

DONG Oil Pipe A/S

## Datasheet C-9403

### Depropaniser Column

<b>DEOP Doc.no.: C750-JENL-P-DS-0028</b>
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Project No. : NL6006  
Client : DONG Oil Pipe A/S  
Project title : DO Terminal Hejre Crude  
Stabilization Project  
Jacobs Document No.: NL6006/P.04/0014  
Client Document No. :  
Revision : A  
Revision Description : For EBEP  
Prepared by : CAHX  
Checked by : SCHR  
Discipline Approved by: SCHR  
Project Approved by: LOM

Issue date : 9 Aug 2011

Submitted by:

**Jacobs Nederland B.V.**

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Project No. : NL6006  
Client : DONG Oil Pipe A/S  
Project Name : DO Terminal Hejre Crude Stabilization Project

Report  
NL6006/P.04/0014, rev. A  
Page 3 of 3

**1      DEPROPANISER COLUMN C-9403**

The Depropaniser Column C-9403 datasheet revision A is issued for EBEP. No changes from revision 1 issue for BEP.

Date format -> dd/mm/yyyy

Design Book No

First Page

Contractor Job No

Mesc No

Made by	Date		EQUIPMENT:	Depropaniser C-9403	Rev.	1			
S.Street	30-11-2010	30/11/2010	Plant:	O Terminal Hejre Crude Stabilization Proje	Date	27/01/11			
Checked by	Date		CONSIGNEE:	DONG Oil Pipe Denmark	Sign				
J.L.Nooijen	2-12-2010	02/12/2010	Eng. by:	Shell Global Solutions International B.V.	First sheet is sheet number		1		
Approved by	Date		Principal:	DONG Oil Pipe Denmark	Equipment No.		C-9403		
M. Voetter	2-12-2010	02/12/2010			Req. No.				

Project DONG  
Plant Gas Plant  
Column Depropaniser C-9403  
Version  
Stream table 120%  
Last modification date 30-nov-10

0

Pro2Col export file I:\Staff\_Files\Sarah\DO Terminal Hejre Crude Stabilization Project\09. Equipment datasheets\02 Columns\02 depropaniser\_C9403\C9403.  
Pro2Col data file I:\Staff\_Files\Sarah\DO Terminal Hejre Crude Stabilization Project\09. Equipment datasheets\02 Columns\02 depropaniser\_C9403\C9403\_

P2C Version 7,1

DRS Version 7,1



Shell Global Solutions

Data/requisition sheet (cont. sheet) for  
**PRESSURE VESSELS (Column)**

Design book No: page:  
Contr. Job No:  
MESC No:

Equipment No. : C-9403

Number required : 1 (one)

OPERATING/MECHANICAL DATA

Description	Trays 1-13 (Note 3)	Trays 14-26 (Note 3)	Trays 27-44 (Note 3)	Units
Contents	C3's & C4's	C3's & C4's	C3's & C4's	
Working temperature, max./normal/min.	100,6	87,4	49,4	°C
Working pressure - max./normal/min.	16,36	16,25	16,01	bar ga
- normal/min. vac. cond.				mbar a
Design temperature, upper/lower Note 4&5	125	-45	125	-45
Design pressure, internal/external Note 4&5	19,0	19,0	19,0	bar ga
Test pressure, hydrostatic/pneumatic				bar ga
Liquid - quantity	29014	26705	14843	kg/h
- surface tension	3,38	3,63	4,18	dyne/cm
- density at working temperature	454,47	459,64	452,35	kg/m³
Vapour - quantity	21298	18989	19878	kg/h
- molecular weight	58,1	54,2	44,3	kg/kmol
- density at working temperature	45,53	42,67	37,79	kg/m³
Heating/cooling medium				
- max. quantity required				kg/s
Diameter of shell ØD/ID	1200			mm
Length between tangent lines	30810			mm
Total packed height				mm
Height per bed				mm
Size and type of packing				
Number of packed sections				
Number of redistributors				
Height of skirt to bottom tangent line				mm
Type of heads Note 6	TORISPHERICAL			
Wall thickness - shell/head				mm
Corrosion allowance/lining/cladding				mm
Insulation thickness				mm
Trays - spacing/number required	600 / 13	600 / 13	600 / 18	mm/pcs
- type	CD Valve	CD Valve	CD Valve	
- lay-out in accordance with sheet(s)	9	8	6	

Total volume :	35,15	m³	Relief valve(s) - Type/size :	
Normal liquid volume :	1,01	m³	- Set pressure :	barga
Volume range required for level control :	1,13	m³	- Number req. :	

