter & visual check.

PLATE ROLLING MACHINES -2Nos(BAY-1)

1. $60mm \ Thick \ X \ 3000mm = 01 \ no$

2. $25mm \ Thick \ X \ 3000mm = 01 \ no$







* LONG SEAM SAW WELDING

- » Set the voltage, ampere, speed & wire feed rate as required w.r.t. the job Thickness inaccordance with WPS
- » Ensure that the Flux is backed. 300°c Min. for 2hrs. Holding Temp before Welding-150°c. feeding in hopper & during Welding -100°c. (AS MANUFACTURER RECOMMENDED)
- » Ensure the tabs (RUN IN & OUT PLATE) are at least 150mm X 200 mm with same thk.
- » Ensure visually welding is free from welding defects like Pin hole, Undercut Burn Through, Uneven Weld bead, Bead Height, Underfill, Spatters & Weld distorsion.



DYE PENETRANT TEST FOR LS-JOINTS

- » Ensure the surface of the welds is free from oil, Greece, lint and visually ok.
- » Apply the cleaner on test Object to remove foreign material on surface.
- » Spray easy visible penetrant Liquid on weld surface and leave it for sufficient dwell time.
- » After completion of dwell time remove penetrant from surface by help of cleaner.
- » After cleaning, apply developer on surface and leave it for adequate dwell time.
- » If any defect observed mark the location near weld. inform concern person to rectify it.
- » Clean the surface.



❖ FLANGE + SHELL VERTICAL FIT-UP

»Ensure perfect matching of shell & Flange faces inside and outside.

» Equate the circumferential variation in 1:0 (offset:Circumference) variation in entire periphery.



- 1. Offset
- 2. Root Gap
- 3. Centre position



* FLANGE + SHELL HYDRAULIC FIT-UP



> CS-FITUP

- » Start fit-up of two half section top & Btm
- » Ensure that the root gap is as per WPS & they are matched abreast.
- » Tack welding is done as per WPS.
- » Tack length 4*t or 50 which ever less.
- » Ensure dimensional measurement and visual check in accordance With QAP
- 1. Offset
- 2. Root Gap
- 3. Alignment of shells
- 4. Length of Tack
- 5. Section length
- 6.Plumb Out



SHELL + SHELL WELD

- » Run the welding machine and start the welding from outside of shell.
- » Back chipping to be done after welding on inside groove.
- » Ensure welding path is aligned with the bevel centre during welding.
- » In case of stop the welding process in between, overlap to be ensured while restarting i.e. minimum 50 mm.



- » Ensure visually welding is Free from welding defects like Pin hole, Undercut, Burn Through, Uneven Weld bead, Bead Height, Underfill, Spatters & Weld distorsion.
 - » Punch the welder no. near The welding T-joint for CS.

BACKGOUGING

FLANGE+SHELL WELD







TROLLY & COLUMN BOOM - SAW WELDING





☐ ULTRASONIC TESTING

- » Clean the area around the weld line (HAZ- Heat affected Zone)
- » HAZ area= 150 mm on both side of welding line (Total 300 mm scanning area to be covered).
- » Apply the couplant (50-50 % mixture of Water &starch) on the HAZ area.
- » Increase 6 dB in reference Db before starting the scanning.
- » Keep overlapping of 10 % to ensure complete coverage.
- » scanning speed of 150 mm/sec.
- » Ensure no defect within HAZ area during scanning
- » If any defect found, Identify with chalk & offer for rectification.



* RADIOGRAPHIC TESTING

- » Place RT film on T-joint with Magnet.
- » Cordon off the area as the radiation is danger for human body.
- » source setting/centering to be done so as the radiation to be exposed on the film.
- » Press 'Start' button to start the radiation.
- » RT film will be exposed in exposure time.
- » Review the RT film w.r.t. density which should be 1.8 to 3.0.
 - » If any defect found Provide traceability for carry out the Repair.



* MPI TESTING

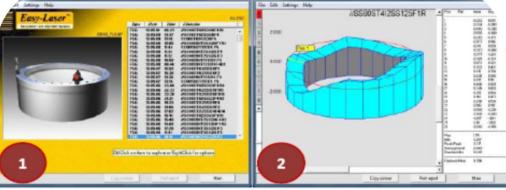
- » Calibrate the machine w.r.t. sensitivity block.
- » Ensure the surface is dust free and clean. Remove Spatters from the surface.
- » apply white contrast on the surface to be checked
- » Ensure No flux leakage on the surface area.
- » If defect found, Mark with white chalk

