WALLTHICKNESS TOWERPipe NOT LESS THAN 3.5 MM.

IF DESIRED THE LATTICE MEMBERS CAN BE POSITIONED AND WELDED UNDER THE TOWER LEGS RESULTING IN A MORE APEXISTRY APPEARANCE OF THE TOWER. HOWEVER THE FLANGES AT THE END OF THE ANGLE IRON MEMBERS A, B AND D0 SHOULD BE CUT AT ANGLES OF 45 DEGREES.
RINGS ARE POSITIONED, CENTERED AND WELDED.

SHAFT IS ROLLED ON A ROLLING MACHINE OF APPR. 300-400 mm AFTER CUTTING THE RADIUS SO THAT 40% CURVED AIRFOIL WILL RESIST.

ONE OF THE BLADES IS MOUNTED ON A MILL STAND, SET UP SUPPORTS (AVERAGE MEASUREMENTS) AND IS USED AS A DROUGHT/MAUL FOR THE OTHER 11 BLADES.

RTR L--9 BUSID--JINOMUL (x-2)
### 5" PISTON PUMP FOR 12 FU 500

**Material, Remarks, Measurements**

<table>
<thead>
<tr>
<th>#</th>
<th>Material</th>
<th>Remarks</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Cylinder</td>
<td>Seamless</td>
<td>5&quot; Gaspipe</td>
</tr>
<tr>
<td>9</td>
<td>Delivery pipe</td>
<td>--</td>
<td>5&quot;</td>
</tr>
<tr>
<td>8</td>
<td>Socket</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>7</td>
<td>T - Socket</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6</td>
<td>Delivery pipe (extension)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5</td>
<td>Exhaust pipe</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>4</td>
<td>Top pipe</td>
<td>--</td>
<td>750</td>
</tr>
<tr>
<td>3</td>
<td>Pipe</td>
<td>--</td>
<td>500</td>
</tr>
<tr>
<td>2</td>
<td>Pump rod 1</td>
<td>--</td>
<td>150</td>
</tr>
<tr>
<td>1</td>
<td>Pump rod 2</td>
<td>--</td>
<td>950</td>
</tr>
</tbody>
</table>

**Other details:***
- **Dimensions:**
  - 2" (5 cm)
  - 12 FU 500
  - Exact fit in cylinder in socket condition
  - Airtight welds
  - Pressure section
  - Suction section
  - Clamp fits over 2" pipe and determines pitch of holes in angles 21
  - Ring welded in casing provides sufficient surface for gasket
  - Amount or size depend on circumstances

---

**Legend:**
- #0 Material
- #1 Name
- #2 Remarks
- #3 Measurements

**Drawings:**
- Bottom view
- Pressure section
- Suction section
- Pump rod guide in socket
- Pressure air chamber
- Suction air chamber
- Ring welded in casing
Three Ways of Windmill Transport

Transport by Truck

Transport by Tractor and Lorry

Lifting Hoist for Windmill Construction

Important: After placing the tower, the towerless are pivoted in with concrete.

After approximately 5 days, the head and motor construction can be
installed. Safe and secure by means of lifting devices.

During the driving up of the concrete, position the motor
pump is fixed into the well according to the specifications.

Head is temporarily tied to the (wind)

Installing the Windmill — 12 pu/s80

For Information:
IF DESIRED THE LATTICE MEMBERS CAN BE POSITIONED AND WELDED INSIDE THE TOWERFLANGES RESULTING IN A MORE AESTHETIC APPEARANCE OF THE TOWER. HOWEVER THE PLATES AT THE ENDS OF THE ANGLES FROM MEMBERS NT 1 AND NT 2 SHOULD BE CUT AT ANGLES OF 45 DEGREES.

FIRST TWO OF THESE TOWERFLANGES ARE PREFABRICATED. BOTH MEMBERS ARE COMPOSED AND THE TOWERFLANGE SECTIONS IS SHAPED IN AND A COMPLETE TOWER RESULTS.
**Diagram of Windmill Construction**

**Transport by Truck**

**Transport by Tractor and Lorry**

**Transport by Dern and Rolling Helpdevice**

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**Lifting Helpdevice**

**Derrick Hoist for Head Construction**

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**Head of Tower**

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**Notes:**

- After placing the tower, the tower is raised with concrete.
- After appr. 5 days, the head and rotor construction can be installed. Safe and steady by means of lifting devices.
- During the construction period of the concrete foundation, the piston pump is tilted and moved according to the specifications.

---

**Material List**

<table>
<thead>
<tr>
<th>Item</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolt</td>
<td>M20 x 150</td>
<td>0.75 kg</td>
</tr>
<tr>
<td>Nut</td>
<td>M20 x 150</td>
<td>0.4 kg</td>
</tr>
<tr>
<td>Washer</td>
<td>M20 x 150</td>
<td>0.3 kg</td>
</tr>
<tr>
<td>Flat</td>
<td>225 x 150</td>
<td>0.3 kg</td>
</tr>
<tr>
<td>Angle Iron</td>
<td>30 x 30 x 0.6</td>
<td>0.015 kg</td>
</tr>
<tr>
<td>Pulley Shaft and Rope</td>
<td>0.25 kg</td>
<td></td>
</tr>
</tbody>
</table>

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**Installing the Windmill**

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**Information:**

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**Diagram Details:**

- **Transport Methods:** Various methods are depicted, including truck, tractor, and lorry.
- **Lifting Helpdevice:** Essential for raising the head of the tower.
- **Derrick Hoist:** Used for head construction.
- **Head:** Specifications for head construction are included.

---

**Construction Notes:**

- The center of gravity of the head is maintained.
- The angle is adjusted to achieve balance.
- The rotor is lifted and positioned at the top of the shaft using a crane.