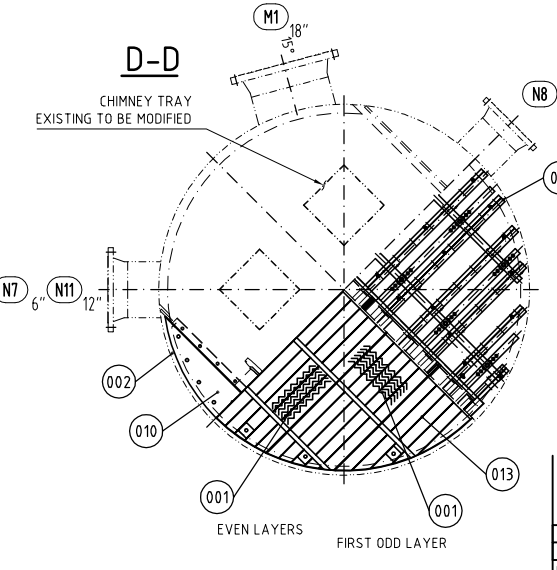
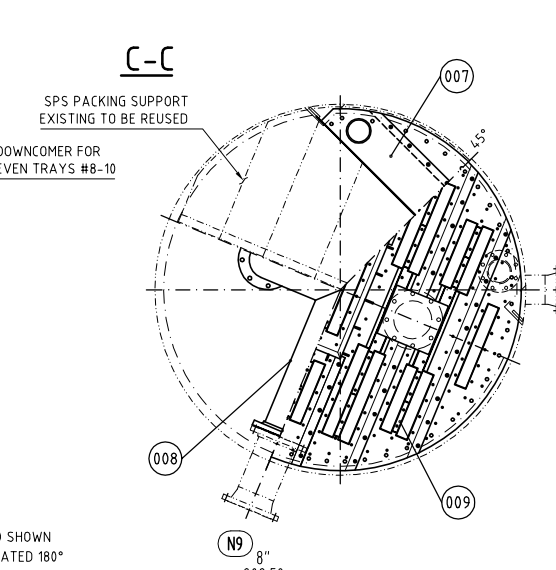
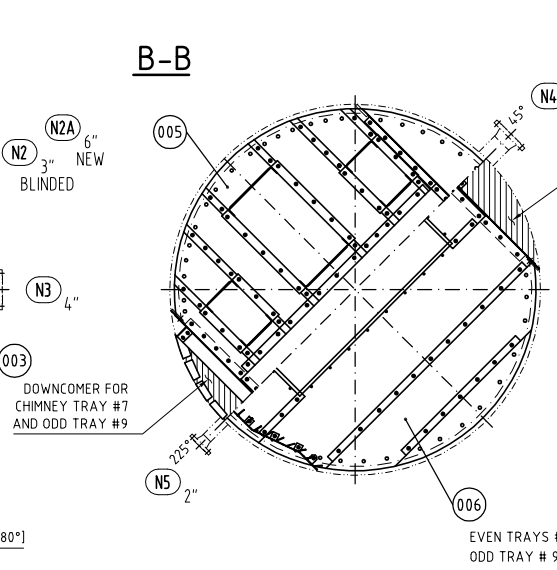
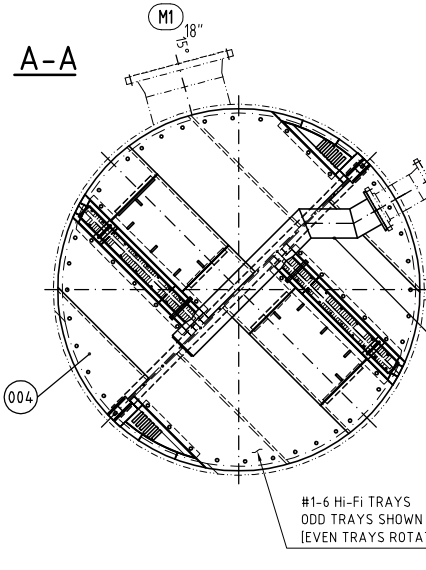
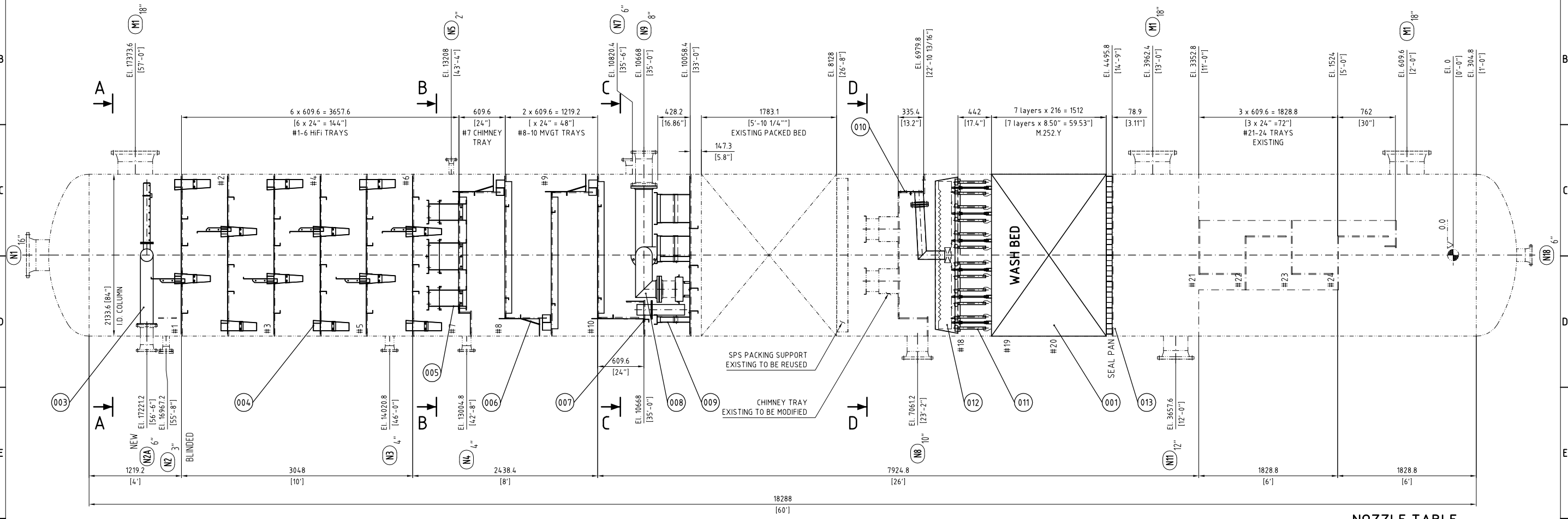