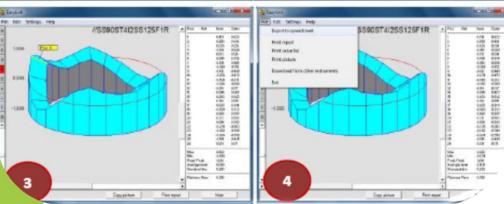


BAY-1

BAY-2







❖ EASY LASER MACHINES-02Nos FLANGE FLATNESS INSPECTION

- » All Flanges tilt & flatness should be within specification
- » Mark the 12 no. of division on flange face where measurement Is to be carry out(the Circumferential distance between each division shall not be more than 500-550 mm
- » Select the program Flatness > Flange Flatness then Enter the number of points (double the no. of division) and the diameter Of flange
- » Start the measurement of flange At inner side and outer side then move to next division & follow the same practice for the whole flange.

❖ FLANGE FACE MACHINING





❖ EASY LASER MACHINE FLANGE FLATNESS INSPECTION

- » Always measure in clockwise direction.
- » Inner side value indicates "A" and Outer side value indicates "B".
- » The Flange division are marked in such way that the three leveling points (REF Point) should fall in measurement points.
- » After completion of measurement save the with respect to the job identification.
- » Click on the filename shown in Easy Link window, select option & export all the data got by this to spreadsheet. The program will give measurement values of OD & ID, and also the flange flatness
- » Flange tilt indication can be find out using A-B formulae



JIGS & FIXTURES



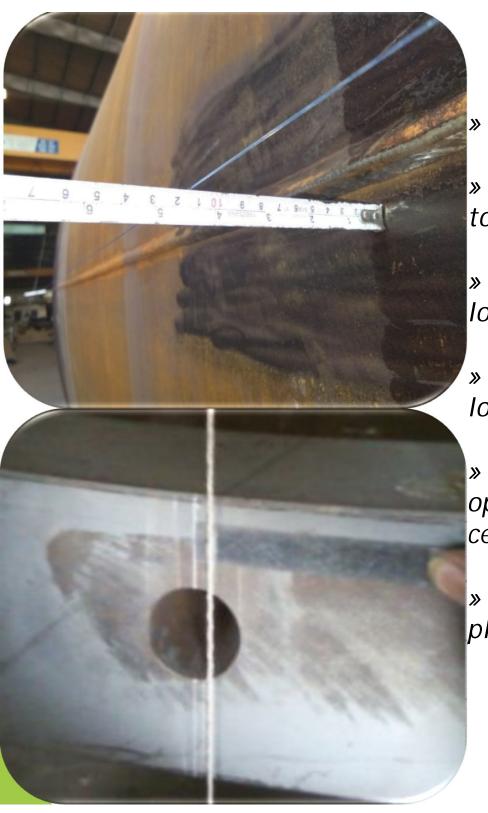


FINAL DIMENSIONS CHECKING

- » Check dimensions at 4 quadrant 0°,90°,180°, 270°):
- a. Alignment/offset
- b. Diagonal
- c. Length
- » Check Ovality of both the flanges as below:
- 1. Check dia at 0°-180°(Y1)
- & 90°-270°(X1)
- 2. Rotate section to 90°
- 3. Check dia at 0°-180°(Y2)
- & 90°-270°(X2)
- 4. Dia-1 = (Y1+X2)/2

Dia-2 = (X1+Y2)/2

Ovality = Dia 1 - Dia 2



* FINAL DIMENSIONS CHECKING

» Check plumb out as below :

» Rotate the section as (90° or 270°) position to bottom.

» Place the plumb from top on 90° to 270° location.

» Set the plum on upper top centre & bottom lower holes.

» Now take plum from there and place on opposite flange top hole & set thread to hole centre.

» Measure distance of bottom hole centre to plumb thread to check 'plumb out



FINAL DIMENSIONS CHECKING

» Check Internals, weldables dimensionally as per approved Internal weldable Check list.

» Check section Visually inside & outside to ensure no defect like: *Pin hole *Under cut *Under fill *Spatter *Over lap *Lamination *Porosity *Dimple *Mismatch *Depression *buckling *Any damage

»Acceptance Criteria:

- 1. Length = \pm 10
- 2. Ovality = 2 mm /Meter
- 3. Diagonal = \pm 3 mm
- 4. Internals bush distance = $\pm 2 \text{ mm}$



- » To Check the climate condition.
- » Set pressure. Gun blow Pressure 7 kg/cm2
- » Shot: Grit Ratio 4:1. Open Grit flow valve
- » Blasting shall be carried out as per Approved Control Plan



- » Visual inspection, Surface profile checking against the Standard & Compare the cleanliness with SA2 ½ comparator
- » Surface Profile :- 50- 75 Microns

SHOT / GRIT - CLOSED BLASTING & PAINTING BOOTH

1. Booth Size - 34m X 8m X 8m



❖ METALLIZING

- » Ensure surface temp is between-10°C and 45°C. & Humidity < 80%
- » Max time delay between blasting and metalizing is 4 hours
- » Ensure metalizing gunto surface distance -150-250mm
- » Align the spraying nozzle with respect to flange face & Door, Duct frames to be metalized & maintain the proper distance for better application
- » Ensure DFT >100 Microns & Ensure visually for missing area / lumps or surface.



