

# 03

## HLT Construction Procedure

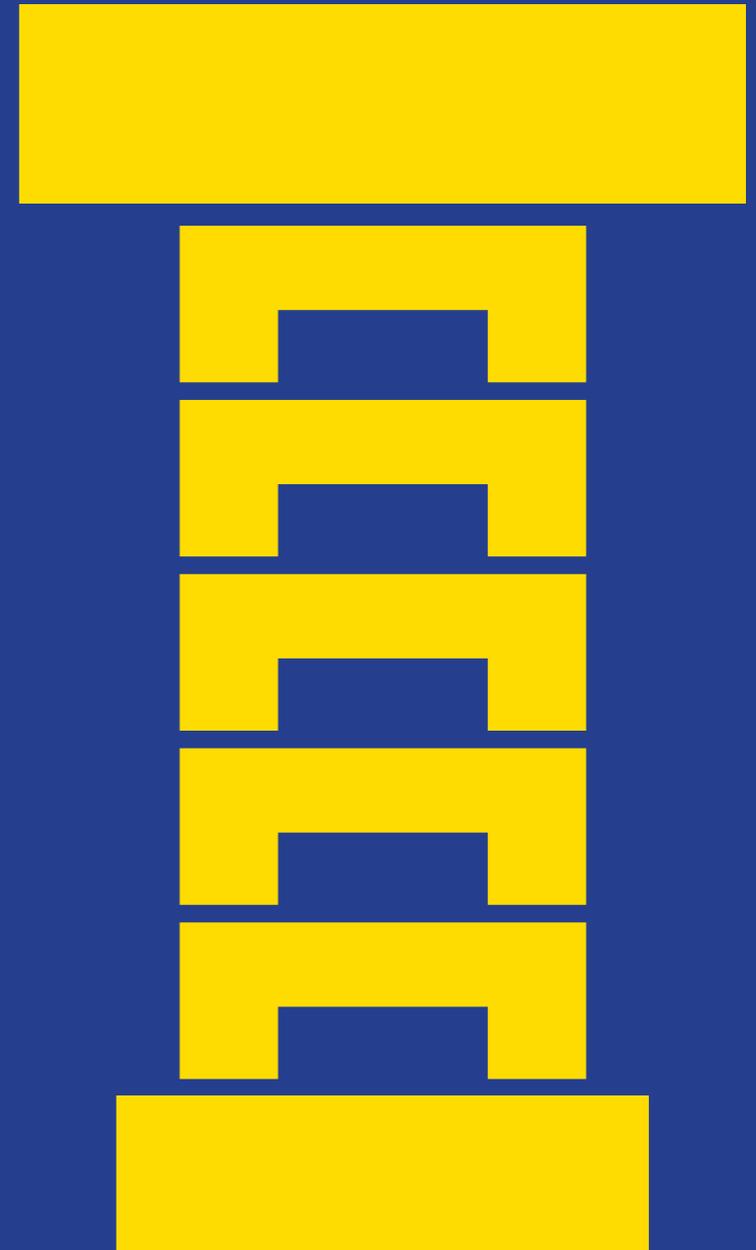
- Step 1.** **Working on basic design drawings and 3D modeling**  
 Reviewing the Module weight, dimension, shape, installation location & height, transport method & path, safety condition depending on the weather, etc.
- Step 2.** **Organizing equipment**  
 Skidding system, Hydraulic gantry, Jack-up system, Hydraulic strand jack, Self-propelled modular transporter.
- Step 3.** **Preparing construction plan**  
**Managing timelines for** Equipment transport → Carry-in → Erection → Construction → Dismantling → Carry-out, etc.
- Step 4.** **Construction**  
 A cluster of engineers with expertise holding certification of equipment manufacturer (ENERPAC, Netherlands) safely and precisely carry through construction.

# 04

## Track Records

Constructor	Client	Equipment used	Worksite
<b>2018</b>			
SEBO MEC			
DAAEH ENC	Samsung C&T Corp.	Hydraulic strand jack	Samsung Electronics Giheung E-PJT
SB TECH			
SEBANG TEC			
DONGIL INDUSTRIES		Jack-up system	Samsung Electronics Pyeongtaek EUV
<b>2019</b>			
SEBO MEC			
DAAEH ENC	Samsung C&T Corp.	Hydraulic strand jack	Samsung Electronics Giheung E-PJT
SB TECH			
SEBANG TEC			
SB TECH		Jack-up system	Samsung Electronics Pyeongtaek EUV
GAYA ESC			Samsung Electronics Pyeongtaek FAB2
TERA ENE	Samsung Engineering	Skidding system	Samsung Electronics Pyeongtaek P2
<b>2020</b>			
SEBANG TEC	Samsung C&T Corp	Hydraulic strand jack	Samsung Electronics Pyeongtaek P2
SEBO MEC	SK E&C		SK Hynix Icheon OAC
TERA ENE	Samsung Engineering	Skidding system	Samsung Electronics Pyeongtaek P2
Others (equipment supply)	H&P Logis Inc.	Hydraulic gantry	

