

other

THREADS TABLE

M	STANDARD
P227.8	GB8335
W28.8-1/14	DIN 477
1"-14	BS 341
25E	EN 629
3/4"-14NGT	CGA V-1

#### TECHNICAL REQUIREMENT

- The design, manufacture, inspection and testing for the cylinder shall comply with requirements of ISO 9809-1.
- Cylinder material is 34CrMo4 and comply with GB18248-2000 and ISO9809-1, chemical composition as follows:

Chemical composition	C	Mn	AL	Si	P	S	Cr	Mo	Ni
%	0.30~0.37	0.60~0.90	0.005~0.040	0.15~0.35	≤0.020	≤0.020	0.90~1.20	0.15~0.30	max0.30

3 Cylinder heat treatment method: quench and temper

Mechanical property guarantee value after heat treatment of cylinder:

$\sigma_b$ (N/mm <sup>2</sup> )	$\sigma_e$ (N/mm <sup>2</sup> )	A (%)	$\sigma_u(50^{\circ}\text{C})/\text{cm}^2$
890~950	≥755	≥14	minimum ≥28
			average ≥35

4 Main data of cylinder:

NOMINAL WATER CAPACITY, L	34	40	45	47	50
LENGTH OF CYLINDER L, mm	1015 <sup>+15</sup> <sub>0</sub>	1175 <sup>+15</sup> <sub>0</sub>	1300 <sup>+15</sup> <sub>0</sub>	1355 <sup>+15</sup> <sub>0</sub>	1435 <sup>+15</sup> <sub>0</sub>
WEIGHT OF CYLINDER, kg	40 <sup>+2</sup> <sub>0</sub>	45 <sup>+2</sup> <sub>0</sub>	47 <sup>+2</sup> <sub>0</sub>	50 <sup>+2</sup> <sub>0</sub>	53 <sup>+2</sup> <sub>0</sub>

5 Working pressure of cylinder is 200bar.

6 Cylinder should be taken hydraulic test one by one according to ISO9809-1, test pressure is 300bar, holding time at hydraulic pressure shall not be less than 30S. During the test process, the cylinder should not leakage, and cylinder should be drying treatment after the test to keep the inside dry.

7 The bursting pressure of cylinder shall not be less than 480 bar and the observed yield pressure shall be greater than or equal 392 bar. The burst tear shall comply with requirements of ISO9809-1.

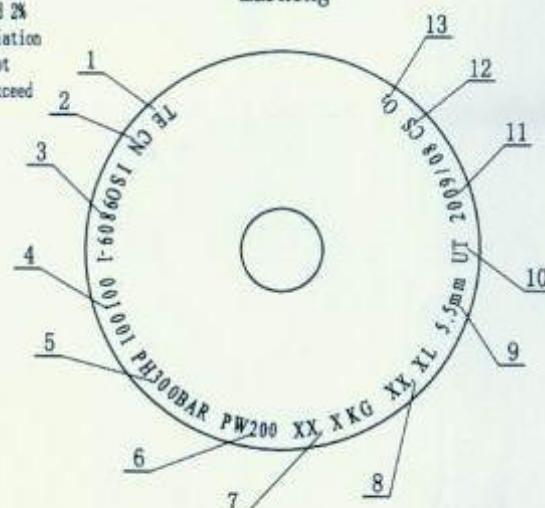
8 After heat treatment, ultrasonic examination and hardness test shall be carried out one by one. Ultrasonic examination for defects in accordance with annex B and JB4730; Hardness average value is HB260-HB320.

9 The out-of-roundness of the cylindrical shell shall not exceed 2% of the mean of the same cross-section diameters; the maximum deviation of the cylindrical part of the shell from a straight line shall not exceed 3mm per metre length; deviation from vertical shall not exceed 10mm per metre length.

10 The mark of cylinder stamping as follow:

- Manufacturer's identification;
- Country of manufacture;
- Standard of manufacture;
- Manufacturing serial number;
- Test pressure, bar;
- Working pressure, bar;
- Empty weight, kg;
- Water capacity, L;
- Minimum guaranteed wall thickness;
- Stamp for non-destructive testing (NDT);
- Initial test date;
- Stamp for inspection;
- Identification of content.

#### marking



Approved by BV inspector: Ma. Chang'e  
2009-11-16

TE09-04

mark point	document	signer	date
Designer	20090926	20090926	20090926
Checked	20090926	20090926	20090926
Supervisor	20090927	20090927	20090927
Approved	20090928	20090928	20090928

owned assembly	0
draw mark	weight
	ratio
	1:3
Total	No.
34CrMo4	Zhejiang Tianen High pressure Vessel Co.,Ltd

ø232-50L  
编号： B20019 001-200  
B20020 001-200  
B20021 001-100

日期：2020-09  
客户：小徐-俄罗斯  
颜色：黑色

TE ON ISO9809-1 PH300 PW200BAR 53. KG 50. L  
EAC 25E 5.8MM UT 2020-09 SN:B20019XXX

232-50L-小徐-俄罗斯

标记	处数	分区	更改文件号	签名	年、月、日	浙江天恩压力容器制造有限公司			IS09809-1标记图
设计	(签名)	(年月日)	标准化	(签名)	(年月日)	阶段标记	重量	比例	
审核									
工艺			批准			共      张      第      页			