Wind pressure :	N/m²	Earth quake factor :	
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	INFORMATION TO BE SUBMITTED WITH THE TENDER			

REMARKS AND/OR DESCRIPTION OF REVISIONS

- Note 1: Liquid and vapour loads shown are for the 'base case summer 100/0' + 20% margin
- Note 2: Column also designed for 'base case turndown'
- Note 3: Shown for tray with highest loading
- Note 4: Design Pressure excludes static head of liquid, Vendor to calculate. Maximum operating liquid level = 2430 mm, operating liquid density = 454.5 kg/m3.
- Note 5: Column to be designed for steam-out conditions. Steam-out conditions to be confirmed by Detailed Engineering Contractor.
- Note 6: Suggested type of head, the most economically optimum type of head shall be selected by the Detailed Engineering Contractor.
- Note 7: Shell Global Solutions International B.V. must review all drawings before construction

Rev 0: for client review Rev 1: Design Pressure updated Rev A: For EBEP

Made by:	Date	EQUIPMENT: Depropaniser C-9403 PLANT: DO Terminal Hejre Crude Stabilization Project CONSIGNEE: DONG Oil Pipe Denmark	Rev.	1	A		
S.Street	30/11/2010		Date	27/01/11	15/8/11		
Checked by:	Date		Sign.		CAHX		
J.L.Nooijen	02/12/2010		Sheet No. 1 cont'd on sheet No. 2				
Approved by:	Date	Eng. By: Shell Global Solutions International B.V.	Equipment No. C-9403				
M. Voetter	02/12/2010	Principal: DONG Oil Pipe Denmark	Req. No.				

Generated from:

Data/requisition sheet (cont. sheet) for <b>PRESSURE VESSELS (Column)</b>		Design book No: _____ page: _____																														
		Contr. Job No: _____																														
		MESC No: _____																														
MATERIAL SPECIFICATION																																
Part	ASTM No.	Part																														
Shell	LTCS+3mm CA	Downcomers																														
Cladding/lining of shell		Baffles																														
Heads	LTCS+3mm CA	Internal pipe fittings																														
Cladding/lining of heads		Stud bolts, external																														
Reinforcing rings		Nuts, external																														
Skirt, base plate, etc.		Bolts, internal																														
Saddles		Nuts, internal																														
Jacket		Gaskets, external																														
Shell flanges		Gaskets, internal																														
Nozzles (line pipe/plate)																																
Liner of nozzles and manholes																																
Flanges (ANS)																																
Flanges (Non-ANS)																																
Welding fittings																																
Stiffening rings																																
Insulation support rings																																
Cleats for platforms, etc.																																
Internal parts	SS316L																															
FABRICATION AND INSPECTION REQUIREMENTS																																
Construction in accordance with:																																
Inspection																																
Inspection authority																																
Stress relieving																																
Special heat treatment	PWHT may be required																															
Radiography																																
Other non-destructive testing																																
Chemical analysis																																
Manufacturer's certificate - chemical analysis																																
- mechanical data																																
WEIGHTS																																
Erection weight (shipping weight)	kg	Weight of internals kg																														
Total weight, operating	kg	Weight of insulation kg																														
Total weight, full of water	kg	Weight of fireproofing kg																														
REFERENCE DRAWINGS/LISTS																																
Arrangement - construction - outline																																
Standard vessel																																
Additional drawings																																
Welding electrodes, rods, etc.	See DEP 30.10.60.18-Gen.																															
General remarks for vessels	Anchor bolt ring and base plate																															
Flanged pipe nozzles	Lifting lug																															
Thermowell nozzles	Name plate																															
Carbon steel flanges	Support ring for insulation																															
Vortex breaker	Inspection hole/handhole/																															
Skirt/saddles/brackets	manhole/davits, etc.																															
Note 1: This sheet is to be confirmed and/ or completed by the Detailed Engineering Contractor.																																
Rev 1: Design Pressure updated Rev A: For EBEP																																
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<p>The manufacturer is responsible for ensuring that the equipment is designed and constructed in accordance with the specifications and codes referred to on the requisition and/or drawings. Furthermore, the manufacturer is responsible for ensuring that the design, including thicknesses of pressure parts, is satisfactory for the design conditions indicated on the requisition and/or drawings. Calculations and thicknesses of material supplied to the manufacturer are for information and tendering purposes only. The manufacturer shall make his own calculations for which he is fully responsible. the manufacturer shall ensure that the equipment supplied conforms to all the applicable codes and national statutory regulations, and he shall obtain all necessary approvals from statutory authorities</p>																																
Made by:	Date	<table border="1"> <tr> <td>Rev.</td> <td>1</td> <td>A</td> <td></td> <td></td> </tr> <tr> <td>Date</td> <td>27/01/11</td> <td>15/8/11</td> <td></td> <td></td> </tr> <tr> <td>Sign.</td> <td></td> <td>CAHX</td> <td></td> <td></td> </tr> <tr> <td colspan="2">Sheet No. 2</td> <td colspan="3">cont'd on sheet No. 3</td> </tr> <tr> <td colspan="2">Equipment No.</td> <td colspan="3">C-9403</td> </tr> <tr> <td colspan="2">Req. No.</td> <td colspan="3"></td> </tr> </table>	Rev.	1	A			Date	27/01/11	15/8/11			Sign.		CAHX			Sheet No. 2		cont'd on sheet No. 3			Equipment No.		C-9403			Req. No.				
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Approved by:	Date	Principal: DONG Oil Pipe Denmark																														
M. Voetter	02/12/2010																															