BLASTING,
METALLIZING &
PAINTING INSPECTION



PULL OFF ADHESION TEST

CROSS HATCH ADHESION TEST

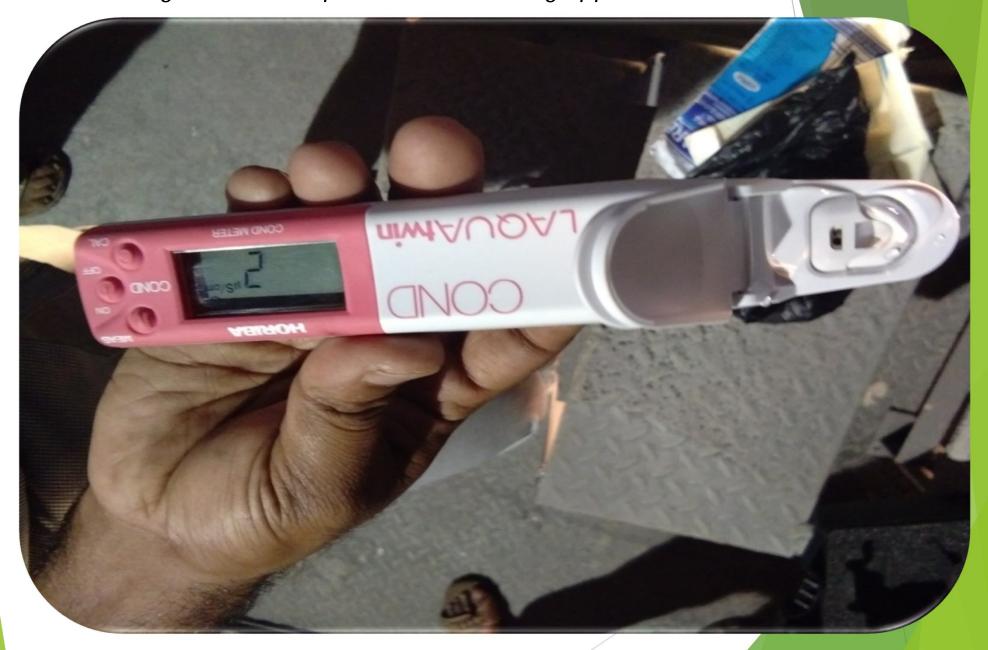
CROSS HATCH ADHESION TEST- TO ASSESS THE ADHESION OF PAINT COATINGS

PULL OFF ADHESION TEST - TO ASSESS THE PROTECTIVE COATING PROCESS

Portable pull-off adhesion testers, like the PosiTest AT, measure the force required to pull a specified diameter of coating away from its substrate. ...During operation, the flat face of a pull stub (dolly) is adher<mark>ed to the coating</mark> to be evaluated.

