INDOOR

ASME

Section VIII, Div.1

thorospherical head: DIN 28011

wall thickness:	6,0mm
min. wall thickness:	4,2mm
inside radius:	3062mm
cyl. height:	25mm
welding factor: v=	0,85
material:	DIN 10028-7 1D

cone with knuckle

wall thickness:	6,0mm
min. wall thickness:	5,0mm
inside radius:	300mm
cyl. height:	30mm
welding factor: v=	0,85
material:	DIN 10028-7 1D

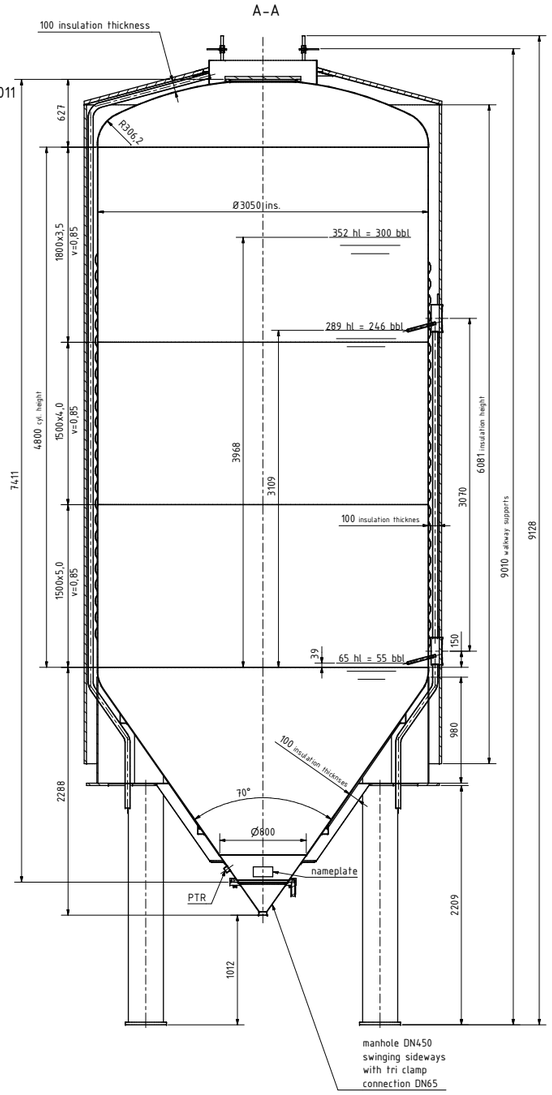
skirt

wall thickness:	8mm
inside diameter:	3050mm
cyl. height:	980mm
material:	S235JR

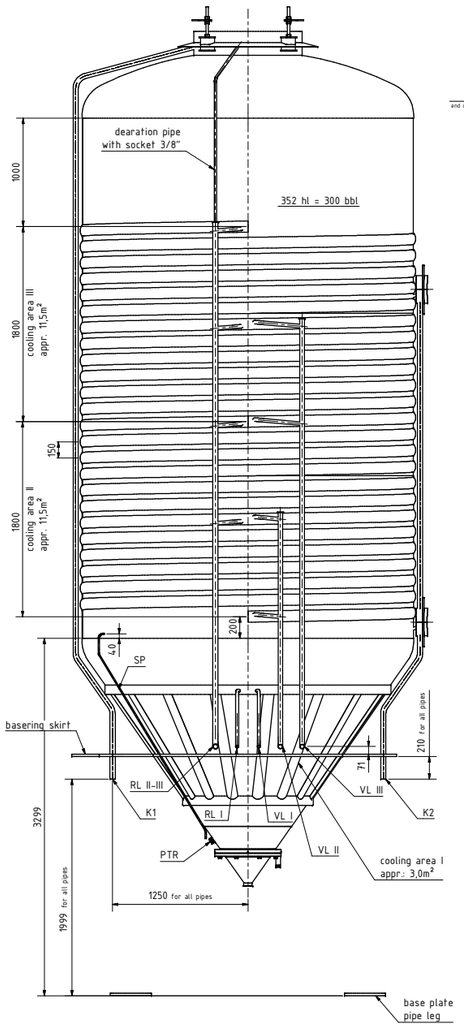
basering

inside diameter:	3258mm
outside diameter:	2858mm
height:	20mm
material:	S235JR

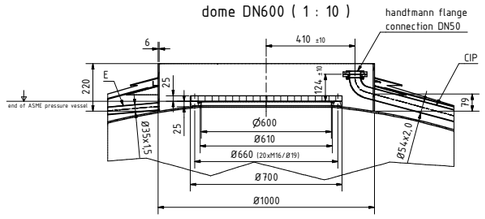
A-A



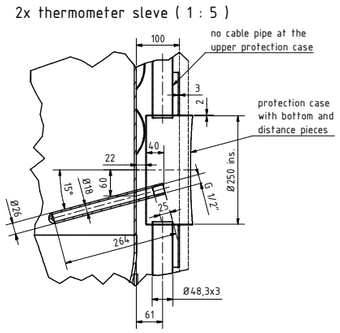
B (1 : 20)