Data/requisition sheet (cont. sheet) for <b>PRESSURE VESSELS (Column)</b>				Design book No: _____ page: _____				
				Contr. Job No: _____				
				MESC No: _____				
NOZZLE DATA								
Mark	Number	Service	Nom size / (min. ID) / flange rating	Remarks				
N1	1	Reboiler Feed	DN300	w. vortex br. type A, no cover plate				
N2	1	Product Outlet	DN100	with vortex breaker type A				
N3	1	Reboiler Return	DN300	with half-open pipe				
N4	1	Feed Inlet	DN150	with half-open pipe				
N5	1	Reflux	DN80	with elbow				
N6	1	Vapour Outlet	DN150					
N7	1	Reboiler nozzle drain	DN50	blinded off, outside skirt				
N8	1	Product nozzle drain	DN50	blinded off, outside skirt				
N9	1	Utility nozzle	DN50	Note 1				
N10	1	Top vent	DN50	Note 1				
INSTRUMENT CONNECTIONS								
K1a/b	2	LRCA	DN50	Notes 1,3				
K2a/b	2	LZ L	DN50	Notes 1,3				
K3a/b	2	LG	DN50	Notes 1,3				
K4	1	PI	DN50	in vapour phase, Note 1				
K5	1	TI	DN50	in liquid phase, Note 1				
K6	1	PI	DN50	in vapour phase, Note 1				
K7	1	TI	DN50	in liquid phase, Note 1				
K8	1	TI	DN50	in liquid phase, Note 1				
K9	1	PI	DN50	in vapour phase, Note 1				
MANHOLES ETC.								
A1	1	Reboiler manhole	DN500	Notes 2,3				
A2	1	Manhole	DN500	Note 2				
A3	1	Manhole	DN500	Note 2				
A4	1	Manhole	DN500	Note 2				
A5	1	Manhole	DN500	Note 2				
<p>Note 1: Minimum process requirements and elevation, to be confirmed by the Detailed Engineering Contractor.</p> <p>Note 2: Manhole orientation and elevation to be checked by the Detailed Engineering Contractor.</p> <p>Note 3: Placed in product compartment.</p> <p>Rev 1: Design Pressure updated      Rev A: For EBEP</p> <p>Rev 0: for client review</p>								
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Checked by:	Date	PLANT: DO Terminal Hejre Crude Stabilization Project CONSIGNEE: DONG Oil Pipe Denmark		Sign.		CAHX		
J.L.Nooijen	02/12/2010			Sheet No. 3      cont'd on sheet No. 4				
Approved by:	Date	Eng. By: Shell Global Solutions International B.V. Principal: DONG Oil Pipe Denmark		Equipment No.    C-9403				
M. Voetter	02/12/2010			Req. No.				

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Data/requisition sheet (cont. sheet) for <b>Column</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Design book</td> <td style="width: 30%;">No:</td> <td style="width: 40%;">page:</td> </tr> <tr> <td>Contr. Job</td> <td>No:</td> <td></td> </tr> <tr> <td>MESC</td> <td>No:</td> <td></td> </tr> </table>				Design book	No:	page:	Contr. Job	No:		MESC	No:	
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**Notes:**