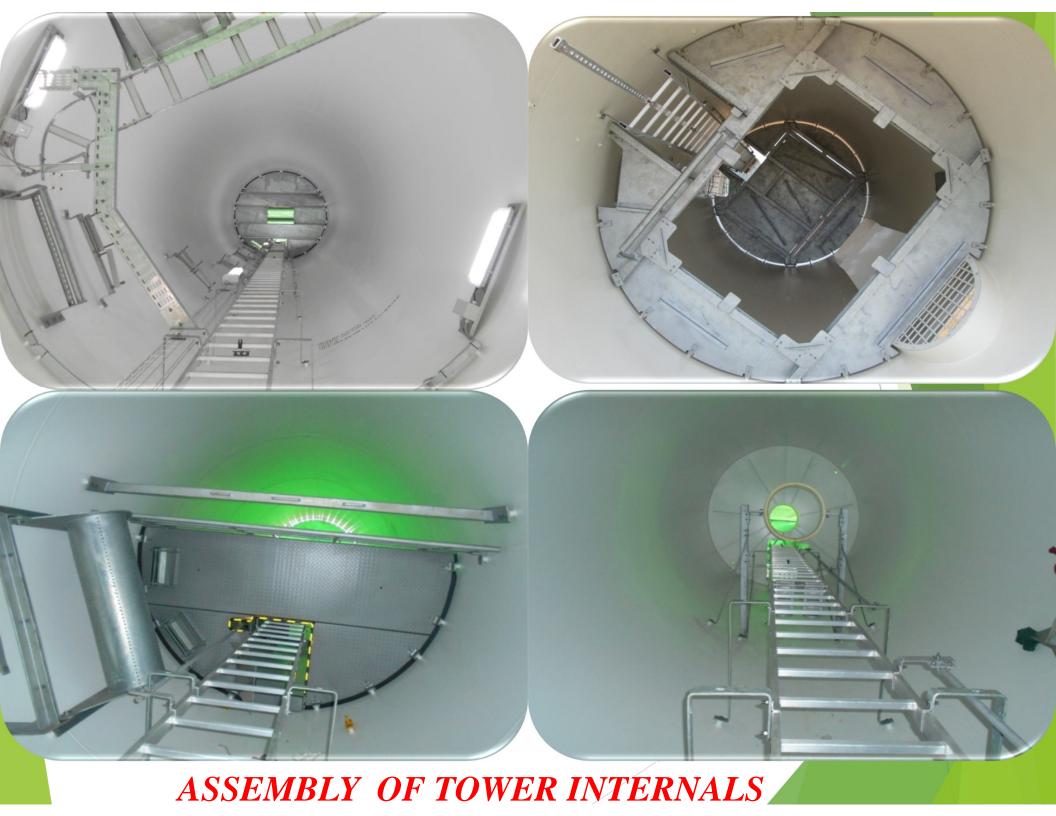
❖ The Bresle Test

> To help to prevent coating failure due to salts such as chlorides and sulphates contaminating the surface prior to the coating application



SALT CONTAMINATION TEST









STORAGE & STACKING OF FINISHED PRODUCTS









DISPATCH OF FINAL PRODUCT

PACKING GUIDELINES FOR TOWER

- Ensure the lashing belt is free from damage to avoid any accident or damage of section
- Put rubber & foam sheet on the saddle to avoid damage of the section paint
- Load the section by crane by tandom lifting keeping balanced height
- ❖ Put the section on the saddle of trailer with taking care to avoid damage of paint
- ❖ Section is Tightened with the help of belt.
- ❖ Put support at trolley end if the section is outside of the trolley
- ❖ See the model & section no. is marked on the ply before loading
- Dispatch document is being checked in accordance with PO
- ❖ Check pre dispatch points as per Punch list
- ❖ If the documents are satisfactory, the section is released for Dispatch
- ➤ Inspection Criteria

Pre Dispatch-Parameters:

Truck size according to section.

Section position on Saddle

Section end is supported

Foam/ Rubber sheet Placed.

Lashing belts tightened.

Spider is tightened properly.

Visual- No damage while loading.

Check points as per Punch list.



TOWER EXPORT TO BRAZIL FROM KRISHNAPATNAM PORT

Format No : F.No:LGI-F/LOM/01



LIKHITA ENERGY SYSTEMS (P) LTD.

YOUR QUALITY OUR COMMITMENT

S.No	Machine Description	Capacity	Qty	Serial No/Id No	MAKE	Remarks
1	CNC Plasma cutting M/C.	Bed Size 4 mtr X 30Mtr	1	LES/CNC-P/001	Contained	UNIT-I
1		Bed Size 4 mtr X 15Mtr	1	LES/CNC-P/002		UNIT-II
2	Plate Bending Machine	60mm thick X 3000mm width	1	LES/BM/01	Himalaya Machinery	UNIT-I
2		25mm thick X 3000mm width	1	LES/BM/02		UNIT-I
3	EP Cutting (Bevelling) M/C	30°,45°& 57.5°	2	LES/EP/01	Gullco International	UNIT-I
4	Transition Bevelling M/C	30°,45°& 57.5°	1	LES/TB/01	V-Max	UNIT-I
5	Motorized Trolley Column &	Vertical Stroke 5000 mm	2 Set	LES/CB/01 Cu-E	Cu-Built Engineers	UNIT-I
5	Boom Model : CCBM 5040T	Horizontal Stroke 4000 mm	2 361	LES/CB/02	Pvt Ltd	UNIT-I
	Motorized Trolley Column & Boom Model : CCBM 5065T	Vertical Stroke 5000 mm Horizontal Stroke 6500 mm	<u> </u>	LES/CB/03	Cu-Built Engineers Pvt Ltd	UNIT-I
6				LES/CB/04		UNIT-I
				LES/CB/05		UNIT-I
	Motorized Hyd. Fit up Station	20 MT	1 Set	LES/20T/HFS/01	Cu-Built Engineers Pvt Ltd	UNIT-I
7		60 MT	2 Set	LES/60T/HFS/01		UNIT-I
,				LES/60T/HFS/02		UNIT-I
		70MT	1Set	LES/70T/HFS/01		UNIT-I
8	Hydraulic Flange Fitup station	4x15MT = 60MT	1Set	LES/15T/HFS/01	Sravana Hydraulics	UNIT-I
9	Flange Face Machining	-	1Set	LES/FFM/01		UNIT-I

