

SPMTs' CONNECTING BEAMS

THE WORLD... OUR PASSION
SINCE 1955

TECHNICAL BROCHURE

INTRODUCTION

Oil & Gas Industry demand for Pre Assembled Rack (PAR) handling is increasing every year due to the growing of Modularized Construction Methodology applied for new downstream and LNG plants.

Such grass root plants are located in remote areas of the world where heavy transport equipment availability and relevant logistic is difficult.

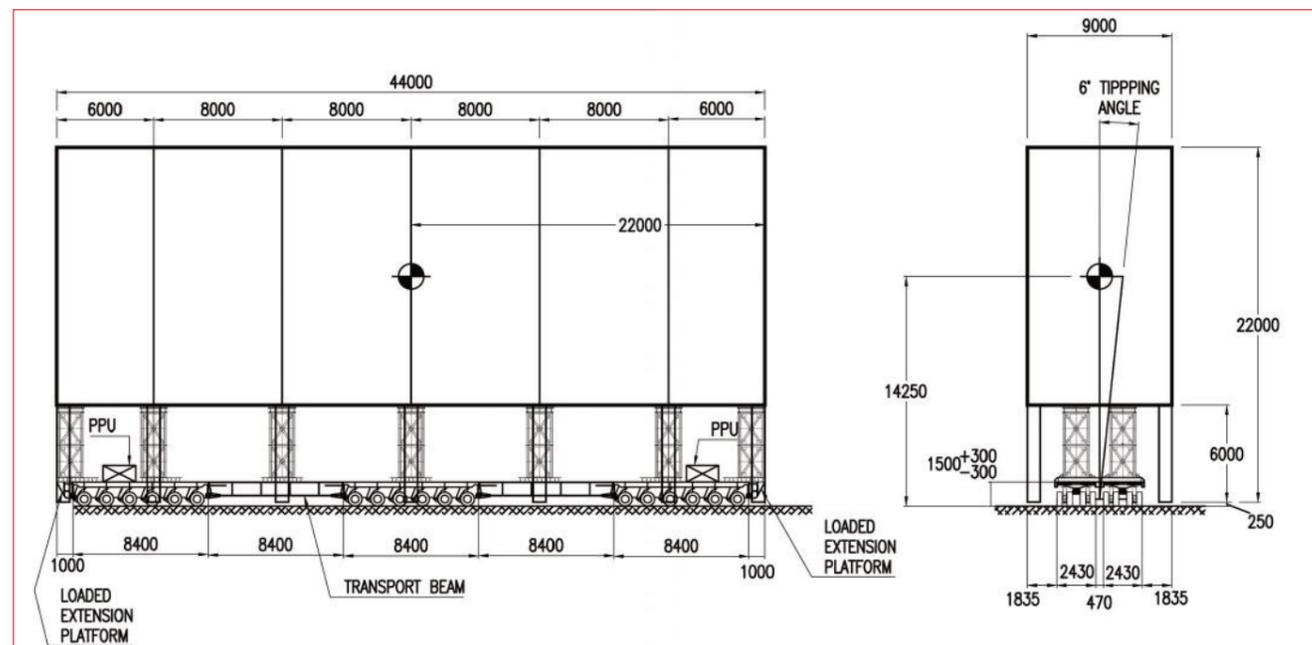
Self Propelled Modular Transporters (SPMT) are the best heavy transport equipment for PAR handling operations such as:

- Fabrication yard moving
- Weighing and jacking up
- Load Out operations
- Load In operations
- Road Transport
- Jacking down even on elevation.

The PAR structure itself is quite light if compared to its volume, so usually the driving factors for SPMT layout study are:

- Convoy stability
- Ground bearing capacity

If the PAR steel structure strength allows to be supported by 2 no. groups of SPMT the number of SPMT axles is limited to above driving factors. If PAR dimensions allow to be handled by single lines of SPMT, which support it by 2.43m width of SPMT chassis, is possible to avoid some SPMT modules by means of Fagioli connecting beams for SPMT.



