

**Calbah**  
1300 225 224

Design  
Engineering  
Fabrication



## DESIGN, ENGINEERING, SPECIALISED FABRICATION

NOTE: Some items are IP protected and cannot be copied

TUNNEL GANTRIES

Improvise Adapt and Overcome

## 30 YEARS OF PREMIUM, REPUTABLE, SPECIALISED DESIGN ENGINEERING

Calbah Industries Design and Drafting office has extensive experience. From concept discussions or sketches, we assist clients with the process of Industrial Design and product development through to specification for manufacture, shop drawings, production management and delivery of finished goods.

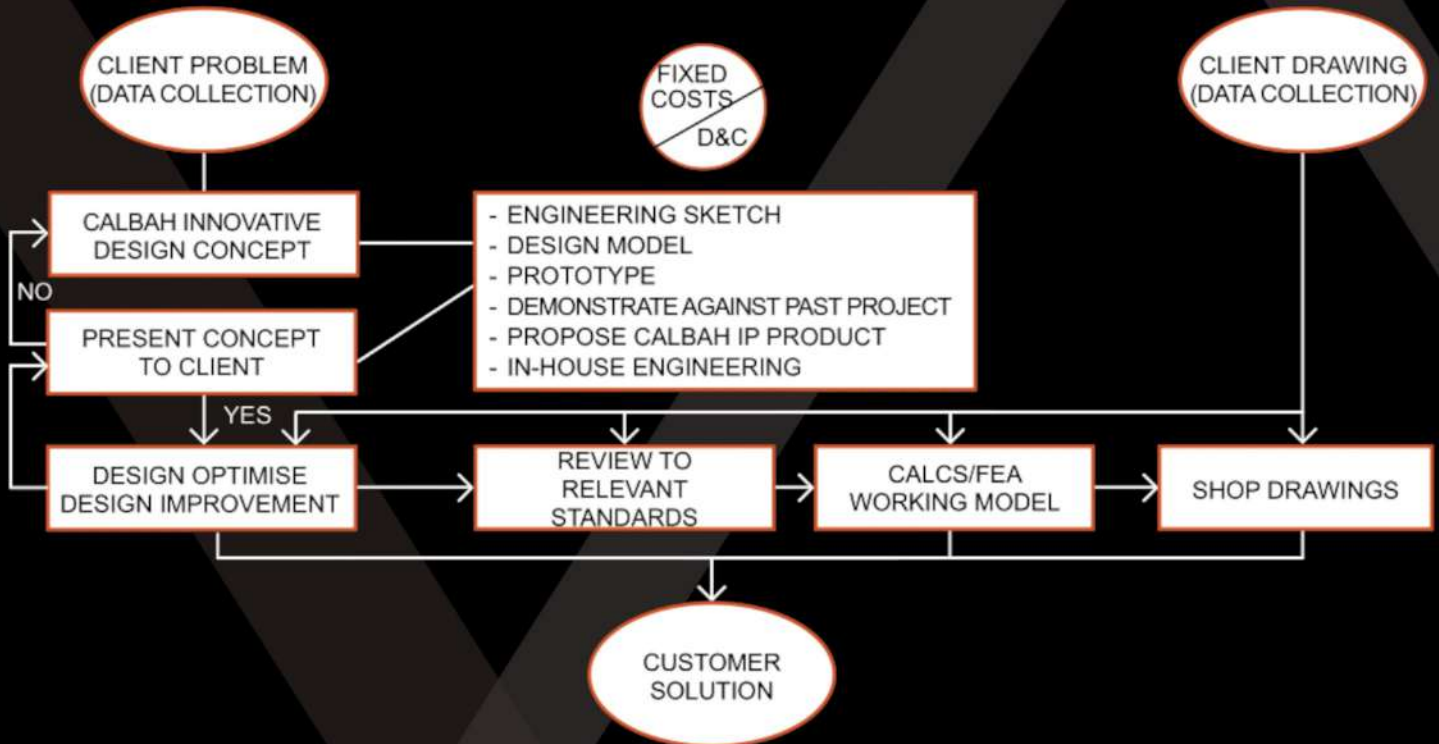
- |                |  |
|----------------|--|
| Design Brief   | Your needs and scope are clearly understood and defined  |
| Concept Design | Calbah Industries develops a solution to meet your needs and presents this solution to you for discussion and approval |
| Design         | Calbah Industries develops the design to achieve maximum productivity and efficiency in operation                      |
| Delivery       | Final design is presented<br>Option for full shop drawings to be completed   |