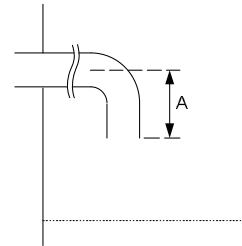
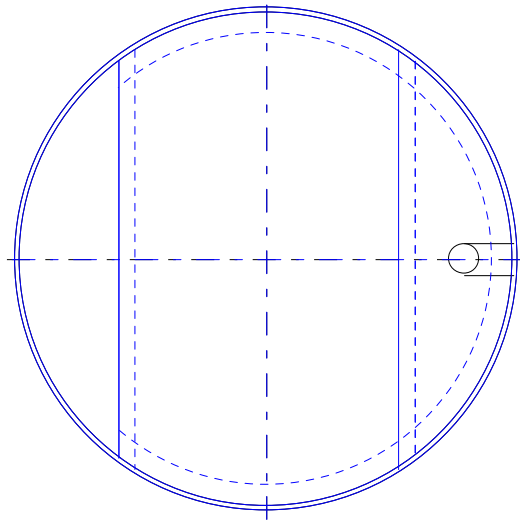
- Dimensions in mm.
- Drawing not to scale.
- Manway to be provided in baffle between bottom sumps.

Rev 1: Design Pressure updated      Rev A: For EBEP  
 Rev 0: for client review

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S.Street	30/11/2010		Date	27/01/11	15/8/11		
Checked by:	Date		Sign.		CAHX		
J.L.Nooijen	02/12/2010		Sheet No. 4      cont'd on sheet No. 5				
Approved by:	Date	Eng. By: Shell Global Solutions International B.V.	Equipment No.    C-9403				
M. Voetter	02/12/2010	Principal: DONG Oil Pipe Denmark	Req. No.				

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**Top view of elbow inlet device with internal below**

Inner diameter of column	1200	mm
Feed nozzle number	N5	
Nozzle nominal size	DN80	
Nozzle minimum ID	77,92	mm
Elbow shape	type I	
Length main pipe	120	mm
Dollar plate	NO	
Vertical distance nozzle-centre to outlet, A	430	mm
<b>MATERIALS</b>		
Pipe material	SS316L	
Corrosion allowance	-	mm

**Notes:**

- 1) Design and construction shall be in accordance with the requirements of DEP 31.20.20.31-Gen.
- 2) Centre line of feed nozzle N5 to be 540 mm above tray floor of tray 44.
- 3) Downcomers of tray 44 are displayed.
- 4) Height of inlet weir on tray 44 to be 150mm
- 5) Inlet weir to be provided with one 12mm mouse hole.

Rev 1: Design Pressure updated

Rev A: For EBEP

Rev 0: for client review

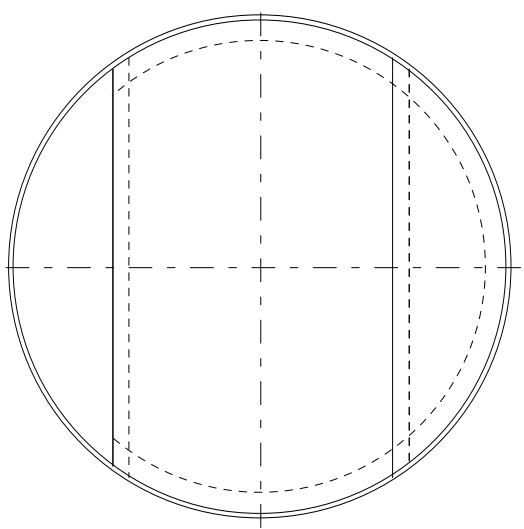
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S.Street	30/11/2010		Date	27/01/11	15/8/11		
Checked by:	Date		Sign.		CAHX		
J.L.Nooijen	02/12/2010		Sheet No. 5 cont'd on sheet No. 6				
Approved by:	Date	Eng. By: Shell Global Solutions International B.V. Principal: DONG Oil Pipe Denmark	Equipment No. C-9403				
M. Voetter	02/12/2010		Req. No.				

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Data/requisition sheet (cont. sheet) for <b>Trays</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Design book</td> <td style="width: 50%;">No:</td> <td style="width: 50%;">page:</td> </tr> <tr> <td>Contr. Job</td> <td>No:</td> <td></td> </tr> <tr> <td>MESC</td> <td>No:</td> <td></td> </tr> </table>		Design book	No:	page:	Contr. Job	No:		MESC	No:	
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**Top view of trays**