**HLT**  
Heavy Lifting Technology



**KLES.**

# HLT Heavy Lifting Technology

## Heavy Load Structure Lifting Solution

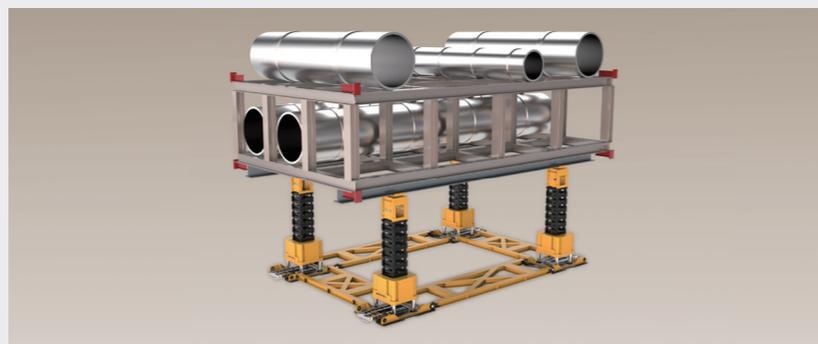
KLES as a network partner of 'ENERPAC', a global market leader in the field of heavy-goods precision-control products and systems, has been furnishing the precision-control products and bespoke turnkey solutions putting to practical use Heavy Lifting Technology, featuring in-precision lifting, moving, and positioning heavy load structures. The very efficient and innovative solutions will be served to the clients in need of tailored product lines perfectly standardized, such as on construction & civil engineering grounds, extensive scale production facility building sites, and plant sites.

We make good our promises for the safety and economy of the project, carrying through safety review, structure design, engineering method development, field construction, and after service for the equipment as well.



## 01

HLT



- HLT stands for 'Heavy Lifting Technology', which employs high-pressure hydraulic and control equipment to lift, lower, move, and position heavy loads at large-scale industrial sites such as construction & civil engineering, plant, shipbuilding and so on.
- HLT technology is designed to maximize stability and work efficiency when lifting, lowering, and moving 10 ~ 5,000 tons of heavy load structures, where general lifting equipment like cranes cannot afford to lift and move such heavy loads in applications.

## 02

Major  
Product Lines



### 01 / Skidding System

It is an extraordinarily safe and efficient heavy load traveling system that can afford to move heavy structures even in confined spaces, which is placed on the skid tracks to move and position the objects.



### 02 / Hydraulic Gantries

- Hydraulic gantries are a very safe, efficient way to lift and position heavy loads in applications even in confined spaces where traditional cranes will not fit and permanent overhead structures for job cranes are not an option.
- Mounted on the skid track, the heavy-duty gantries render a means for catching up, moving and positioning heavy loads multiple times, up to 1,100 tons capacity.



### 03 / Jack-up Systems

- The jack-up system is a multipoint lifting system. A typical system setup includes four jack-up units positioned under each corner of a load. A four unit setup has a lifting capacity of 2,000 metric tons (500 tons per unit).
- The lifting frame of a jack-up contains four hydraulic cylinders in each corner which lift and stack steel boxes. A load is lifted in increments as boxes are slid into the system, lifted, and stacked; forming 'lifting towers'.



### 04 / Hydraulic Strand Jacks

- They are applied where the most sophisticated lifting is compulsory.
- A strand jack can be considered a linear winch. In a strand jack, a bundle of steel cables or strands are guided through a hydraulic cylinder; above and below the cylinder are anchor systems with wedges that grip the strand bundle. By stroking the cylinder in and out while the grips are engaged in the anchors, a lifting or lowering movement is achieved.
- By synchronizing multiple strand jacks using the smart cylinder control function, super heavy loads up to 5,000 tons can be safely and practically lifted.



### 05 / Self-propelled Modular Transporter

- This trailer features a minimized height and slim design, which makes it very easy to operate in confined spaces, so that two trailers and a power pack can be shipped inside a 20 ft. container.
- Each wheel unit has a steering function as well as a lifting cylinder at its disposal.
- The trailer can be operated affordably by one man by way of a user-friendlier Intelli-Drive wireless control system, available to run in the combination of up to 6 units in 2 lines, which makes this modular system extremely efficient.