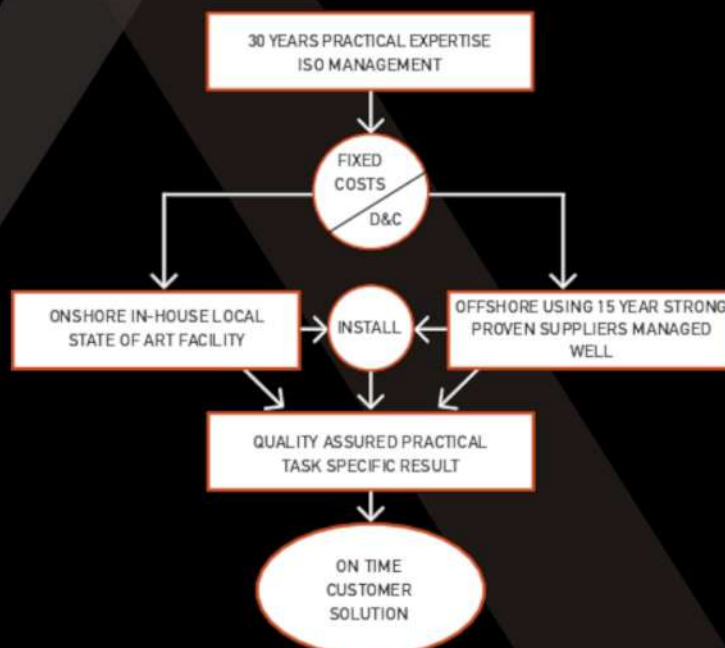


# CALBAH DESIGN/FABRICATION STRUCTURE CHART

## CALBAH INDUSTRIES – INDUSTRIAL DESIGN



## CALBAH INDUSTRIES – FACILITATE PROJECT



## CUSTOM DESIGN & ENGINEERING OFFICE

Design Engineers

Draftsmen

Design Review and enhancement/  
optimisation

FEA, Design Verification by 3rd Party,  
shop drawings

Hydraulic, Mechanical, Electrical,

Spooling and Heavy Fabrication.

Highly Experienced in Tunnelling,  
Infrastructure, Mining, Oil & Gas, Rail  
and General Engineering

Practical Design through to  
Commissioning

Qualified Project Managers

## INDUSTRY SECTORS

- Oil & Gas
- Tunnelling
- Rail
- Infrastructure
- Specialized Machinery  
Design & Manufacture
- General Engineering
- Mining

## CERTIFICATIONS

ASI Environmental Sustainability  
Charter Member Platinum

Avetta Consortium Member

AS 1210, ASME, AWS D1.1

AS/NZS 1554.1, 1554.2, 1554.3,  
1554.4, 1554.5, 1554.6

ISO 45001: 2018 Health and Safety

DNV 2.7-1, DNV 2.7-3

ISO 9001: 2015 Quality

ISO 14001:2015 Environment

## QUALIFICATIONS





## MULTIPURPOSE TUNNEL FIT-OUT GANTRIES



Calbah Industries has designed and developed various types of self-propelled gantries for installation of brackets, pipes, handrails, and cables within the tunnel. The Calbah design team will adopt the gantries to each tunnel's specific requirement such as space proofing, workstation phases, stages, and assessments of risks.

## Types of Gantries

- Upper Gantries
- Lower Gantry
- Cable Gantry
- Track Form (concrete panel) Installation Gantry
- Panel Installation Gantry

## Other related products with the Gantries

- Logistics / Loading baskets for Upper, Lower & cable gantry.
- Cable drums Skids for the Cable gantry
- Hydraulic Single concrete panel lifter
- Hydraulic 2 & 3 panel lifter

## Features

- Self-driven powered by diesel generator and hydraulic power pack.
- Hoists (sliding & fixed types) for loading, unloading listing the Basket
- Sliding Pneumatic arms to help assemble Brackets
- Work & Loading platforms
- Access/emergency exit stairs
- Safety features like squawker, warning lights and emergency stops
- Remote for control of hoists and Gantry
- Lights & Electrical power points
- Changeable wheel to drive either on flat or sloped surfaces of tunnel

