



Descriptions

A **Multi-jack System** is an arrangement where multiple screw jacks are used in unison to achieve lifting, lowering, or positioning of large or heavy loads. These systems can utilize various types of jacks and are designed to handle significant weight and provide precise, synchronized movement. Common multi-jack configurations include H, U, T, and I arrangements, named for the layout of the jacks.

Arrangement Options:

Multi-jack systems can be linked together in various ways, including:

- **Mechanically linked:** Multiple screw jacks are connected by components like drive shafts, bevel gearboxes, motors, couplings, and plummer blocks, allowing a single motor to control all jacks simultaneously.
- **Electronically linked:** Individual motors drive each jack, and a computer-controlled system synchronizes their movement. This is useful when there isn't enough space for mechanical linkages.

Key Components and Features:

- **Jacks:** They are the core of the system, they are worm gear screw jacks or bevel gear screw jacks.
- **Synchronization:** It is essential for level and stable lifting, achieved through mechanical linkages or electronic controls.
- **Motion Control:** Systems may include motors, gear reducers, and motion control devices for accurate positioning.
- **Controls and Programming:** Computer control units and programmable systems allow for precise, automated operation, especially in synchronous lifting.

Descriptions

Benefits:

- **Lifting heavy loads:** Multi-jack systems can handle significantly larger loads than single jacks.
- **Even load distribution:** They can distribute a load over a large area.
- **Synchronized lifting:** Computer-controlled systems ensure smooth and level lifting and lowering.
- **Precision positioning:** Systems with encoders and controlled movement allow for accurate placement of loads.

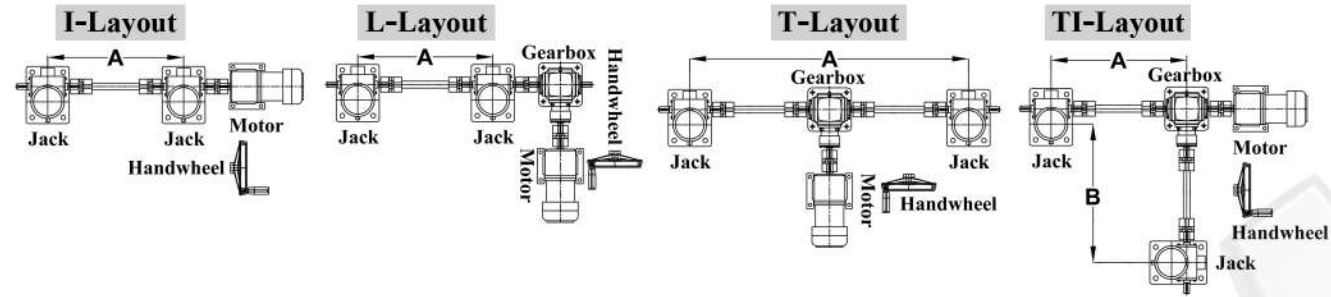
Applications:

Multi-jack systems are used in various industries, such as:

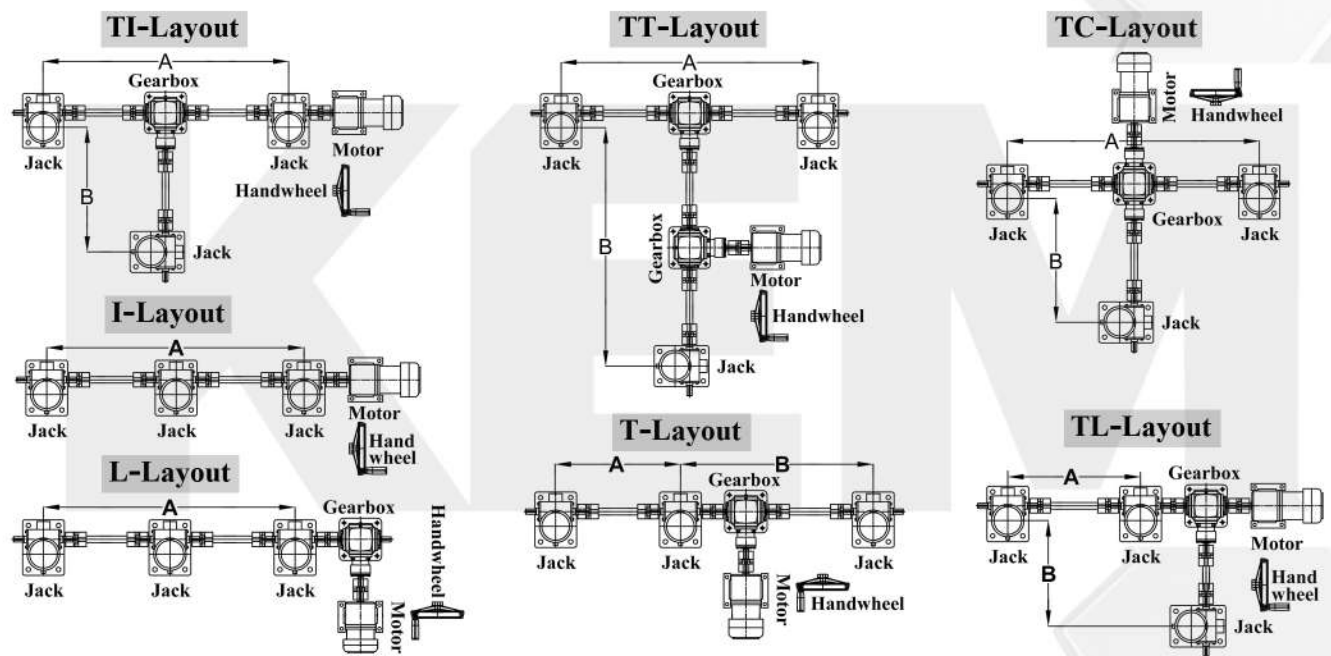
- **Construction:** Bridge construction, building erection, heavy equipment installation.
- **Industrial maintenance:** Lifting and positioning machinery or components in plants and facilities.
- **Energy infrastructure:** Working on power plant components or refinery modules.
- **Modular construction:** Lifting and placing large prefabricated sections.