	Self Centering Type Welding Rotator	50 MT	16 Set	LES/50T/WR/01 to 16	Cu-Built Engineers Pvt Ltd	UNIT-I
10		15 MT	3 Set	LES/15T/WR/01 to 03		UNIT-I
		80MT	1Set	LES/80T/WR/01		UNIT-I
11	Dummy Flange rotator set (Painting Rotator)	80MT	1Set	LES/80T/PR/01	Cu-Built Engineers Pvt Ltd	UNIT-I
12	10Tonn EOT Crane(10Tx25Mtrs)	10T	1 No	CU/DG-EOT/2017-12/245	Cu-Built Engineers Pvt Ltd	UNIT-II
13	15MT EOT Crane (15Tx20.4Mtrs)	15T	1 No	CU/DG-EOT/2017-04/208	Cu-Built Engineers Pvt Ltd	UNIT-II
15		15T	1 No	LES/15T/EOT/01	Orient Engineers Pvt Ltd	UNIT-I
	20MT X 21M DG EOT Crane	20 MT	1 No	2829	Electromech Material Handling Systems(India)Pvt	UNIT-I
14			1 No	2830		UNIT-I
			1 No	CU/DGEOT/2017-09/225	CU-Built Engineers Pvt Ltd	UNIT-II
15	25MT EOT Crane (25Tx25Mtrs)	25T	1 No	CU/DG-EOT/2017-12/246	Cu-Built Engineers	UNIT-I
13			1 No	CU/DG-EOT/2017-12/247	Pvt Ltd	UNIT-I
16	40MT X 21M DG EOT ABUS Crane	40 MT	1 No	2827	Electromech	UNIT-I
10			1 No	2828	Material Handling Systems(India)Pvt	UNIT-I
17	50MTX22M DG Gantry Crane	50 MT	1 No	LES/GC/001	Orient Engineers	UNIT-I
17			1 No	LES/GC/002		UNIT-I
18	60MTx30Mtrs Gantry Crane	60T	1 No	LES/GC/003	Orient Engineers	UNIT-II
1 1	SubMerged Arc Welding Outfit (Diode Technlogy) Model Maestro - 1200-01(F)	Model 1200 AMPS	4	LES/SAW/WM/001 TO 004	Ador Welding Ltd &	UNIT-I
1 1			4	LLS/ 3AVV/ VVIVI/001 10 004	APS LTD	UNIT-I UNIT-I
				-		

Format No : F.No:LGI-F/LOM/01



LIKHITA ENERGY SYSTEMS (P) LTD.

YOUR QUALITY OUR COMMITMENT

S.No	Machine Description	Capacity	Qty	Serial No/Id No	MAKE	Remarks
20	SubMerged Arc Welding Outfit IGBTModel Maestro - 1000l	1000 AMPS	2		Ador Welding Ltd & APS LTD	UNIT-I
21	SAW Welding machine	1200Amps	3		APS Ltd	UNIT-I
22	Arc Welding Machine(SMAW)	600Amps & 400Amps	21	LES/SMAW/WM/001 to 021	APS Ltd	UNIT-I,II
23	MIG Welding Machine	600Amps & 400Amps	40	LES/MIG/WM/001 to 040	ESAB, Weld Mech & APS	UNIT-I,II
24	TIG Welding Machine	400A	5	LES/TIG/WM/001 to 005	APS Ltd	UNIT-II
25	Single Phase Welding M/C	300AMPS	12	LES/SP/WM/001 to 012	Ultra Arc	UNIT-I,II
26	AG7 Angle Grinding M/C	2400W	24	B-1 to B-24	Bosch & Dewalt	UNIT-I,II
27	AG5 Angle Grinding M/C	-	25	A-1 to A-25	Bosch & Dewalt	UNIT-I,II
28	AG4 Angle Grinding M/C	-	16	C-1 to C-16	Bosch & Dewalt	UNIT-I,II
29	Pencil Grinding M/C	-	5	P-1 to P-5	KEN	UNIT-I,II
30	Magnetic Drilling M/C	36mm	8	M-1 to M-8	K.P.T	UNIT-I,II
31	Pug Cutting M/C	-	7	LES/PC/01 to 07	Sec Machines Konark	UNIT-I
32	Radial Drilling M/C	38mm	2	LES/RD/01 & 02	Sigma & Shayog	UNIT-II
33	Broach cutter Machines	36mm & 50mm	18	LES/BCM/01 to 18	Super Broach	UNIT-I,II
34	Baking Oven	0-400 degree	3	LES/BO/01 to 03	Guru Electrocnics	UNIT-I,II
35	Flask Oven	0-100 degree	11	LES/FO/01 to 11	Arcon	UNIT-I,II