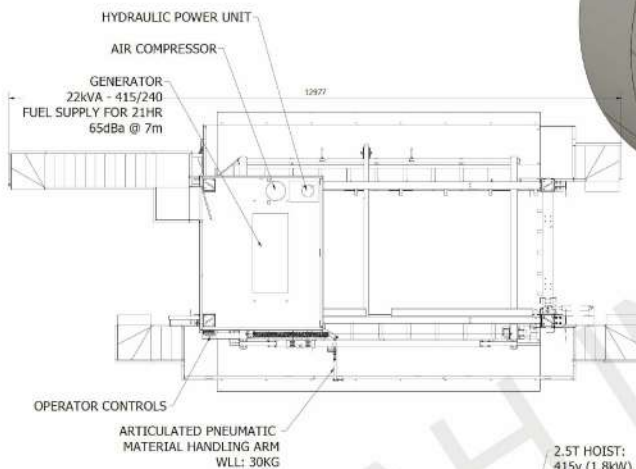
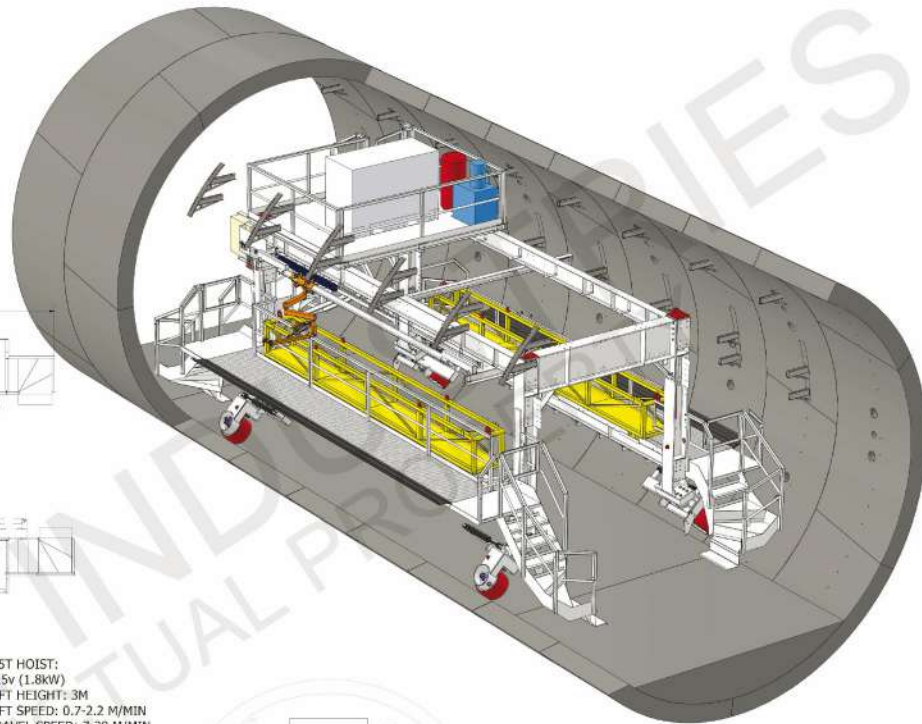
The above features vary based on the gantry type and its function. For more details regarding each type of gantry, read the comments associated with the appropriate gantry within the brochure.



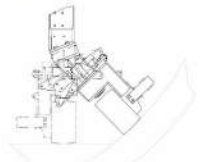
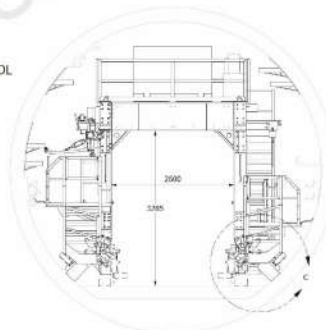
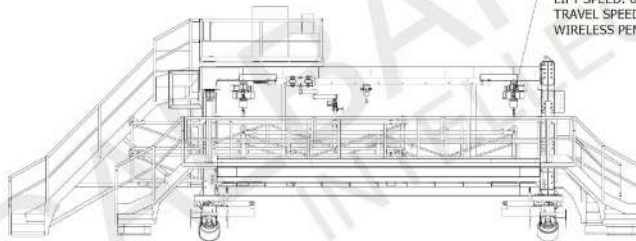


## LOWER GANTRY

TARE WEIGHT: 10.5T  
MAXIMUM WEIGHT: 15T  
SPEED: 10 M/MIN (MAX.)  
INCLINE: 8%  
STEERING:  $\pm 45^\circ$   
WHEEL: 5000KG (DURO 95A)



2.5T HOIST:  
415v (1.8kW)  
LIFT HEIGHT: 3M  
LIFT SPEED: 0.7-2.2 M/MIN  
TRAVEL SPEED: 7-20 M/MIN  
WIRELESS PENDANT CONTROL



ADJUSTABLE DRIVING SURFACE

|              |                         |
|--------------|-------------------------|
| PROJECT NAME | TUNNEL FIT-OUT GANTRIES |
| CLIENT       | LOWRIE GANTRY           |
| DRAWN BY     | CALBAH INDIAN/THIRUS    |
| CHECKED BY   | TH                      |
| VERIFIED BY  |                         |
| REV NO.      |                         |
| SHEET SIZE   | A1                      |
| WEIGHT       |                         |



17/28 Warrington Drive, Scarborough NSW 1515  
P: +61 8 9392 4100 F: +61 8 9392 4101  
E: info@calbah.com.au  
www.calbah.com.au