Item	set	spare	unit	drawing- or part-no.	description	remarks	material	wght. (kg)
000	1	-	set	C028484-01-01	GENERAL ARRANGEMENT			
001	1.8	-	m ³	C028484-01-01	SEGMENTED PACKING M.252.Y. (s=0.1)	7 layers	410S	161.4
002	1	-	set		ATTACHMENTS		C.S.	30.8
003	1	-	pc.	C028484-01-02	REFLUX PIPE N2A (Ø6")	BY CLIENT	C.S.	
004	6	-	pc.	C028484-01-03	#1-6 HI-FI TRAYS		C.S.	
005	1	-	pc.	C028484-01-04	#7 CHIMNEY TRAY		C.S.	
006	4	-	pc.	C028484-01-05/06	#8-10 MVGT TRAYS		C.S.	
007	1	-	pc.	C028484-01-07	SEAL PAN BELOW #10		C.S.	
008	1	-	pc.	C028484-01-08	#9 DIESEL REFLUX (Ø8")	BY CLIENT	304	111.6
009	1	-	pc.	C028484-01-09	FPD ORIFICE PAN DISTRIBUTOR		410S	301.3
010	1	-	pc.	C028484-01-10	SEAL PAN MODIFICATIONS	on Chimney Tray	410S/304L	47.7
011	1	-	pc.	C028484-01-11	VDP DISTRIBUTOR		410S	360
012	1	-	pc.	C028484-01-12	IV PREDISTRIBUTOR		410S	12.4
013	1	-	pc.	C028484-01-13	SPS SUPPORT GRID		410S	111