Screw Jack System Configurations

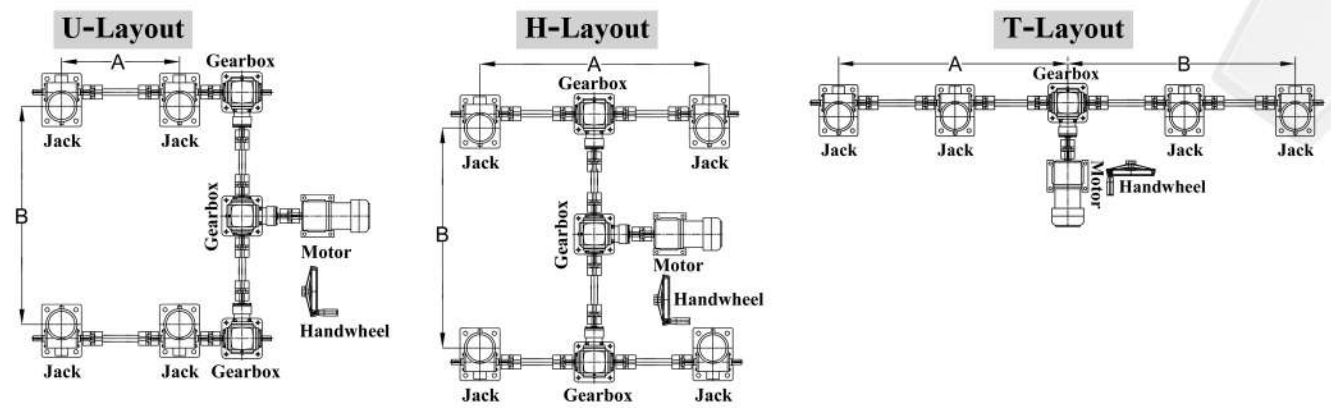
2-Jacks System



3-Jacks System

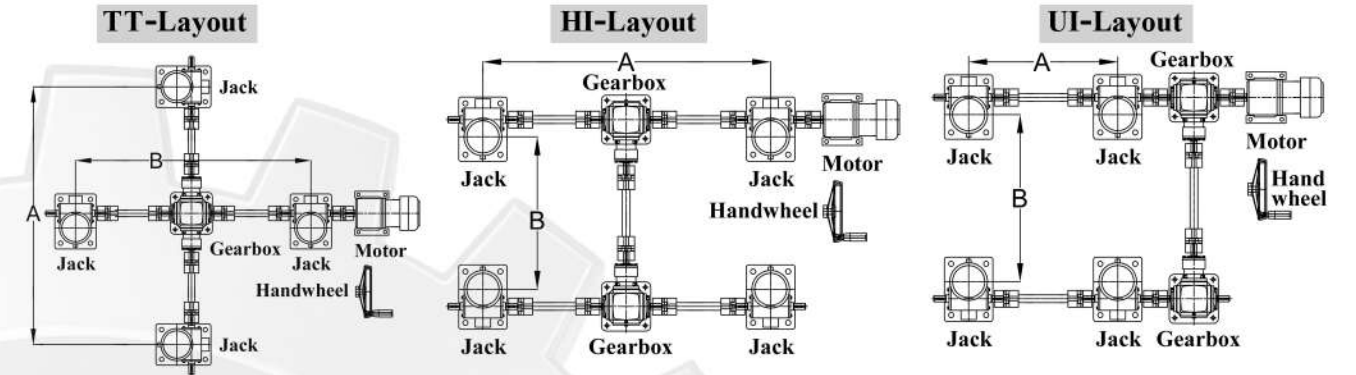


4-Jacks System

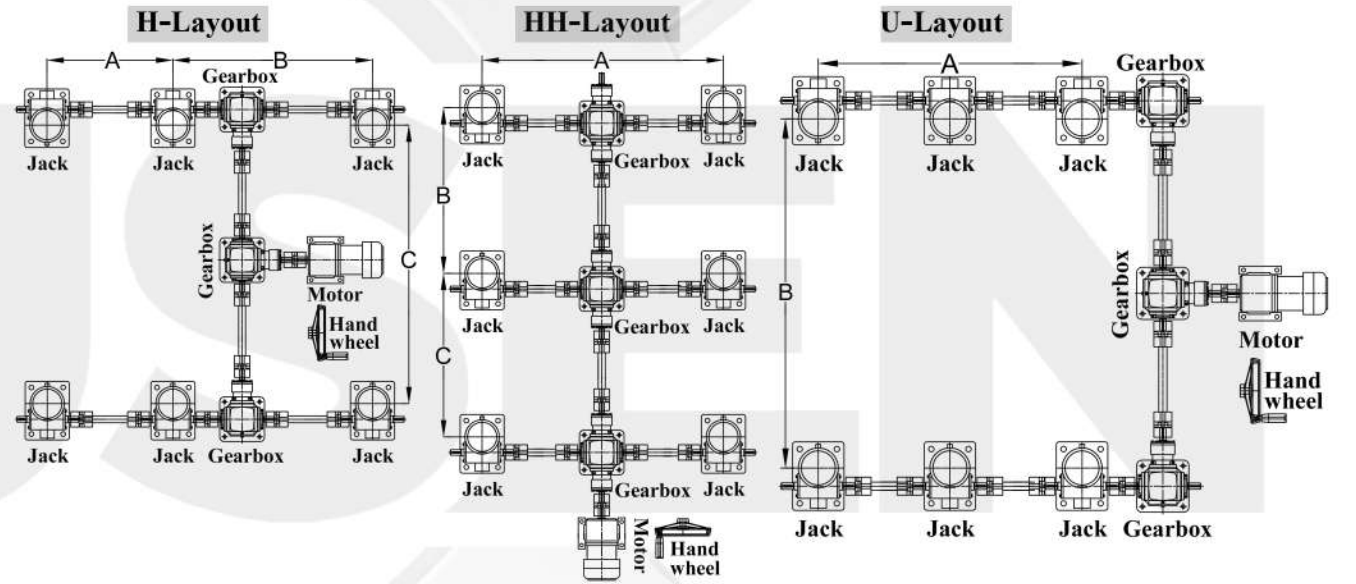


Screw Jack System Configurations

4-Jacks System



6-Jacks System



8-Jacks System