DRAWING NO.: TUNNEL FIT-OUT SHIT: 2/4 REV

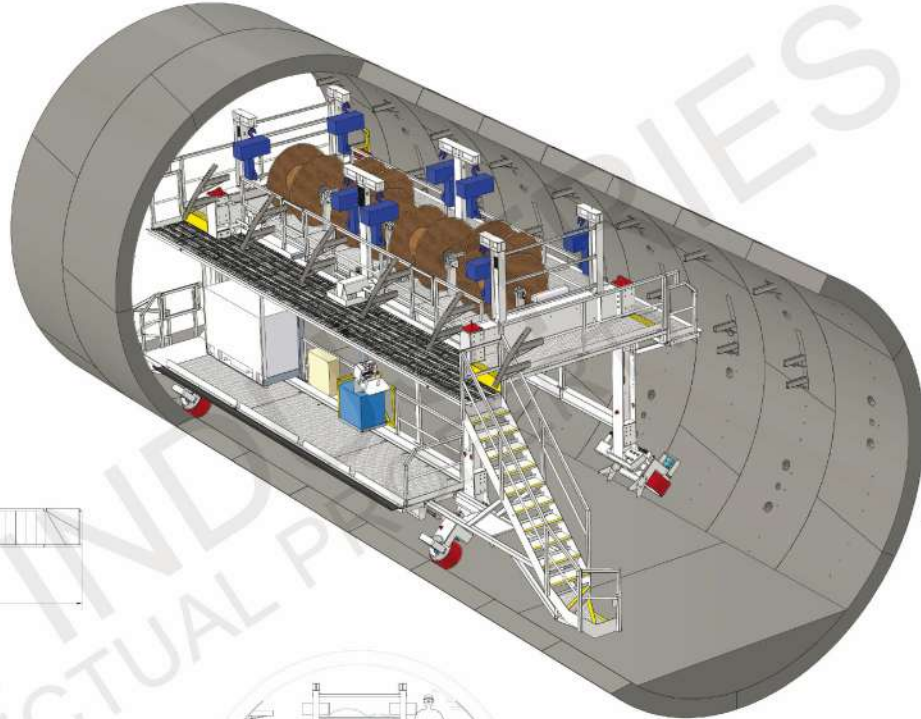
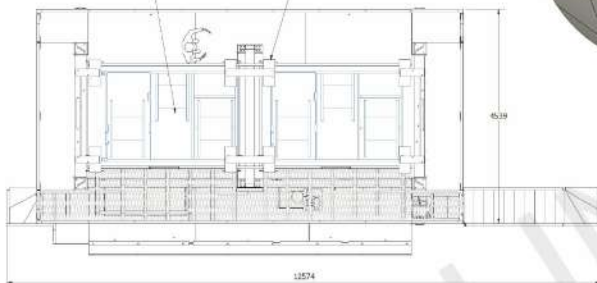


## CABLE GANTRY

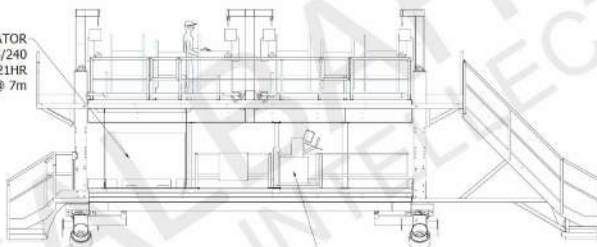
TARE WEIGHT: 12.1T  
MAXIMUM WEIGHT: 16.7T  
SPEED: 10 M/MIN (MAX.)  
INCLINE: 8%  
STEERING:  $\pm 45^\circ$   
WHEEL: 5000KG (DURO 95A)

HOISTS  
WLL: 2T ea.  
SINGLE REMOTE CONTROL  
SELECTABLE UP TO 8x HOISTS

CABLE DRUM SUPPORT SKID  
WLL: 1850KG ea.



GENERATOR  
22kVA - 415/240  
FUEL SUPPLY FOR 21HR  
65dBa @ 7m



HYDRAULIC POWER UNIT  
(OPERATOR CONTROLS)

ADJUSTABLE DRIVING SURFACE

PROJECT NAME: TUNNEL FIT OUT GANTRIES

CABLE GANTRY

CLIENT: CALBAH INDUSTRIES

DRAWN BY: JH

CHECKED BY:

VERIFIED BY:

ISS NO.:

SHEET NO.:

WEIGHT:



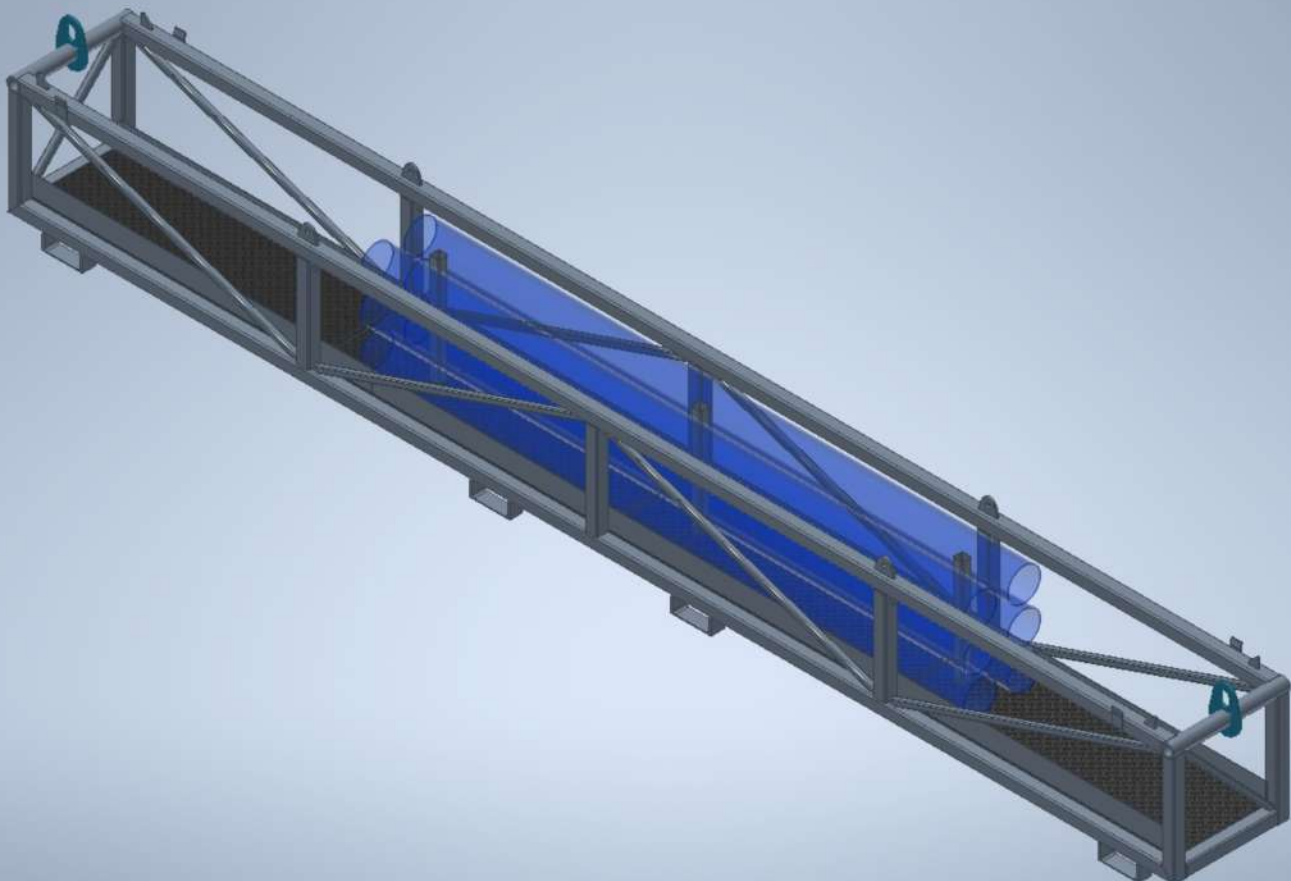
11/28 Adelaide Drive, Endeavour Hills, VIC 3170  
P +61 395 404 0111 F +61 395 404 0112 E info@calbah.com.au  
We are Calbah. We are the experts in steel construction.

