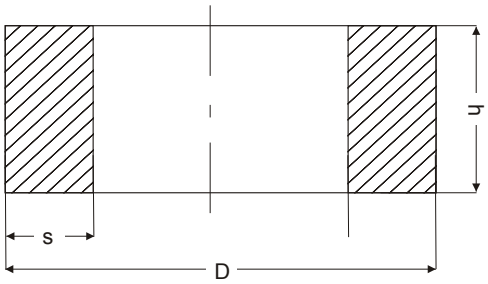
SEAMLESS ROLLED RINGS



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

NO.	STANDARD NO.	GRADES OF STEEL
1	PN-H-84030:1989	16HG; 30G2; 40H; 40HM; 45HN; 25HM
2	PN-H-84032:1974	65; 50HF
3	PN-H-84035:1972	20H2N4A
4	PN-H-94021:1997	ŁH15SG, ŁH20M
5	PN-EN 10025	S235JRG2; S275JR; S355JO; S355J2G3; S355J2G4
6	PN-EN 10028-2	P235GH; P265GH; P295GH; P355GH; 16Mo3
7	PN-EN 10028-6	P460QH
8	PN-EN 10113-2	S355NL
9	PN-EN 10222-2	P245GH; P280GH; P305GH
10	PN-EN 10222-4	P355QH1; P355NH
11	PN-EN 10083	41Cr4; 42CrMo4; 34CrNiMo6; C45; C60
12	PN-EN 10088-1	X10Cr13; X2CrNi19-11; X2CrNiMo17-12-2; X6CrNiMoTi17-12-2
13	ASTMA182	304L; 316L
14	DIN 17230	100Cr6
15	DIN 17243	C22.8
16	ASTMA105	A105
17	PN-EN 10273	P250GH