<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Tray numbers</td><td>27-44</td><td></td></tr> <tr><td>Inner diameter of column</td><td>1200</td><td>mm</td></tr> <tr><td>Space above tray</td><td>600</td><td>mm</td></tr> <tr><td colspan="3" style="text-align: center;"><b>VALVE TRAY BUBBLING AREA</b></td></tr> <tr><td>Required net free area</td><td>0,068</td><td>-</td></tr> <tr><td>Number of valves per tray</td><td>64</td><td></td></tr> <tr><td>Type of valve</td><td colspan="2">Sulzer RV-1</td></tr> <tr><td>Diameter of holes (2)</td><td>38,9</td><td>mm</td></tr> <tr><td>Number of valves per tray</td><td>64</td><td></td></tr> <tr><td>Nominal leg length</td><td>11,11</td><td>mm</td></tr> <tr><td>Cap thickness</td><td>2</td><td>mm</td></tr> <tr><td>Tray panel thickness</td><td>2</td><td>mm</td></tr> <tr><td colspan="3" style="text-align: center;"><b>CONVENTIONAL DOWNCOMERS</b></td></tr> <tr><td>Number of passes</td><td>1</td><td></td></tr> <tr><td>Downcomer type</td><td colspan="2">NORMAL</td></tr> <tr><td>Height of tray outlet weir</td><td>55</td><td>mm</td></tr> <tr><td colspan="3" style="text-align: center;"><b>SIDE DOWNCOMER:</b></td></tr> <tr><td>Downcomer top area</td><td>0,162</td><td>m²</td></tr> <tr><td>Downcomer bottom area</td><td>0,162</td><td>m²</td></tr> <tr><td>Downcomer clearance</td><td>34</td><td>mm</td></tr> </table>	Tray numbers	27-44		Inner diameter of column	1200	mm	Space above tray	600	mm	<b>VALVE TRAY BUBBLING AREA</b>			Required net free area	0,068	-	Number of valves per tray	64		Type of valve	Sulzer RV-1		Diameter of holes (2)	38,9	mm	Number of valves per tray	64		Nominal leg length	11,11	mm	Cap thickness	2	mm	Tray panel thickness	2	mm	<b>CONVENTIONAL DOWNCOMERS</b>			Number of passes	1		Downcomer type	NORMAL		Height of tray outlet weir	55	mm	<b>SIDE DOWNCOMER:</b>			Downcomer top area	0,162	m²	Downcomer bottom area	0,162	m²	Downcomer clearance	34	mm	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Notes:</td></tr> <tr><td colspan="2">1) Design and construction shall be in accordance with the requirements of DEP 31.20.20.31-Gen.</td></tr> <tr><td colspan="2">2) Holes shall be evenly distributed: pattern to be specified by manufacturer</td></tr> <tr><td colspan="2">3) A 10 mm 'interrupter bar' shall be welded just upstream the first row of perforations.</td></tr> <tr><td colspan="2">4) Even trays are shown.</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="3" style="text-align: center;">MATERIALS</td></tr> <tr> <td style="width: 70%;">Tray material</td> <td style="width: 10%;">SS316L</td> <td style="width: 20%;"></td> </tr> <tr> <td>Corrosion allowance</td> <td>-</td> <td>mm</td> </tr> </table>	Notes:		1) Design and construction shall be in accordance with the requirements of DEP 31.20.20.31-Gen.		2) Holes shall be evenly distributed: pattern to be specified by manufacturer		3) A 10 mm 'interrupter bar' shall be welded just upstream the first row of perforations.		4) Even trays are shown.		MATERIALS			Tray material	SS316L		Corrosion allowance	-	mm
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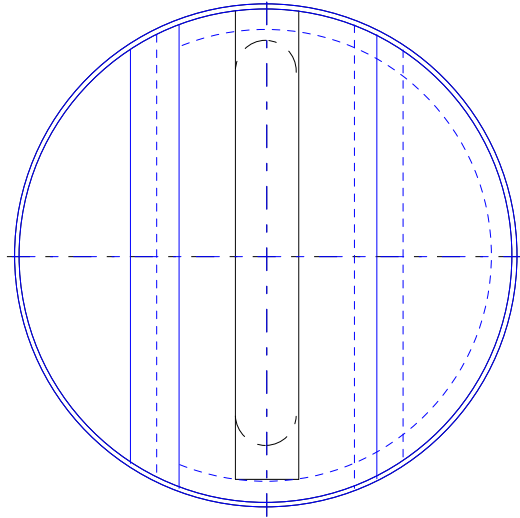
  

Rev 1: Design Pressure updated
Rev A: For EBEP

Rev 0: for client review

Made by:	Date	EQUIPMENT: Depropaniser C-9403 PLANT: DO Terminal Hejre Crude Stabilization Project CONSIGNEE: DONG Oil Pipe Denmark	Rev.	1	A		
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M. Voetter	02/12/2010	Principal: DONG Oil Pipe Denmark	Req. No.				