WWW.CALBAH.COM

DRAWING NO.: TUNNEL FIT OUT GANTRIES

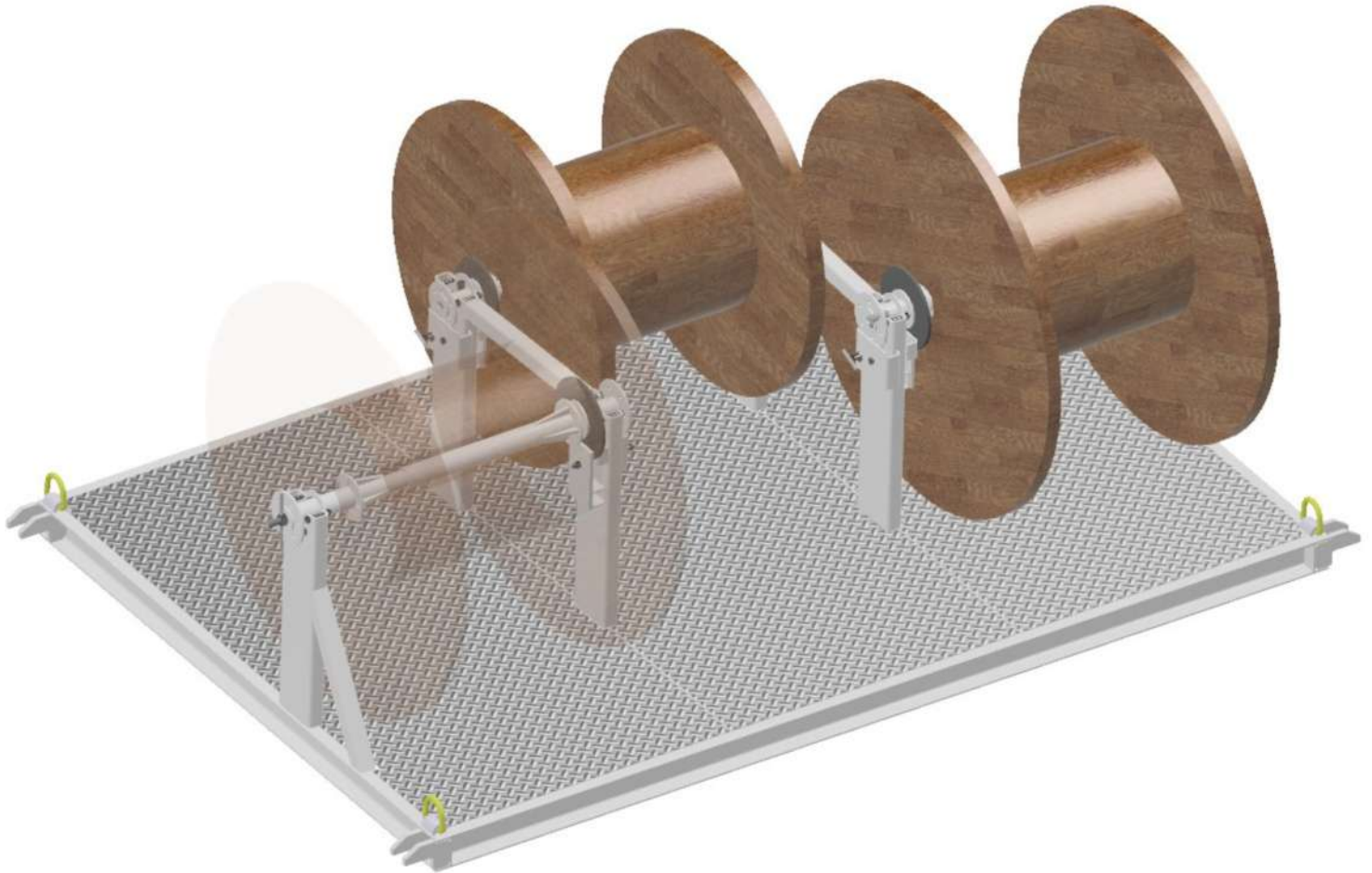
SHT: 3 / 4 REV

## LOGISTICS & LOADING BASKETS





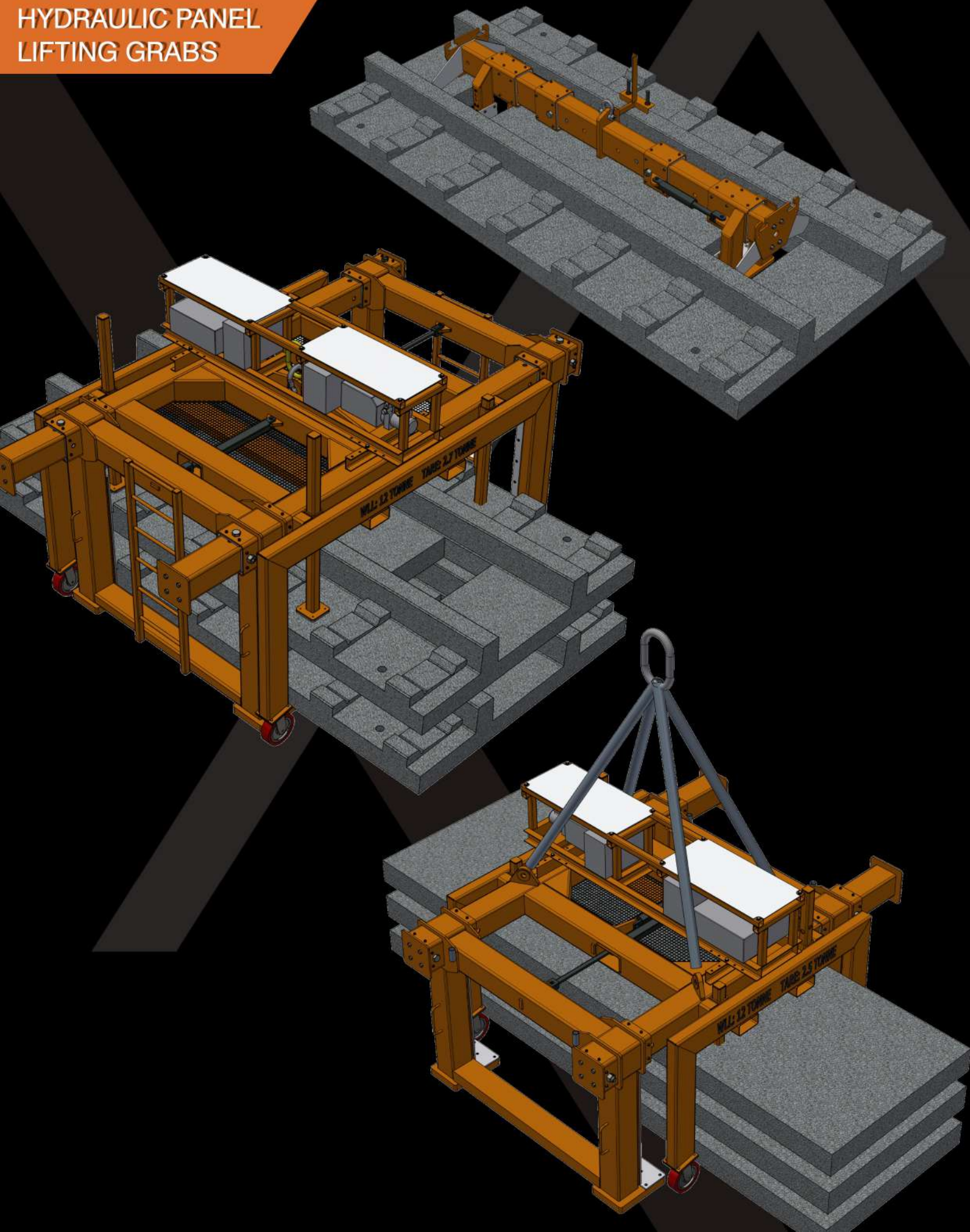
## CABLE DRUM SKID



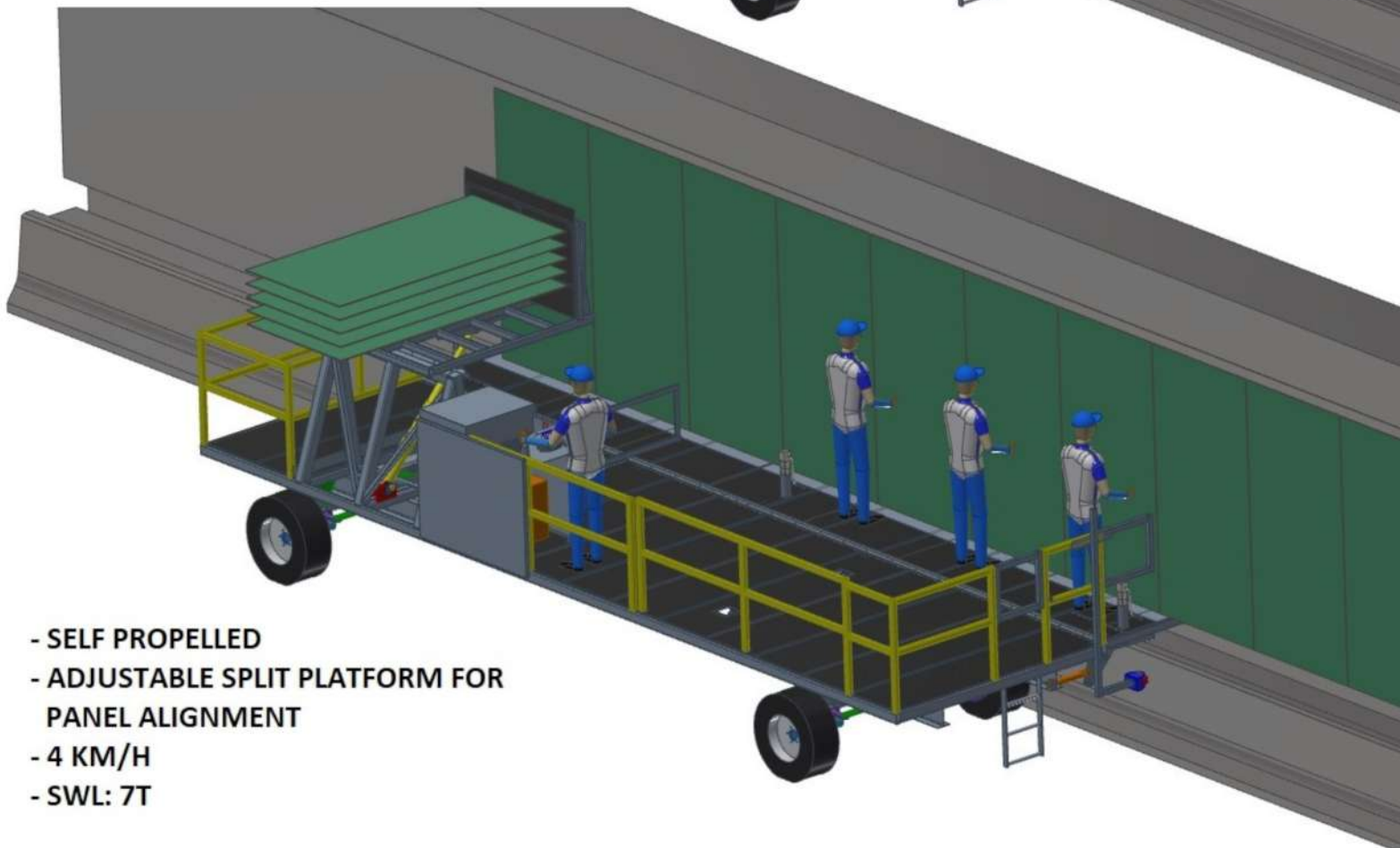
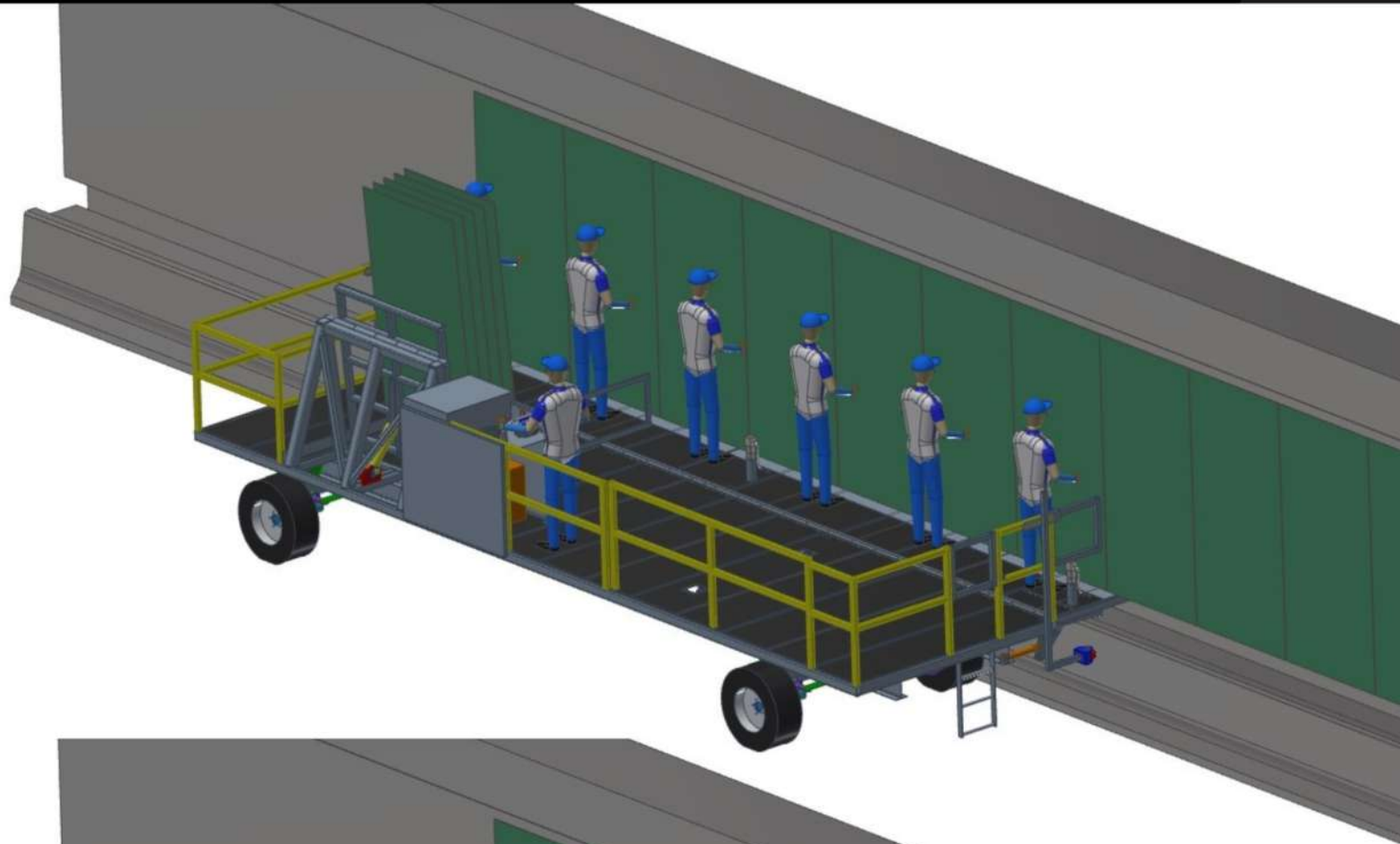
|   |   |  |                |   |  |
|---|---|--|----------------|---|--|
| PROJECT NAME  | TUNNEL OUT GARDENS  |  |                |    |  |
