**Suspended tubing tongs KPT-2**

The suspended tubing tongs is intended for using during make-up and break-out operations with drill pipes and tubing during maintenance and overhaul of oil and gas wells as a part of AZ-37 hoisting unit, UPT-50, A-50, COOPER, CREMCO and other units. The tong may be operated in moderate and cold microclimatic areas.

**Advantages:**
- Without planetary gear reducer;
- Enforced design, safety from external influence;
- Minimum service maintenance;
- Easy gear shift;
- Improved ergonomics.

**Description:**
- The hydraulic drive of the tong is operated by the hydraulic system of the hoisting unit. A set of hoses for connection to the hydraulic system is included in the tong delivery set.
- The pipe clamping device of cam type, the locking system preventing operation with the unlocked door is provided.
- The planetary reducer and the gear box ensure two speeds of the rotator
- The tong is fastened by the compensating hanger, providing vertical travel of the tongs.
- An adjustable hydraulic valve for torque limitation and torque visual control system are available.

**The tongs is completed with the following:**
- Tongs completed with 73 jaws.
- Set of changeable parts is intended for operation with all tubing types and versions.
- Set of installation parts:
  - high pressure hoses;
  - quick-release coupling with 2 tips;
  - rope;
  - clutches;
  - guyline tractor;
  - brake remover;
  - chain sling with gauge block;
  - lyrated anchor clamp.
- Installation parts kit is intended for connection to hydraulic system of a unit and suspending a tongs on a mast.
- Set of spare parts, tools and accessories:
  - brake;
  - sliding bearings;
  - set of general mechanical rubber goods (rings, gaskets, sealing).

Spare tools and accessories kit is intended for installation of the goods and for change of components during operation.
**Spiders ZK, ZK-56**

A spider is intended for holding the tubing string when used as a part of units for well repair and overhaul, as a part of units for subsurface repair operations.

**Application:**
- A safety device protecting from accidental release of tubing string is provided in spider design.
- Spider is driven pneumatically from pneumatic system of hoisting unit.
- Hoses for connection to hoisting unit are delivered with a spider.
- The spider ZK-56 can be driven manually by the removable lever, included in the spider (ZK) delivery set.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>ZK</th>
<th>ZK-56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air pressure in pneumatic system, MPa</td>
<td>0.8±0.2</td>
<td></td>
</tr>
<tr>
<td>Load capacity, t, not less</td>
<td>80</td>
<td>56</td>
</tr>
<tr>
<td>Nominal tubing bore diameter, mm</td>
<td>48,60,73,89,102,114</td>
<td>48,60,73,89</td>
</tr>
<tr>
<td>Overall dimensions, mm</td>
<td>550x515x435</td>
<td>563x506x363</td>
</tr>
<tr>
<td>Weight, kg, max:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- without slips</td>
<td>175</td>
<td>106</td>
</tr>
<tr>
<td>- with slips</td>
<td>206</td>
<td>126</td>
</tr>
</tbody>
</table>

**On ordering specify the following:**
- spider description (designation)
- customer’s additional (special) requirements (relating to the spider design, delivery set, etc.)
Suspended sucker rod tongs KPSh-3

The sucker rod tongs is intended for using during make-up and break-out operations with sucker rods during development maintenance and overhaul of oil and gas wells as a part of A-50 repair unit, A-50M, Aз 37, A32/40 and other domestic and foreign units. The tong may be operated in moderate and cold microclimatic areas. It was tested at the oilfields of OAO “Surgutneftegaz”.

Advantages:
• Small-sized high-torque orbital hydraulic motor (M&S, Bulgaria);
• Impact-resistant and impact-protected design;
• Chain sling with height adjustment is used for suspension. Also a tumbuckle for suspension height adjustment with accuracy ± 25 mm is available.
• Disk brake instead of band brake;
• Bearing units design requires minimum service maintenance;
• Without planetary gear reducer;
• Torque limitation;
• The smallest overall dimensions and weight in comparison with similar tongs of foreign and domestic production.

Description:
• Hydraulic drive is driven from hoisting unit hydraulic system. Set of hoses for connection to hoisting unit hydraulic system is included in delivery set.
• The tongs is mounted with the help of compensating suspension providing vertical displacement of the tongs.
• An adjustable hydraulic valve for torque limitation and torque visual control system are available.

The tongs consists of:
• Tongs housing completed with gear reducer;
• Pressure gage;
• Hydraulic motor;
• Hydraulic distributor with built-in safety valve;
• Suspension;
• Holding tongs;
• Jaw holder with jaws;
• Disk brake.

Complete set of the tongs:
• Tongs completed with jaw holder S26 and holding tongs S26;
• Changeable parts set:
  • Jaw holder S16;
  • Jaw holder S33;
  • Holding tongs S16;
  • Holding tongs S33.