

Chemopetrol,a.s. Service Division	Drain bottles for continual bleeding of condensate	N 13 820

The standard is binding for all departments of the company and external organizations which order and accept drain bottles for continual bleeding of condensate. It does not apply to the Litvínov and Kralupy refinery unit.

The departments are obliged to present the standard to all external organizations providing these activities for them as well as to all organizations the standard is also binding for.

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1. General provisions
 - 1.1 Scope of validity
The standard applies for manufacture of drain bottles for continual bleeding of condensate used in the company.
 - 1.2 By standardization of the drain bottles for continual bleeding of condensate the reduction of number of types is monitored for the needs of Chemopetrol a.s.
 - 1.3 One type was determined with option of double design and seven sizes as per the pressure.
 - 1.4 Drain bottle is drawn under drawing No. 1-S-18652.
 2. Basic elements of a drain bottle
 - 2.1 Tubes:
 - a) seamless steel tubes pursuant to ČSN 42 5715 from material 11 353.0 (.1)
 $\varnothing 28 \times 2,6$ $\varnothing 35 \times 2,6$ $\varnothing 60,3 \times 3,2$ $\varnothing 219 \times 6,3$ $\varnothing 31,8 \times 2,6$ $\varnothing 57 \times 3,2$
 $\varnothing 89 \times 3,6$
 - b) Precision seamless steel tubes pursuant to ČSN 42 6711 from material 11 353.0 (.1)
 $\varnothing 14 \times 2$ $\varnothing 30 \times 2,5$
 - 2.2 Pipe bends VN 42 5760 from material 11 353.1

Typ 3 - 180° - $\varnothing 57$
Typ 3 - 90° - $\varnothing 57$
 - 2.3 Flanges
 - a) Welding neck flange ČSN 13 1160.0 – TYPE 01 from material 11 373.1 (ČSN 13 1222.0 to run-out)
DN 200 PN 6
 - b) Welding neck flange ČSN 13 1160.0 – TYPE 01 from material 11 373.1 (ČSN 13 1224.0 to run-out)

DN 20 PN 16
DN 50 PN 16
DN 25 PN 16
DN 80 PN 16
 - c) Blinding flanges ČSN 13 1160.0 – TYPE 05 from material 11 373.1 (ČSN 13 1323.0 to run-out)

It replaces: N 13 820 from 5/1995	Administrator: Standardization department –Service Division	Valid from: 15.8.1998
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DN 200 PN 6

d) Blinding flanges ČSN 13 1160.0 – TYPE 05 from material 11 373.1 (ČSN 13 1325.0 to run-out)

DN 25 PN 16

2.4 Flat steel pursuant to ČSN 42 5340 from material 11 373.0

50 x 4

2.5 Bolts pursuant to ČSN EN 24 014 (02 1101) / ČSN EN 24 016 (02 1301 to run-out)

2.6 Nuts pursuant to ČSN EN 24 032 (02 1401) / ČSN EN 24 034 (02 1601 to run-out)

2.7 Gaskets – plain compression ring from material

KLINGER – SIL 4500 – pursuant to N 13 026

HD 100 – pursuant to TP-62-62-96 – to run-out

DN 200 PN 6

DN 50 PN 16

DN 25 PN 16

3. Anticorrosion protection of bottles

3.1 Inner and outer anticorrosion protection of bottles is carried out after consultation with the corrosion and material evolution laboratory (TS DS) that determines and checks suitability of coating solution.

4. Insulation

4.1 Bottles – material fibreglass cord or finished mattress – board provisor

4.2 Siphon – material fibreglass cord and board provisor.

5. Amendment -List of quoted and related standards and documents

Quoted

ČSN EN 24 014

(02 1101)

Fasteners. Bolts with hexagonal bolt head. Production grade A and B. (ISO 4014:1988)

ČSN EN 24 032

(02 1401)

Fasteners. Hexagonal nuts, type 1. Production grade A and B (ISO 4014 : 1988)

ČSN EN 24 016

(02 1301)

Fasteners. Bolts with hexagonal bolt head. Production grade C . (ISO 4016 : 1988)

ČSN EN 24 034

(02 1601)

Fasteners. Hexagonal nuts. Production grade C .

ČSN 13 1160 part 1

Pipeline and fitting. Flanges and flange sockets. Flanges for PN 2,5 to 250.

ČSN 13 1160 part 2

Pipeline and fitting. Flanges and flange sockets. Flanges for PN 2,5 to 250.

ČSN 42 5340

Hot rolled strips of steels grade 10 and 11. Dimensions.

ČSN 42 5715

Hot formed seamless steel tubes. Dimensions.

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ČSN 42 6711	Precision seamless steel tubes.
VN 42 5760	Dimensions.
TP-62-62-96	Steel pipe bends. Type 3 and 5 . Dimensions
ČSN 13 1222 - r.63	Gaskets/packing. Asbestos-polymer packing materials.
ČSN 13 1224 - r.63	(TEMAC , a.s. Zvěřínek)
ČSN 13 1323 - r.65	Flat welding flanges - Np 6
ČSN 13 1325 - r.65	Flat welding flanges - Np 16
N 13 026	Blank flanges - Np 6 Blank flanges - Np 16 Flat soft and combined gaskets for flange joints of pipeline and apparatus

Related

ČSN 13 1061	Pipeline and fitting. Metal flanges. Shapes and dimensions of the sealing surfaces.
ČSN 13 1550	Pipeline and fitting. Metal flanges. Flat sealing for flanged connections of pipe

Figure:

Design:

I: only with full drawn flanges for one drain place

II: hatched of fully drawn flanges for two close drain places

- A. Discharge line (condensate drain)
- B. Bleeder pipe
- C. Water inlet
- D. Steam inlet
- E. Water overflow
- F. Outlet
- G. Connection for discharge

Size number	Gas pressure mm v.s.	Depth (p) mm	Length (L) mm
1	500	1500	2150
2	1000	2250	2900
3	1500	2750	3400
4	2000	4000	4650
5	3000	5250	5900
6	4000	6250	6900
7	5000	7500	8150

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