MULTIPLE SCREW JACK CONFIGURATIONS

Typical System Configurations
1.1.3.2.8 Multiple Screw Jack Configurations

Total Input Power for Screw Jack Systems [kW], $P_s$:

$$ P_s = \frac{\text{Input Power per Screw Jack (kW) \times Number of Screw jacks}}{\text{Arrangement Efficiency} \times \text{Gearbox Efficiency}} $$

<table>
<thead>
<tr>
<th>Number of Screw jacks in Arrangement</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6 → 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrangement Efficiency (%)</td>
<td>95</td>
<td>90</td>
<td>85</td>
<td>80</td>
</tr>
</tbody>
</table>

**Gearbox Efficiency** = Bevel Gearbox Efficiency $\times$ Reduction Gearbox Efficiency

**Bevel Gearbox Efficiency** = 95% Typical (refer to 4.0.).

**Reduction Gearbox Efficiency** = Consult unit details, if no reduction gearbox present assume efficiency of 100%

**Note** For Screw Jacks connected in-line the worm shaft can transmit up to 3 times the torque for a single Screw Jack at its maximum capacity, except the 1820 Unit which can transmit 1.5 times the torque (refer 1.5.2.2.2.).

1.1.3.2.9 Typical System Configurations

‘H’ and ‘U’ configured Screw Jack systems are typical and include Screw Jacks, Motor, Bevel Gearboxes, Reduction Gearboxes, Drive Shafts, Couplings and Plummer Blocks.

![‘H’ Configuration](image)

![‘U’ Configuration](image)

Screw Jack arrangements can be built in many formats with the use of Bevel Gearboxes which allow the direction of drive rotation to be selected on assembly. The Gearboxes come in 2, 3 and 4 way drive types (refer 4.0).
1.1.3.2.10 Other System Configurations

'U' Configuration

'2U' Configuration

'E' Configuration

'TF' Configuration
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