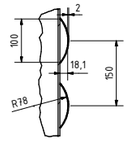
dome DN600 (1 : 10)



2x thermometer sleve (1 : 5)

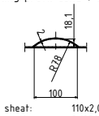


cooling profile cyl. part (1 : 5)



sheat: 110x2,0 mm
section area: 0,1236 dm²
capacity appr: 12,4 Ltr/m²

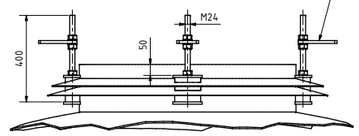
cooling profil cone (1 : 5)

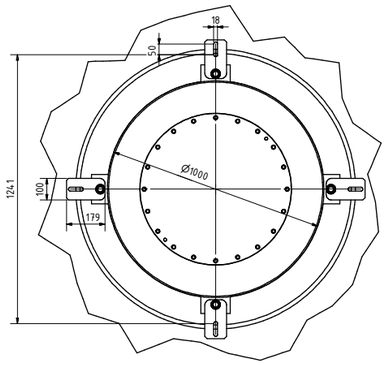


sheat: 110x2,0 mm
section area: 0,1236 dm²
capacity appr: 12,4 Ltr/m²

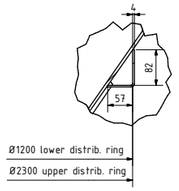
detail walkway support (1 : 10)

supporting brackets for grid
gallery adjustable (±100mm)





distribution rings (1 : 5)



Ø1200 lower distrib. ring
Ø2300 upper distrib. ring

NB	according log of NB numbers
	NB SERIAL NUMBER
CERTIFIED BY:	ZIEMANN
NAME OF MANUFACTURER	ZIEMANN + BAUER GmbH
S/N	14300129/1000 8623
YEAR BUILT:	2012

U

W

RT 4

TAG No.:

	M.A.W.P kPa	°C	M.D.M.T °C	kPa
VESSEL	200 at	30	-10 at	300
JACKET I	300 at	30	-10 at	300
JACKET II	300 at	30	-10 at	300
JACKET III	300 at	30	-10 at	300
JACKET IV	at		at	

	M.A.E.W.P		M.D.M.T	
VESSEL	3 at	30	-10 at	3

pipes and nozzles

Mark.	Description	DN	Size	DIN	Remarks
CIP	CIP-pipe	50	Ø54x2,0	11850	flanged at the top
E	drain pipe	32	Ø35x1,5	1127	dome
K1	cable pipe 1	40	Ø48,3x2,0	1127	dome
K2	cable pipe 2	40	Ø48,3x2,0	1127	PT100
VL I	cooling inlet I	20	Ø26,67x2,11	ASTM A 312	cone cooling
VL II	cooling inlet II	32	Ø42,2x2,77	ASTM A 312	cyl. Part
VL III	cooling inlet III	32	Ø42,2x2,77	ASTM A 312	
RL I	cooling outlet I	20	Ø26,67x2,11	ASTM A 312	cone cooling
RL II-III	cooling outlet II	40	Ø48,3x3,68	ASTM A 312	cyl. Par
SP	sample pipe	10	Ø14x2,0	11850	
DHP	dry hopping pipe	65	Ø70x2,0	11850	flanged at the top
PT100	thermometer sleeve		G ½"		
PTR	pressure transmitter		UNI DE5		cone
S1	swing cone hinge				
T	name plate				
TR	transport position				

Tank explanation:

Working conditions:

	tank	cooling
design overpressure	2,0 bar	3,0 bar
test overpressure	2,6 bar	3,9 bar
vacuum resistance	300mm WC	
design temperature	-10°C/+30°C	-10°C/+30°C
earthquake loads	max. 0,6 x g	
location	indoor	

cooling medium: Glycol -4,0°C

Surfaces:

top head: the complete inner surface ground Ra <= 0,4µm
cyl. Part: cold rolled material according DIN EN 10028-7
cone: the complete inner surface ground Ra <= 0,4µm

welding seams: internal welds ground Ra max. 0,8 µm
external welds metallic bright

The tanks are completely pickled inside and outside and passivated.

mild steels S235JR/S355JO: - skirt primed with 2 coats of anticorrosive paint
- pipe legs primed with 2 coats of anticorrosive paint
- top coat skirt and pipe legs primed with colour RAL 5017 ???