36	CNC Press Brake	4.2Mtr-250T	1	LES/PB/01	Weldor	UNIT-II
		4Mtr x 10mm-400T	1	LES/PB/02	Hindustan Hydraulics	UNIT-II
37	Pipe Bending Machine	-	1	LES/PB/01	-	UNIT-II
38	Numerical Control Shearing Machine	4Mtr x 10mm	1	LES/NSCM/01	Hindustan Hydraulics	UNIT-II
39	Punching Machines	-	10	LES/PM/01 to 10	-	UNIT-II
	Power Press	100T	1	LES/100T/PP/01	-	UNIT-II
40		50T	1	LES/50T/PP/01	-	UNIT-II
		20T	2	LES/20T/PP/01	-	UNIT-II
41	Hydraulic Press	250Tonn	1	LES/250T/HP/01	-	UNIT-II
42	Straightner	600mm wide /Maximum 20mm 3/4 roll configuration	1	LES/STRAGHTNER/01	Indigenous	UNIT-II
43	Heat Treatment	5Mtrsx3.2Mtrx2.5Mtrs Electrical Furnace	1	LES/HT/01	Indigenous	UNIT-II
44	Electrical Air Compressor	10Bar	1	PNA821671 / LES/AC/001	Chicago Pneumatic	UNIT-I
44		10Bar	1	TNE5100395 / LES/AC/002	Atlas Copco	UNIT-I
45	Diesel set Air Compressor	10Bar	1	LES/DC/01	Elgi	UNIT-II
46	Diesel Generator	250KVA	1	LES/DGSET/01	Cummins Powerica	UNIT-I
47	Diesel Generator	125KVA	1	LES/DGSET/02	Cummins Powerica	UNIT-II
48	Blasting booth	34mtr(length), 8mtr(width), 8mtr(height)	1	LES/BB/01	MecShot Blasting Equipments(P)Ltd	UNIT-I
49	Painting booth	34mtr(length), 8mtr(width), 8mtr(height)	1	LES/PB/01	-	UNIT-I
50	Painting Machines	-	2	LES/PM/01 & 02	Graco	UNIT-I,II
51	Mobile Cranes	14MT	2	LES/14T/HYDRA/01 & 02	Ace & Escorts	UNIT-I,II







MATERIAL HANDLING FACILITY GANTRY

- 1. 60MT X 30Mtrs GANTRY 01 No
- 2. 50MT X 22Mtrs GANTRY 02 No's BAY-1
- 1. 20MT X 21Mtrs EOT 03 No's
- 2. 15MT X 21Mtrs EOT 01 No's BAY-2
- 1. 40MT X 21Mtrs EOT 02 No
- 2. 15MT X 21Mtrs EOT 01 No MOBILE CRANES
- 1. 14MT Mobile Cranes 02Nos



Flange Facing Machine

FIT-UP STATIONS

Motorized Hyd. Fit up Station - 03Sets
Hydraulic Fit-up station - 01Set
Self Centering Type Welding Rotator - 19Sets
Welding rotators - 1Set
Dummy flange rotator set - 1Set
Motorized Trolley Column & Boom - 05Sets
SAW Trolley machine - 04Sets