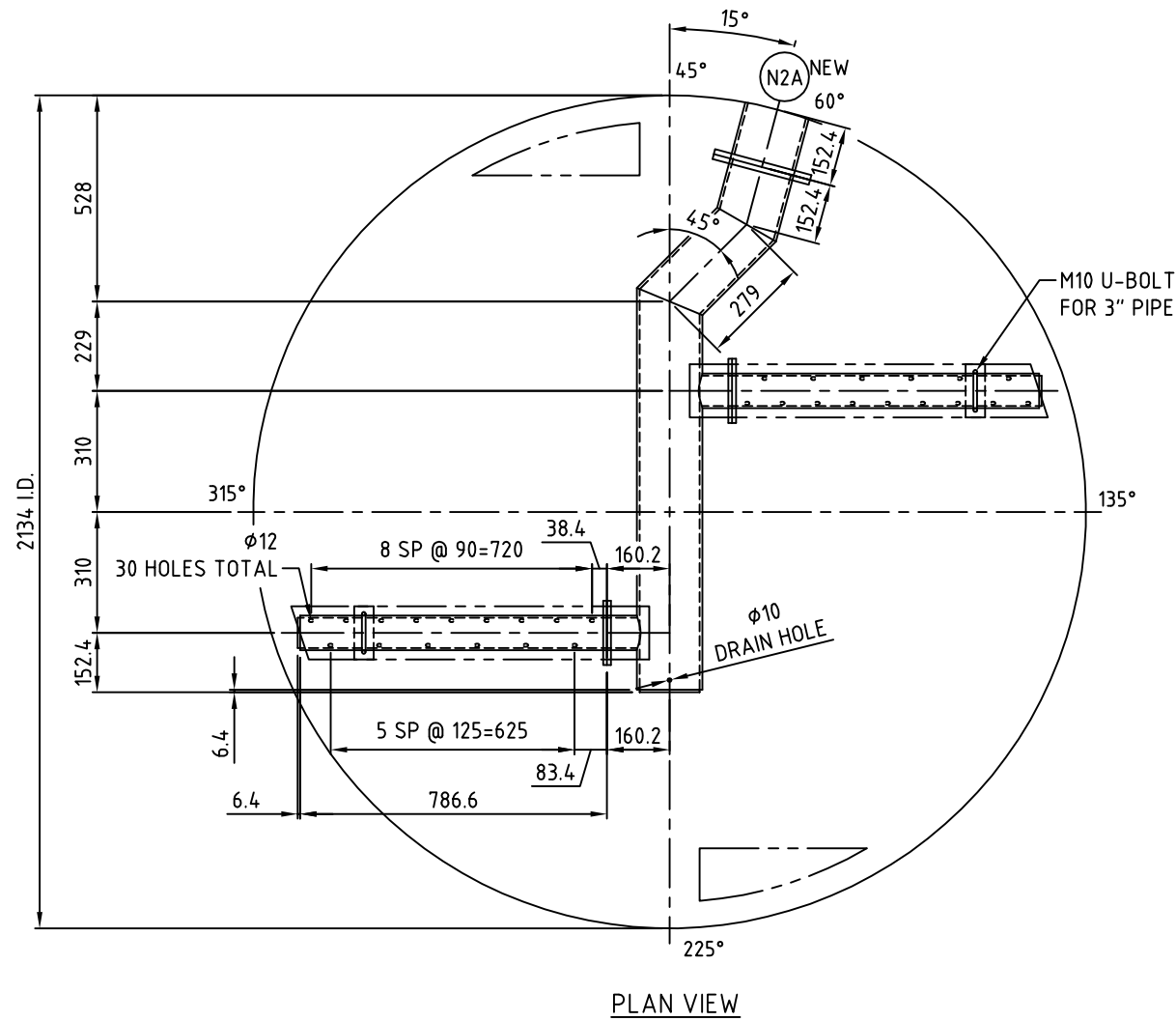
NOZZLE TABLE			
MARK	SIZE	QTY	SERVICE
NEW NOZZLES			
N2A	6"	1 NEW	REFLUX RETURN
N9	8"	1	DIESEL REFLUX
EXISTING NOZZLES			
M1	18"	3	MANHOLE
N18	6"	1	RESIDUE OUT
N11	12"	1	CRUDE FEED
N8	10"	1	DIESEL DRAW OFF
N7	6"	1	DIESEL VAPOR
N5	2"	1	KERO REFLUX
N4	4"	1	KERO DRAW
N3	4"	1	KERO VAPOR
N2	3"	1	TO BE BLINDED REFLUX RETURN
N1	16"	1	O/H VAPOR

GENERAL NOTES:
1.- ALL ELEVATION INDICATED ARE FROM EL. 0.0 (0° 00').

