Dimensions:

Outer diameter (D): 280 ÷ 3600 mm

Height (h): 35 ÷ 560 mm

Wall thickness (s): 30 ÷ 400 mm

Minimal unit weight: 100 kg/pcs.*

Maximal unit weight: 2500 kg/pcs.

*Rings below 100 kgs should be agreed while ordering
MANUFACTURING SPECIFICATIONS

acc. to PN-H-94004:1984 - forgings for general purposes
acc. to PN-H-94009:1992 - forgings for pressure equipment
acc. to PN-H-94023:2000 - seamless rolled rings from non-alloy and alloy steels
acc. to EN 10222 - (1 + 2) forgings for pressure equipment
acc. to EN 10250 - (1 + 4) forgings for general purposes

SPECIFICATIONS OF THE DELIVERY

Rings are delivered as rolled, soft annealed, normalised, quenched and tempered or supersaturated

ACCEPTANCE TESTS/ CERTIFICATES

Acceptance tests are performed according to conditions of appropriate standards, as determined by the Huta Bankowa’s Quality Control Service, UDT, TÜV, PRS, LRS, GL, DNV, BV, ABS.

ULTRASONIC TESTS

acc. to SEP 1921; BN-86/0601-09; PN-EN10228-3

APPROVALS

Huta Bankowa holds an approval for manufacture of rings designated for pressure equipment issued by TÜV Nord, UDT, PRS and BV

MACHINED RINGS

Rings are delivered as rolled, roughly machined or machined upon an agreement of manufacturing specifications.

GRADES OF STEEL

Rings are manufactured of carbon and alloy steel according to Polish and foreign standards agreed while ordering

<table>
<thead>
<tr>
<th>NO.</th>
<th>STANDARD NO.</th>
<th>GRADES OF STEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PN-H-84030:1989</td>
<td>16HG; 30G2; 40H; 40HM; 45HN; 25HM</td>
</tr>
<tr>
<td>2</td>
<td>PN-H-84032:1974</td>
<td>65; 50HF</td>
</tr>
<tr>
<td>3</td>
<td>PN-H-84035:1972</td>
<td>20H2N4A</td>
</tr>
<tr>
<td>5</td>
<td>PN-EN 10025</td>
<td>S235JR; S275JR; S355JO; S355J2G3; S355J2G4</td>
</tr>
<tr>
<td>6</td>
<td>PN-EN 10028-2</td>
<td>P235GH; P265GH; P295GH; P355GH; 16Mo3</td>
</tr>
<tr>
<td>7</td>
<td>PN-EN 10028-6</td>
<td>P460GH</td>
</tr>
<tr>
<td>8</td>
<td>PN-EN 10113-2</td>
<td>S355NL</td>
</tr>
<tr>
<td>9</td>
<td>PN-EN 10222-2</td>
<td>P245GH; P280GH; P305GH</td>
</tr>
<tr>
<td>10</td>
<td>PN-EN 10222-4</td>
<td>P355QH1; P355NH</td>
</tr>
<tr>
<td>11</td>
<td>PN-EN 10083</td>
<td>41Cr4; 42CrMo4; 34CrNiMo6; C45; C60</td>
</tr>
<tr>
<td>12</td>
<td>PN-EN 10088-1</td>
<td>X10Cr13; X2CrNi19-11; X2CrNiMo17-12-2; X6CrNiMoTi17-12-2</td>
</tr>
<tr>
<td>13</td>
<td>ASTM A182</td>
<td>304L; 316L</td>
</tr>
<tr>
<td>14</td>
<td>DIN 17270</td>
<td>100Cr6</td>
</tr>
<tr>
<td>15</td>
<td>DIN 17243</td>
<td>C22.8</td>
</tr>
<tr>
<td>16</td>
<td>ASTM A105</td>
<td>A105</td>
</tr>
<tr>
<td>17</td>
<td>PN-EN 10273</td>
<td>P250GH</td>
</tr>
</tbody>
</table>