Tank insulation: HR Polyurethane foam, CFC-free, min. 40 kg/m³

Insulation thickness top head: 100mm
cyl. Part: 100mm
cone: 100mm

The tanks protected 2-times by anticorrosive paint acc. Ziemann standard

Insulation cladding:

top head:	ever sheet of aluminium	t=1,0mm
	Execution as 1-layer conical roof	
cyl. Part:	trapezoidal sheet of aluminium (20/125), blank	t=0,8mm
cone:	stainless steel, tightly welded, outer surface pickled	t=2,0mm

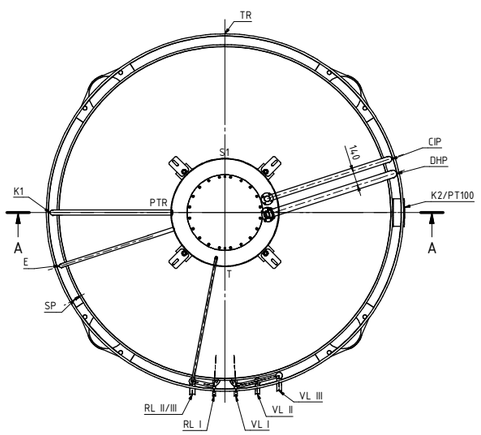
DESIGN CHECKED AGAINST ASME CODE EDITION 2010
SECTION VIII - DIVISION I
CORROSION ALLOWANCE: NONE
MATERIAL SA 240 GR 304; SECTION II PART A
HEAT TREATMENT: NONE
RADIOGRAPHIC EXAMINATION ACCORDING DRAWING No.: 1020418 Rev.0
HYDROTEST ACCORDING UG - 99
CHARPY IMPACT TEST EXEMPTED AS PER UHA - 51(d)
TOLERANCES ACCORDING UG 80 - 81, UW33, UW35
OUT OF ROUNDNESS <= 0,5%
DIMENSION: SI - UNITS
CODE CASES: NONE
CRN NUMBER: NONE
NB NUMBER: 145 - 154

HORIZONTAL PROJECTION

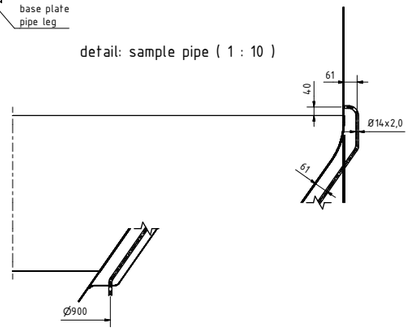
Orientation of sockets exclusively as determind by the general layout

Serial number: 8623-14300129/1000 to 8632-14300129/1000 | Year of manufacture: 2012

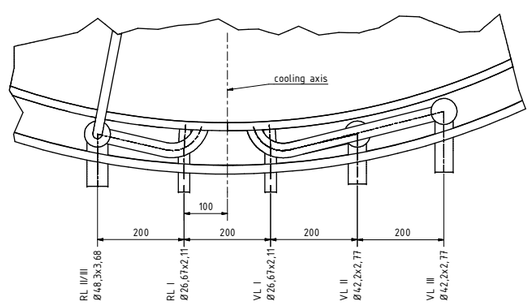
top view example



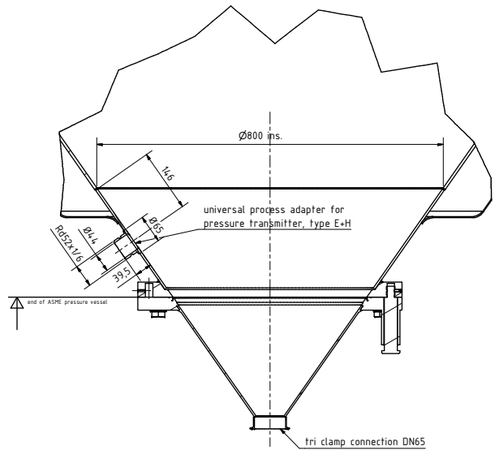
detail: sample pipe (1 : 10)



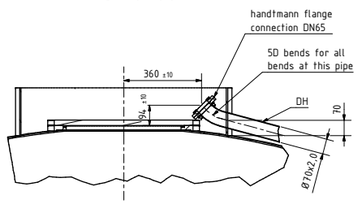
detail: cooling connections (1 : 5)



detail manhole DN450 (1 : 5)
and process connection for pressure transmitter



detail dry hope pipe (1 : 10)



Taking care of brewing

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ZIEMANN GROUP

Index	Revision	Date	Name
B	Beschreibung field	09.02.2012	CHS
A	tri clamp connection	02.02.2012	DAR
00	Erstersterlung	12.12.2011	KLAN

	Date	Name	Wirkgth:
Drawn	08.01.2012	PAULUS	Material: S240 GR.304
Checked			Commission:
Signed			Project: 14300129_1000

Consider protection mark according to DIN 34

Client: GOLDEN ROAD BREWERY LA/ USA

Description: Fermentation and storage tank
Ø3050MM INS.
TI = 352HL = 300BBL

Scale 1 : 20 | Drawing 1019823 | Index B | Sheet 1/1 | A0