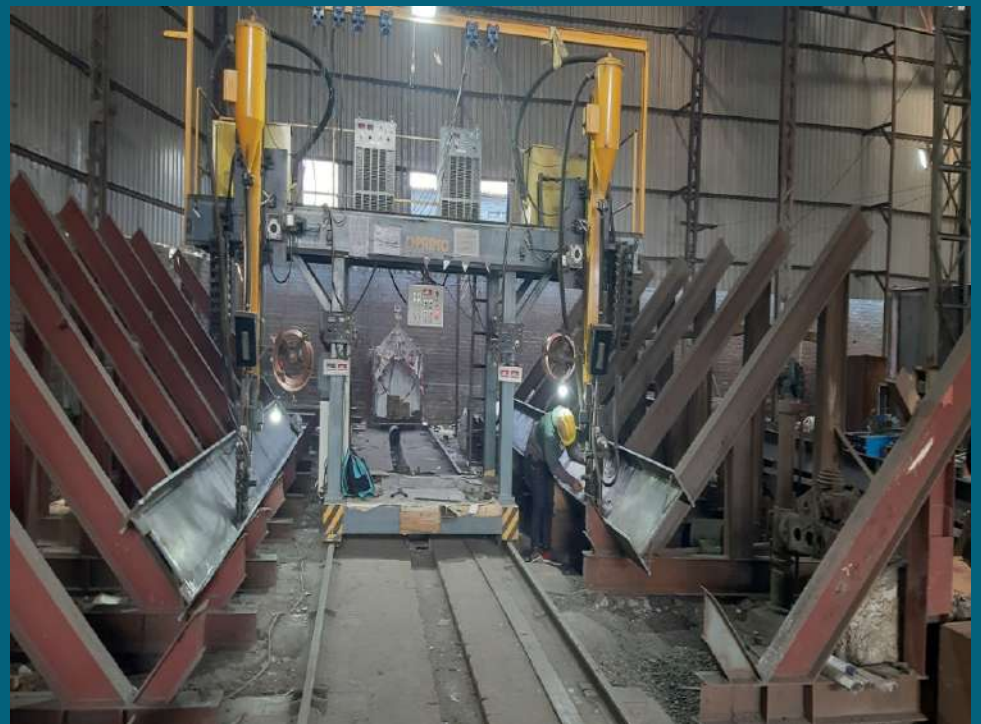


JCL INFRA LTD

An ISO 9001-2008 Certified Company
An RDSO Certified Company

BRIDGE GIRDER DIVISION

Profile



We are RDSO approved leading Designer and manufacturer of Steel Bridge Girders, Open Web Girders, Plate Girders & Bow String Girders along with erection/launching at site. We comply & are approved by RDSO according to there latest STR fulfilling all perquisites and compliances .

We have two fabrication units, both situated at Partapur Industrial Area Delhi Road Meerut having combined covered area of more than 30000 Sqm

We have our own dedicated designing team who have a combined expertise for designing of fabrication drawing, assembling, drawing and preparation of launching scheme

Our Units are operated with latest state of the art CNC machines.

Our Facilities are capable of fabrication of **20000 MT per annum.**

INFRASTRUCTURE

Our both units are fully equipped with all the machinery and infrastructure required as per RDSO standard/as requested by our valued client for manufacturing and inspection and accuracy of the highest value.

We have fully equipped Laboratory for both Chemical and Mechanical testing of material during Inspections.

We have 10 Production Engineers, 15 Supervisors and 5 highly skilled dedicated Fabrication Teams having manpower of more than 250 people who can complete the work in record time with all quality and accuracy.