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**Half Open Pipe****Top view of half open pipe with internal below**

Inner diameter of column	1200	mm
Feed nozzle number	N4	
Nozzle nominal size	DN150	
Nozzle minimum ID	146,3	mm
Length of pipe	1140	mm
<b>MATERIALS</b>		
Pipe material	SS316L	
Corrosion allowance	-	mm

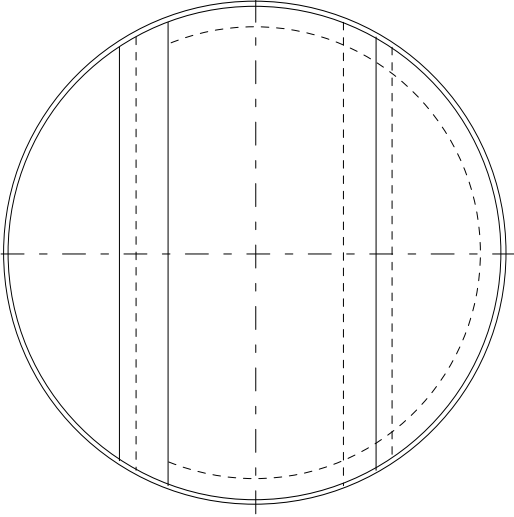
<b>Notes:</b>
1) Design and construction shall be in accordance with the requirements of DEP 31.20.20.31-Gen.
2) Half-Open pipe has to be closed at end.
3) Half-Open opening to face downward.
4) Centre line of feed nozzle N4 to be 580 mm above tray floor of tray 26.

Rev 1: Design Pressure updated

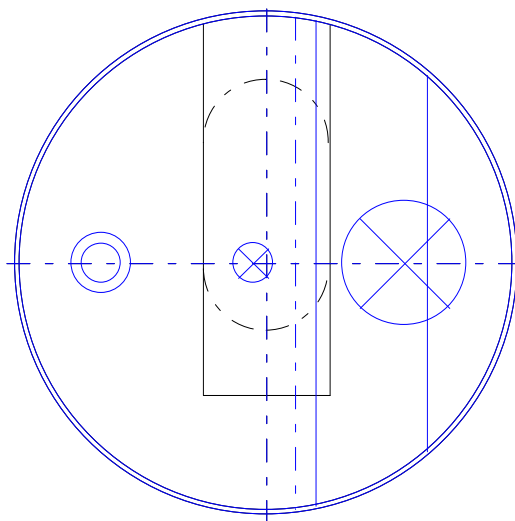
Rev A: For EBEP

Rev 0: for client review

Made by:	Date	EQUIPMENT: Depropaniser C-9403 PLANT: DO Terminal Hejre Crude Stabilization Project CONSIGNEE: DONG Oil Pipe Denmark	Rev.	1	A		
S.Street	30/11/2010		Date	27/01/11	15/8/11		
Checked by:	Date		Sign.		CAHX		
J.L.Nooijen	02/12/2010		Sheet No. 7 cont'd on sheet No. 8				
Approved by:	Date	Eng. By: Shell Global Solutions International B.V.	Equipment No. C-9403				
M. Voetter	02/12/2010	Principal: DONG Oil Pipe Denmark	Req. No.				

Data/requisition sheet (cont. sheet) for <b>Trays</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Design book</td> <td style="width: 50%;">No:</td> <td style="width: 50%;">page:</td> </tr> <tr> <td>Contr. Job</td> <td>No:</td> <td></td> </tr> <tr> <td>MESC</td> <td>No:</td> <td></td> </tr> </table>		Design book	No:	page:	Contr. Job	No:		MESC	No:																																																																															
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**Top view of half open pipe with internal below**

Inner diameter of column	1200	mm
Feed nozzle number	N3	
Nozzle nominal size	DN300	
Nozzle minimum ID	289	mm
Length of pipe	920	mm
<b>MATERIALS</b>		
Pipe material	SS316L	
Corrosion allowance	-	mm

**Notes:**

- 1) Design and construction shall be in accordance with the requirements of DEP 31.20.20.31-Gen.
- 2) Half-Open pipe has to be closed at end.
- 3) Half-Open opening to face downward.
- 4) Centre line of feed nozzle N3 to be 520 mm above product compartment cover plate.