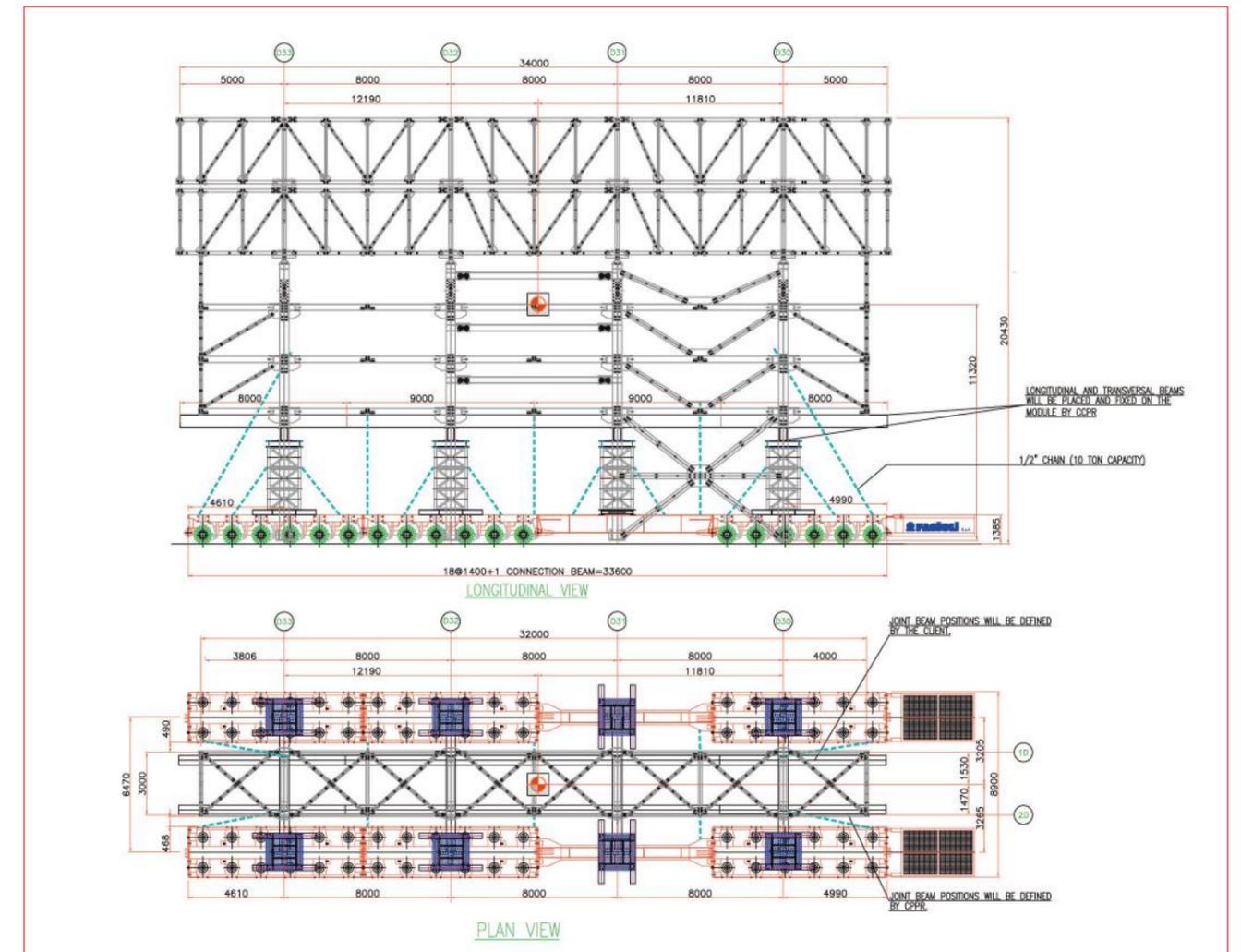
SPMT:

The Advantages to avoid or to save SPMT modules by utilization of Fagioli Connecting Beams are:

- SPMT hire cost saving
- Less high value HT equipment at site
- Less problems of equipment availability in remote areas
- Easier logistic in remote areas
- Less workforce need

Disadvantages:

PAR with a deflective steel structure design is not supported on a width of 2.43m like a full SPMT module.



FAGIOLI CONNECTING BEAMS - IMPROVEMENT 01

In order to wipe out the Disadvantage, as above explained that can limit or refuse the utilization of Fagioli Connecting Beams, Fagioli Engineering Division have developed the first Improvement to our "In House design" auxiliary equipment, taking into account some external suggestions from our International Clients. The Improvement 01 is a set of mobile brackets to be applied on existing Fagioli SPMT Connecting Beams which can support the bottom part of a deflective PAR where need as per its structural design. Such brackets can be slid/positioned along connecting beam length in compliance with PAR strength points as shown in the enclosed 3D rendering. For the technical point of view Fagioli Connecting Beam works really like a "6 axle module platform" because it's equipped with hydraulic hoses and electronic wires which allow to grant full mechanical, hydraulic and electronic connection of front and back SPMT modules, therefore assuring total load and steering control.

FAGIOLI 2013 MEGA PAR HAULAGE BY SPMT + CONNECTING BEAMS

Fagioli received 2013 esta award for the best "SPMT TRANSPORT JOB OF THE YEAR" for an operation performed in a petrochemical plant in Brazil.

The most challenging aspect was the centre of gravity was about 11 metres (the maximum tipping angle was 3.7 degrees during transport activities manufacturing area and 11 degrees during the eight kilometres transport journey).

The 4 SPMT group have been connected by 4 connecting beams.



FAGIOLI
VIA FERRARIS, 13 - 42049 S.ILARIO D'ENZA (RE)
PH+ 39 0522 6751
INFO@FAGIOLI.COM