Some of our achievements -

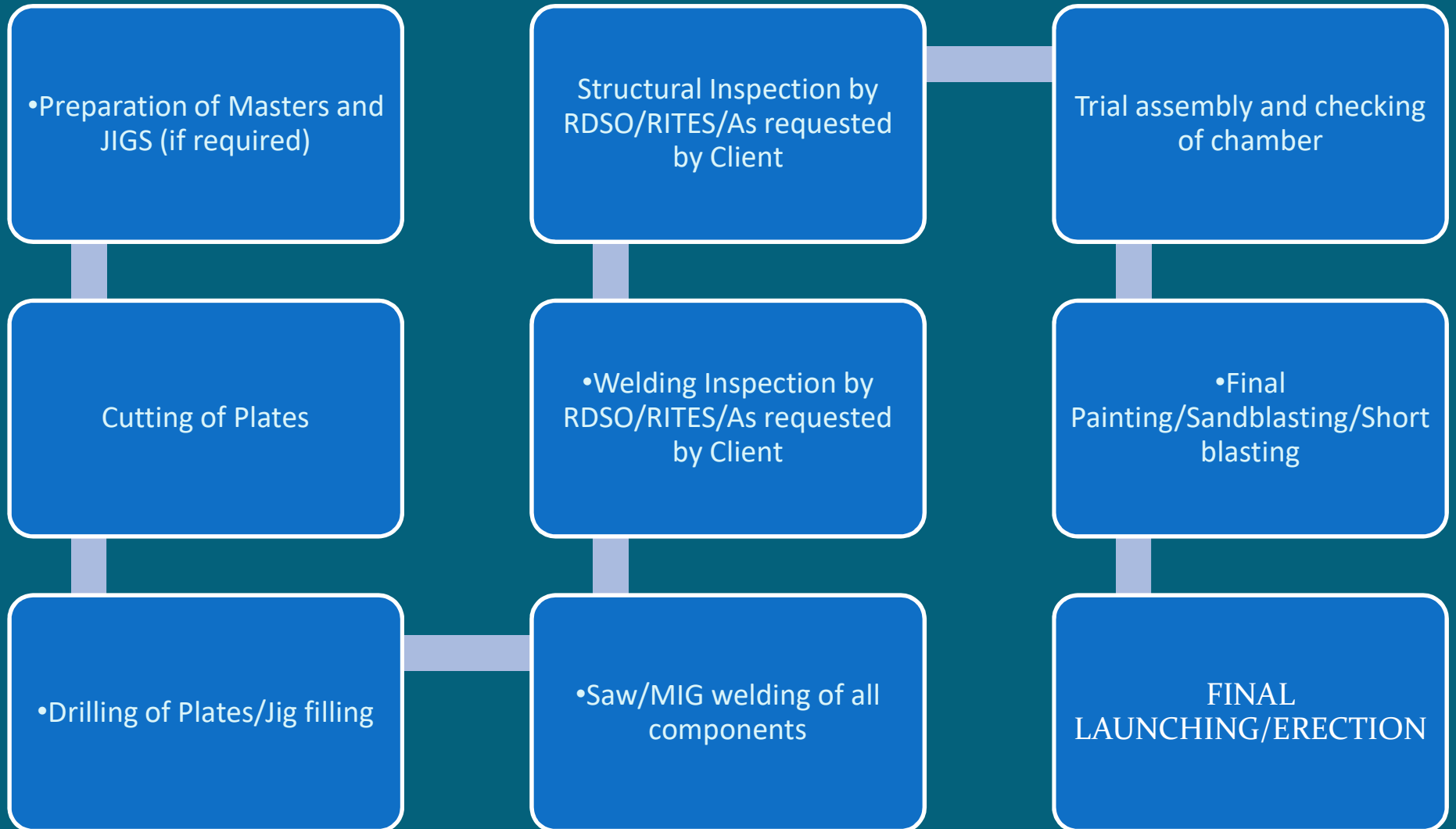
- **Completion of fabrication of 2 - 120 meter OWGs with an accuracy achievement with error of less than 0.01 mm/meter**
- **Successful cantilever launching with centre closing over a 20 meter height of river Ganges of 2 – 120 meter OWGs**
- **Successful fabrication, and launching of more than 6000MT in 6 months simultaneously across 2 independent projects.**
- **Completion of single government work worth ₹57 cr.**

GIRDER MANUFACTURING PROCESS AND INSPECTION

We follow standard process as per RDSO standard for manufacturing and inspection of Girders ensuring quality and accuracy stated as below:

- Developing Fabrication Drawings, Quality Assurance Plan, and welding procedure Data Sheet as per GAD drawing and their approval.
- Layout of Girders for physical verification of drawings and template-ing.

PROCESS CHART FLOW



Development of Fabrication Drawings, WPDS and QAP

- Prior to Fabrication, fabrication drawings are developed by our design engineers based on the general arrangement drawing of the Girders with Quality Assurance Plan and Welding process data sheet
- These are submitted to competent authority for approvals and after approval layout process is being carried out in workshop.

LAYOUT OF GIRDERS FOR PHYSICAL VERIFICATION OF DRAWINGS AND TEMPLATING

- As per approved drawings layout of half elevation of the Girder is being done on floor by drawing lines.
- Camber lengths and nominal lengths are verified from the layout and camber is being checked as per drawing
- Templating of gusset plates is being done on all Intersection joints and preparations of Master Jig gussets are being done for production.