Rev 1: Design Pressure updated

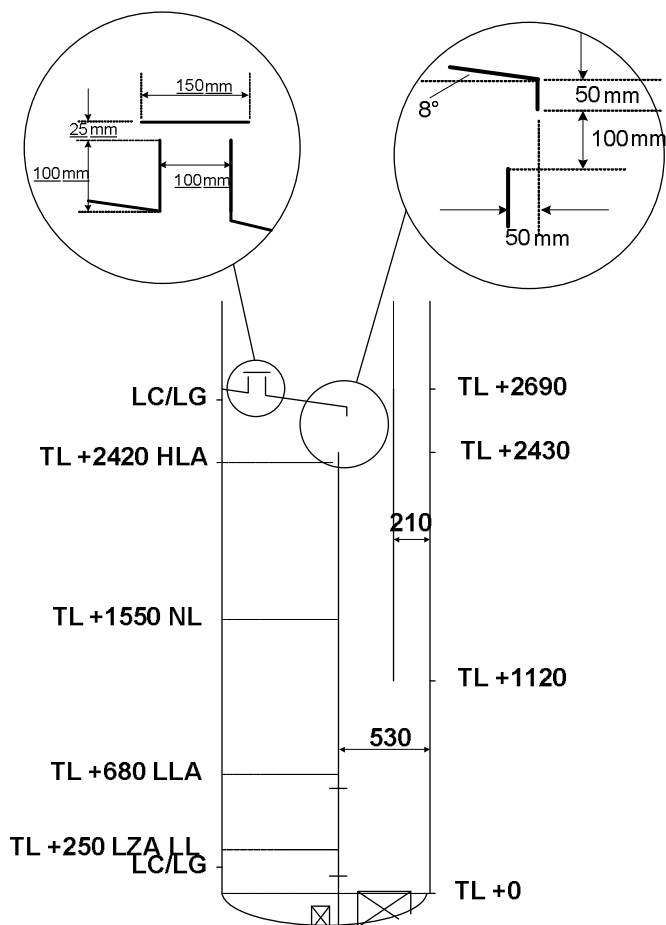
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M. Voetter	02/12/2010		Req. No.				

Generated from:

## Side view of column bottom



Product nozzle number (1)	N2	
Product nozzle nominal size	DN100	
Product nozzle, minimum required ID	97,2	mm
Reboiler nozzle number (2)	N1	
Reboiler nozzle nominal size	DN300	
Reboiler nozzle, minimum required ID	289	mm
Number of reboiler nozzles	1	
Width reboiler baffle (3,4,5)	530	mm
Height overflow baffle from TL	2430	mm
Width downcomer baffle(6)	210	mm

Notes:	
1)	Product outlet nozzle shall be equipped with a vortex breaker manufactured in compliance with Standard Drawing S 10.010, Type A. (See sheet 13)
2)	Reboiler nozzle shall be equipped with a vortex breaker manufactured in compliance with Standard Drawing S 10.010, Type A, but without a cover plate. (See sht. 13)
3)	Reinforcement ribs of the reboiler baffle shall only be allowed on the product compartment side.
4)	Reboiler baffle to be provided with a 12 mm mouse hole at the lowest point.
5)	Reboiler baffle to be provided with a hatchway.
6)	Downcomer from tray 1 to extend to TL +1120
7)	Dimensions in mm.

Rev 1: Design Pressure updated

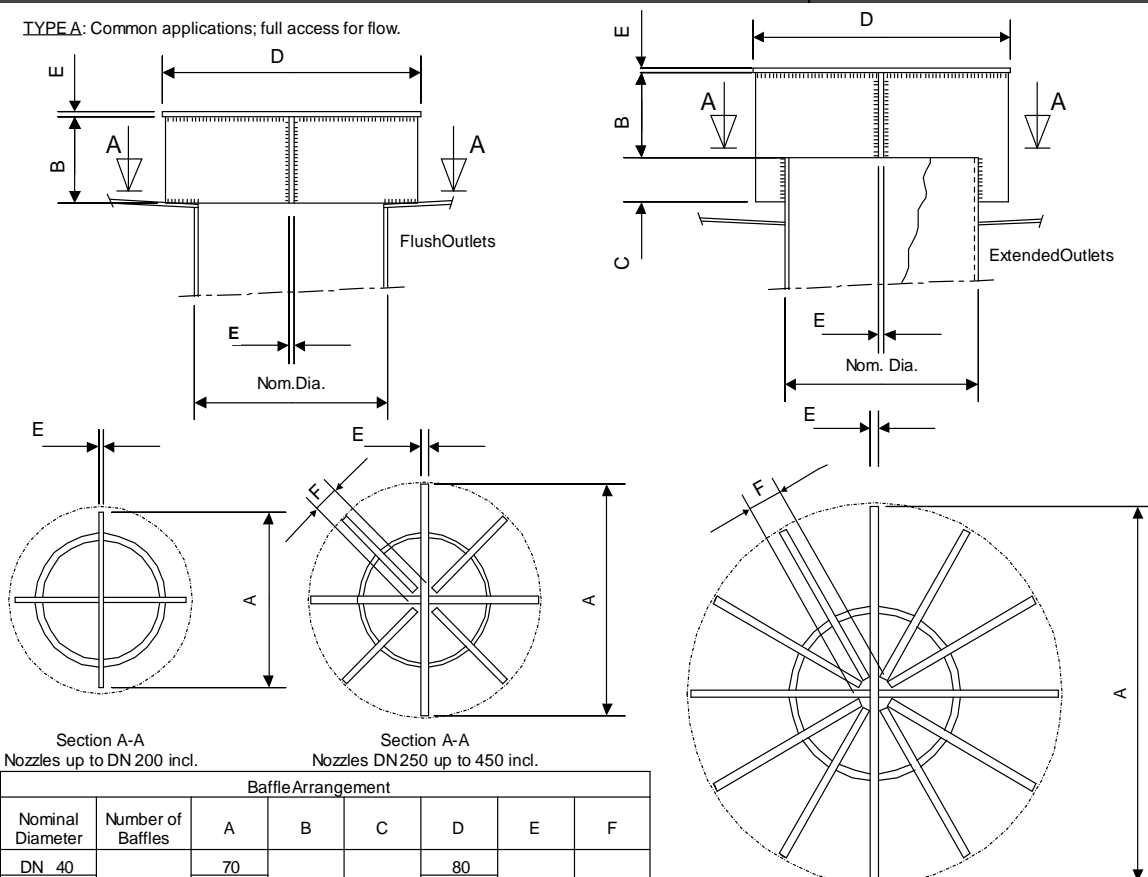
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TYPE A: Common applications; full access for flow.