MIG WELDING MACHINES-40Nos





LES/SMAW/WM

TIG WELDING MACHINES-05Nos

SMAW WELDING MACHINES-30Nos





1. Broach Cutters

M/C -Ø75mm-08No's

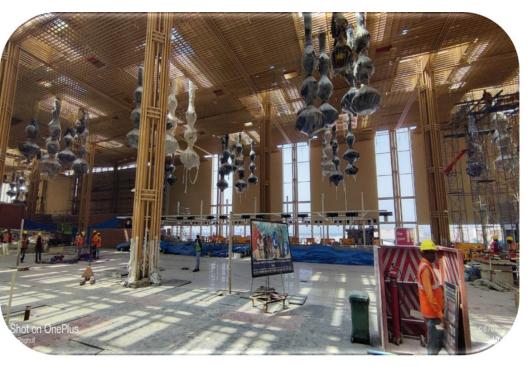
2. Radial Drilling M/C

- Ø36mm - 02No's

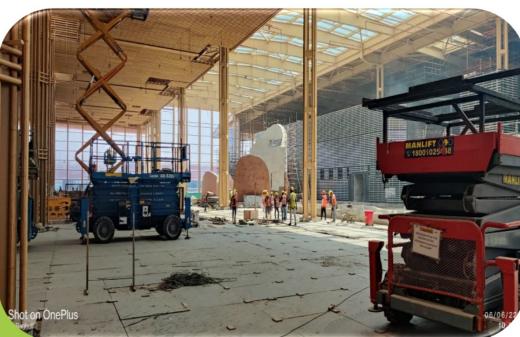
3. Magnetic Drilling M/C-Ø32mm-08No's



STRUCTURALS FABRICATION FOR BANGLORE INTERNATIONAL AIRPORT (BIAL)









STRUCTURALS FABRICATION FOR BANGLORE INTERNATIONAL AIRPORT (BIALL)









STRUCTURALS FABRICATION FOR BANGLORE INTERNATIONAL AIRPORT



METRO RAIL HYDERABAD L&T STRUCTURAL FABRICATION



JSW STRUCTURAL STEEL FABRICATION (JSSL)



JSW STRUCTURAL STEEL FABRICATION (JSSL)









STRUCTURAL ASSEMBLY-BGE ENERGY LTD



STRUCTURAL ASSEMBLY-BGR ENERGY LTD









STRUCTURAL ASSEMBLY



PAINTED COLOUMNS







JSSL BLASTING, PRIMER AND FINAL PAINTED SECTIONS



PAINTED COLOUMNS & BRACINGS



SUPPLIED TO ISRO



SUPPLIED TO L&T METRO



SUPPLIED TO BGR ENERGY



EXPORT TO BRAZIL



DIESEL GENERATOR – 01 No DG Capacity = 250KVA



RESOURCES

COVERED AREA - 5000Sq.meters

UNCOVERED AREA- 72000Sq.meters



STORAGE & STACKING OF FINISHED PRODUCTS AT UNIT-II



PIPE BENDING MACHINE





STRAIGHTNER

20MM THICK

STRAIGHTNER



CNC PLASMA MACHINE











UNDERFRAME COMPLETE FOR LWSCZ COACHES

JNDERFRAME FRONT PART
FOR LWSCZ COACHES



UNDERFRAME COMPLETE FOR LWSCZ COACHES



450LTR WATER TANK

BODY SHELL ITEMS

LIKHITA PROCESS INDUSTRIES

An ISO 9001:2015 Certified Company



Manufacture and supply of Wind Mill Tubular Tower Internals, Supporting Structures for Solar structures, Isolator components, Structural & General fabrication

COMPANY ADDRESS

Office Address:

Plot No: A59/1, IDA Kukatpally, Gandhinagar, Hyderabad 500037 Telangana, India

Factory Address:

Plot No: 90 to 93, Suraram (V),
Qutubullapur (M),
Renga Reddy DT,
Hyderabad-500055.
Telangana, India

Establishment of Likhita:

Likhita Process Industries

Likhita Process Industries was established in 2006, and it was located in Heart of the Hyderabad city. The major portion was specially designed for Wind Mill Tubular Tower Internals with capacity of 30 Sets / Month (Approx 300 MTs / Month). We have supplied our materials through out India.

We successfully exported our Tubular Tower Internal components to Vietnam, Indonesia and Brazil.





Facilities:

Likhita Process Industries

Total Area: 3 Acers

Power Capacity: 250 KVA (EB)Generator: 180 KVA











STORE

MOBILE HANDLING



Machinery:

CNC Plasma cutting M/c

Double Torch - Plasma & Oxyfuel

Capacity: 30 mm (Plasma)

Capacity : 200 mm (Oxyfuel)
Size : 3 Mts x 30 Mts
Make : MESSER



Machinery:

CNC Bending M/c

Thk Capacity : 8 mm

Bending Length: 5200 mm

Make : Hindustan Hydraulics



Machinery:



Shearing Machine- Plasma:

Capacity: up to 6 mm

Cutting Size: 2.5 Mtr

Make : WELDOR

Heavy Duty Hydraulic Press:

Capacity: 750 Tons

Qty: 1 no

Make : Huge Smith



Machinery:





Power Presses:

Capacity:

30 Tons - 250 Tons



Machinery:

Flats & Angle Cutting M/c

Qty : 2 nos

Angle cutting size : $75 \times 75 \times 8 \text{ mm}$ (Max)

Flat cutting size : 120 x 16 mm (Max)

Diesel Generator:

Capacity: 180 KVA

Make : POWERICA





Lift mounting beam

HDG Ladder





Platform Plates

Platform Plates



BOX COLUMN - JSSL







HAND RAILS - JSSL

SHEAR CORE WALL - JSSL





BEAMS - JSSL

COLUMNS - JSSL

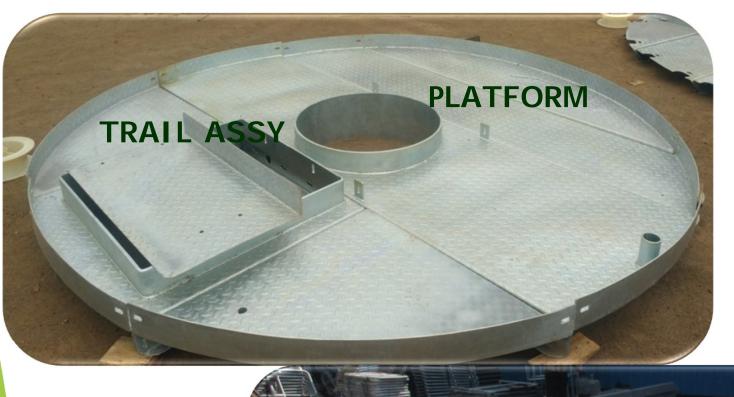




CRUSHER MACHINE FRAME ASSY



SKID ASSY







INTERNAL PART ASSY



SOLAR STRUCTURE TRAIL ASSY





TOWER INTERNALS PACKING



TOWER INTERNALS SMALL ITEMS PACKING

Likhita Process Industries







CRUSHER PART COMPONENTS - EXPORT PACKING



TOWER INTERNALS LOADED





STRUCTURAL LOADED
JSSL



HAND RAILS - JSSL



SHEAR CORE WALL - JSSL



BOX COLUMN - JSSL



Likhita Process Industries STORAGE TANK



LPI & UT TESTING





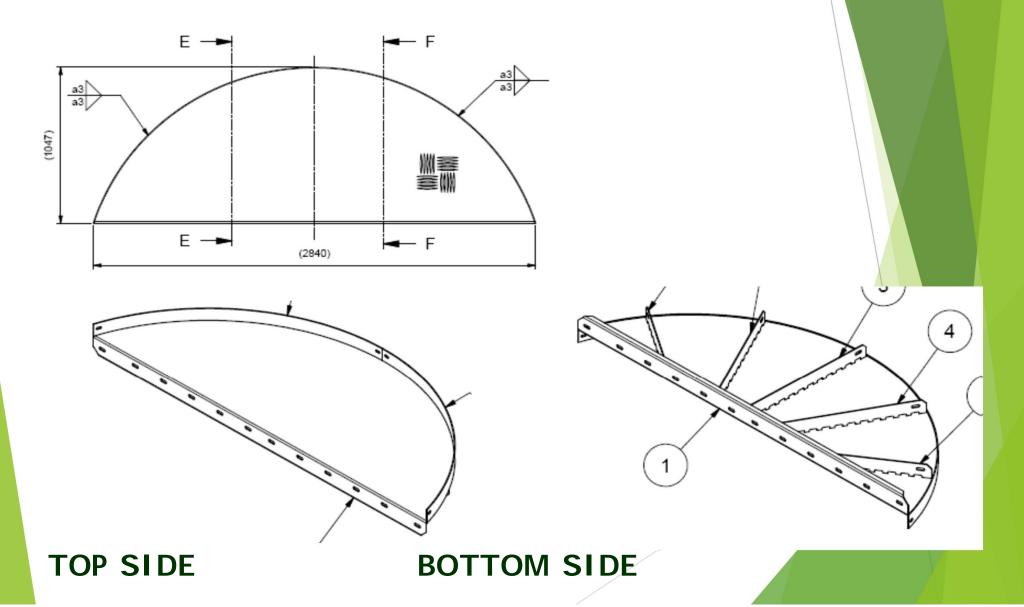
TOWER INTERNALS HDG COATING TESTING







PROPOSAL TO REDUCE DISTORSION



PROPOSAL TO REDUCE DISTORSION



INSTEAD OF SINGLE PLATE
SPLITTED INTO TWO PLATES
WITH BOLTING
SAMPLE FABRICATED &
ACCEPTED



SEZ BUILDING ENTRANCE - JSSL