MASTER AND JIGS

- Masters and Jigs are prepared by transferring intersection lines on Master gussets and detailing holes as per drawing on them.
- Drilling of holes is being carried out for manufacturing of Master Jigs for further production of similar gussets(if requested)
- Drilling is generally done by CNC drilling machine On all structural members

CUTTING OF PLATES

- After inspection of Raw Materials, cutting of all plates used in fabrication of Girder components is being carried out with the help of CNC cutting machine for the plate to be cut in best accuracy size.
- It is ensured that plates are cut dimensionally and not cut undersize



DRILLING OF HOLES/JOG FILLING

- From the Master Jigs, drilling of similar plates are being carried out with the help of Radial drill machine and CNC punching machines



Girder Straightening machine Installed in our factory for handling all Size of Girders as per RDSO guidelines



Fabrication Workshop Pictures



WELDING INSPECTION BY RDSO/RITES/RAILWAY

After final welding, Welding inspection is being carried out in workshop by carrying out following Welding Tests as per approved QAP:

- Visual Inspection
- Non destructive inspection (NDT)
 - Magnetic Particle Inspection
 - Ultrasonic Test
 - Radiographic Test
 - Dye Penetration Test (DPT)
- Destructive Test
 - Macro- Etching test
- We have in-house testing facilities for conducting all these Tests.

SAW/MIG WELDING OF ALL COMPONENTS

- After cutting of all plates, fittings of Girder components on fixture with proper lines and level.
- Final Welding SAW/MIG as per approved fabrication drawings is done on Girder components by keeping them on fixtures
- Drilling of holes on these components is done after final welding.
- We use SAW/MIG wire and Flux manufactured by RDSO approved vendors.
- We have our own specially designed fixtures for SAW to ensure accuracy and speed

STRUCTURAL INSPECTION BY RITES/RDSO/RAILWAY

After welding approval, girder components are being checked dimensionally as per drawings. Following parameter are usually being checked by Inspection Authority:

- Overall Length of Members and gusset size.
- Depth of Girders
- Distance between center of bearings.
- Hole pitch and edge distance
- Overall width of the girder components
- Distance between Holes
- Straightness of the Girder components

TRIAL SHOP ASSEMBLY AND CHECKING OF CAMBER

- Trial Assembly of Girder is being done at shop after inspection with the help of Bolts and Drifts.
- For multiple Girder of same drawings, trial assembly of 1st span is sufficient to check the correctness of fabrication and Jigs/Templates or else directed.
- Proper camber as per drawing is given at all joints with the help of camber jacks for the final testing of Camber.
- After inspection of camber, the Girder is dismantled and stacked for painting/metalizing as per requirement.
- We have overhead Cranes (20 MT Capacity) for assembly of Girders which reduces time and hence increase our production capacity.

FINAL PAINTING/BLASTING AND METALIZING

- Before dispatch, Painting/Sandblasting, Metalizing is done on Girder components as per Bridge code (IRS B1:2001).
- Spray painting is done at our Paint shop to give best quality and long life.
- We use Iron Grit for Blasting to give desired roughness to the surface before Painting and Metalizing. We have separate Paint/Sand Blasting Shop for both the units to match the production.
- We also use Epoxy and International Paints if desired by the client

SANDBLASTING AND METALIZING CHAMBER



ERECTION AT SITE

We have expertise in Launching and Erection of Open Web Girders /Plate by all method namely-

- Erection by Crane over Trestle/CC Cribs.
- Launching by Cantilever Crane method using Link Members
- Launching by Rolling method/ Girder Train Method by Joining 2-3 Girders by Temporary Link Members

RDSO APPROVAL CERTIFICATE

Ph. Rly. 42122 (O)
Telefax: 0522-2459920 (O)
Email: dsb2rds@gmail.com

भारत सरकार-रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ- 226011

Government of India - Ministry of Railways
Research Designs & Standards Organisations
Manak Nagar, Lucknow-226011

BY SPEED POST

No. CBS/G/Reg./ JCL Infra Dated: 11-02-2020

M/s. JCL Infra Limited
J. Sons House, Garh Road
Meerut-250 002 (U.P.)

Sub: Continuation of firms name in the RDSO approved list of Vendors for fabrication of Open Web, Composite and other Steel Plate Girders Part 'A'.

Ref: Your firm's letter No. JCL/RDSO/Girder Regn./2019-20/6855 dated 05-02-2020.