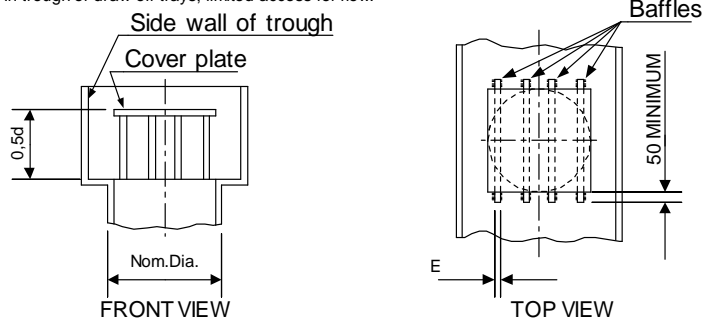
Section A-A  
Nozzles up to DN 200 incl.Section A-A  
Nozzles DN 250 up to 450 incl.Section A-A  
Nozzles DN 500 and DN 600

## NOTES:

- 1) Dimension "E" is mandatory because thicker plate will obstruct inlet.
- 2) All sharp edges shall be rounded off.
- 3) Materials: as specified on requisition or equipment drawing.
- 4) all dimensions are in millimetres.

Baffle Arrangement							
Nominal Diameter	Number of Baffles	A	B	C	D	E	F
DN 40	4	70	50	25	80	4 ± .5	50
DN 50		85			95		
DN 80		115			125		
DN 100		150			160		
DN 150		215			225		
DN 200		290			300		
DN 250	8	365	125	40	375	6 ± .5	50
DN 300		440	150		450		
DN 350		515	175		525		
DN 400		590	200		600		
DN 450		680	225		690		
DN 500		740	250		750		
DN 600	12	890	300	50	900		

TYPE B: In trough of draw-off trays; limited access for flow.



Baffle Arrangement	
Nominal Diameter	Number of baffles
100 < d ≤ 200	2
200 < d ≤ 300	3
300 < d ≤ 400	4
400 < d ≤ 500	5
500 < d ≤ 600	6

All baffles in length direction of through  
For through widths above 2d apply type A.

F	May'95	MFEM/10	MFEM/1	
ISSUE	DATE	Ref.Ind. Sign/Init. Designer	Ref.Ind. Sign/Init. Custodian	DESCRIPTION
APPROVED BY				
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Data/requisition sheet (cont. sheet) for			Design book		No:	page:		
			Contr. Job		No:			
			MESC		No:			
Made by:	Date	EQUIPMENT: Depropaniser C-9403 PLANT: DO Terminal Hejre Crude Stabilization Pro CONSIGNEE: DONG Oil Pipe Denmark	Rev.	1	A			
S.Street	30/11/2010		Date	27/01/11	15/8/11			
Checked by:	Date		Sign.		CAHX			
J.L.Nooijen	02/12/2010							
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M. Voetter	02/12/2010		Req. No.					

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