| TRACK/FORM/ENTRY  |    |  |                |   |  |
| CLIENT  | CALBAR INDUSTRIES   |  |                |   |  |
| DESIGNED BY   | 201   |  |                |   |  |
| CHECKED BY  |   |  |                |   |  |
| FOR NO.   |   |  |                |   |  |
| SHEET SIZE  | A3  |  |                |   |  |
| WEIGHT  |   |  |                |   |  |
| <p>2708 Midway Drive, Scarborough, ON, M1V 4Y3<br/>         Tel: 416-291-8700 Fax: 416-291-8701 E: info@calbar.com P: 416-291-8700</p> <p>2708 Midway Drive, Scarborough, ON, M1V 4Y3<br/>         Tel: 416-291-8700 Fax: 416-291-8701 E: info@calbar.com P: 416-291-8700</p> |   |  |                |   |  |
| DRAWING NO. : TUNNEL-OUT-001  |   |  | SHT: 4 / 4 REV |   |  |



## HYDRAULIC PANEL LIFTING GRABS



## PANEL INSTALLATION GANTRY



- SELF PROPELLED
- ADJUSTABLE SPLIT PLATFORM FOR  
PANEL ALIGNMENT
- 4 KM/H
- SWL: 7T



**1300 CAL BAH**  
**225 224**