Based on the compliance received vide reference above, it has been approved by the competent authority that firm's name has now continued in the RDSO approved list of Vendors for fabrication & supply of steel bridge Girder Part 'A' w.e.f. 05.02.2020.

The other conditions given in Vendor Registration have no change.

Pradeep Kumar
11-2-2020
(Pradeep Kumar)
Joint Director/B&S

ISO 9001:2008 CERTIFICATE

KVQA Certificate of Registration
(Quality Management System)

KVQA CERTIFICATION SERVICES PVT. LTD.
This is to certify that the Quality Management System of
M/S JCL INFRA LTD.
Khasra No. 373 & 374, Industrial Area, Delhi Road,
Partapur, Meerut-250103, U.P., India.
JCL Infra Ltd. (Work Shop)-Khasra No. 333, Industrial Estate,
Delhi Road, Partapur, Meerut -250103, U.P, India.

Has been found to be of the Quality Management System Standard
ISO 9001:2015
This certificate is valid for the following product or service range
Manufacture and Supply of Rail Product i.e. Switches, Crossings,
Spring Setting Devices (SSD), Switch Expansions Joints (SEJ),
Improved Switch Expansion Joints (ISEJ), Steel Channel Sleepers,
Steel Bridge Girder and Fittings.

1st Surveillance Done On: 17/04/2019
2nd Surveillance Done On: 17/04/2020

Certificate No: **KDACQ201805124**
Date Of Issue: 17, May, 2018
Valid Until: 16, May, 2021*

Issued by ---
Authorised signatory KVQA

IAF **elac**
In Check the Status of the Certification kindly log on to www.kvqa.in
F-300, Sector-63, Noida U.P. India. Ph-011-22711940, 22711941
Email : delhi@kvqa.in
*Subject to successful completion of surveillance audits
CB-045-QMS

SOME OF OUR COMPLETED PROJECTS



**Fabrication and Erection of 90 mtr span
Open Web Girder ,
3x30 mtr Composite Girders
over river Ganga over road bridge**



OWG-30.5Mtr Span



OWG-45.7 Mtr Span



**Launching &Erection of 4 nos OWG
74 mtr span over River Ganga ROB**



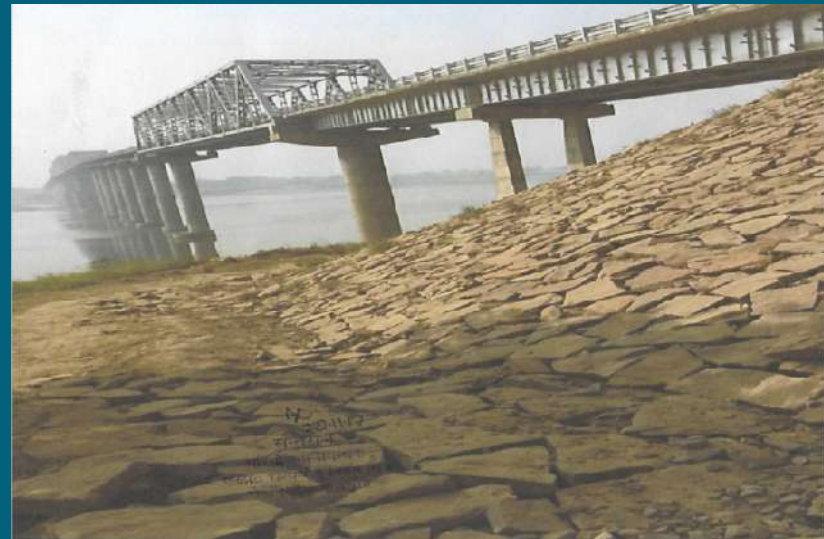
**Erection by Cantilever Crane over Rivers ,
Spans of 120 mtr, 90 mtr ,
72 mtr and 30.5 mtr ROB**



**3 Nos OWG for
Mumbai Monorail Project,
L&T**



**Completed ROB with
Steel OWG of spans
72 mt x120 mt x72 mt**



**Erection of Girders for DFCCIL
Tata Projects Ltd**



It will be a Pleasure to Serve You

Contact for Very Quick Responses:

Mr. V.Subramanian,
President-Marketing,
Mobile: 9849063039,

E-mail: vsubramanian.jcl@gmail.com

Mr Vishwa Vasu Gupta, Executive Director, Email:vishwa@jcl.in

Mr. Ajai Gupta, Managing Director. Email:info@jcl.in

Factory Address:

JCL Infra Limited,

Partapur Industrial Area, Delhi Road, Meerut-250103