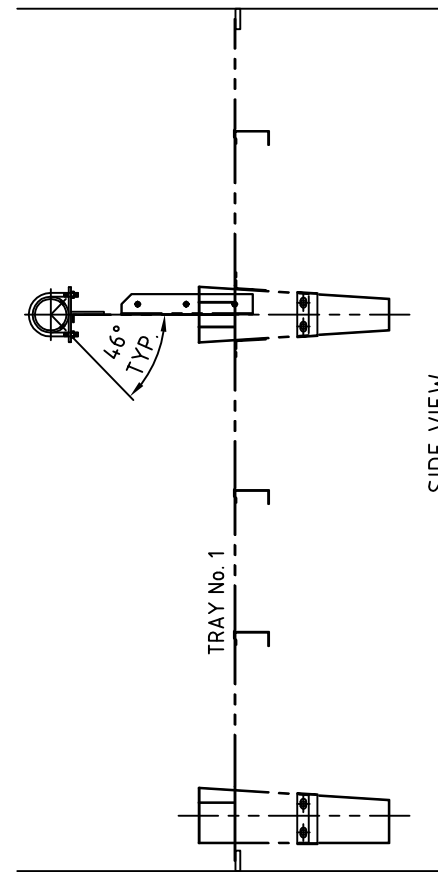
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0	ORIGINAL ISSUE	ATT	21-01-2003	ATT	25/07/2003	DD	25/07/2003
rev.	revision remarks	issued by	date	checked	date	approved	date
Job no.:	SULZER project no: C028484		size:	A-1 scale: %			
col.-I.D.:	2134mm (84in)	customer: ENAP/PARES & ALVAREZ	customer p.o.:	45550001388			
col item.:	PV-16,01	plant:	customer-dwg.:				
bed.:		area: CRUDE TOPPING TOWER	ACAD 2000				
SULZER		GENERAL ARRANGEMENT		drawing-no. C028484-01 01			

GENERAL NOTES:

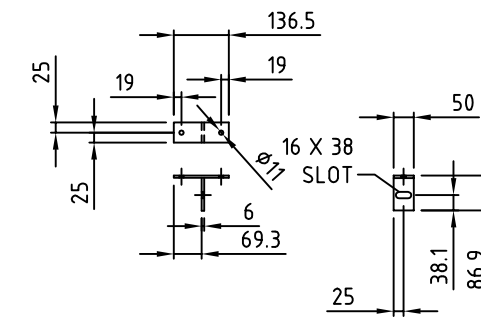
1. VESSEL MANWAY I.D. IS: 431.8
2. ALL PARTS SHOWN ARE NOT SULZER'S SCOPE OF SUPPLY.
3. PIPING LEVEL TOLERANCE: ±3
4. HEADER PIPE SIZE/MATERIAL: 6" SCH 40 C.S.
FLANGE TYPE/MATERIAL: 6" SHELL-13mm THK. C.S.
5. LATERAL PIPE SIZE/MATERIAL: 3" SCH 40 C.S.
FLANGE TYPE/MATERIAL: 3" SHELL-10mm THK. C.S.
6. PIPE SUPPORT MATERIAL: 6.4mm THK.
7. END CAP MATERIAL: 6.4mm THK.
8. ALL DIMENSIONS ARE IN: MILLIMETERS



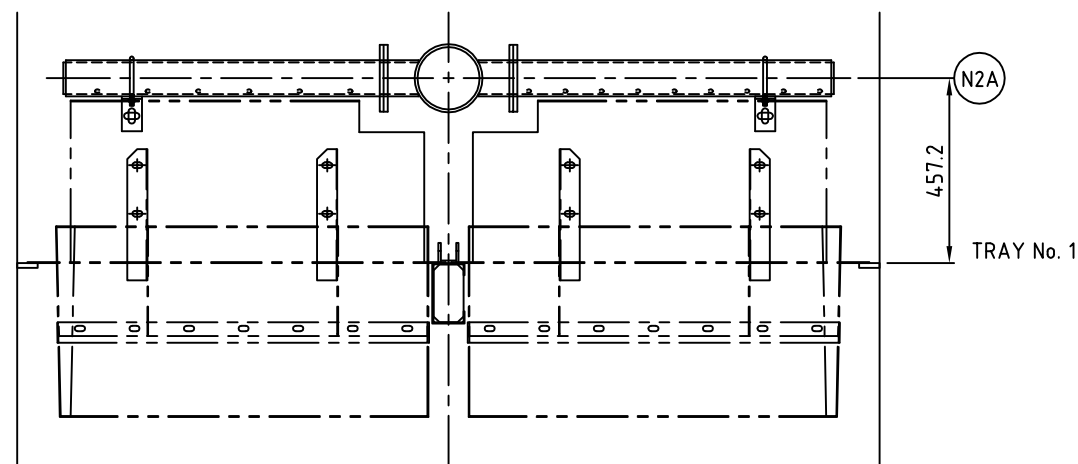
PLAN VIEW



SIDE VIEW



PIPE SUPPORT DETAIL

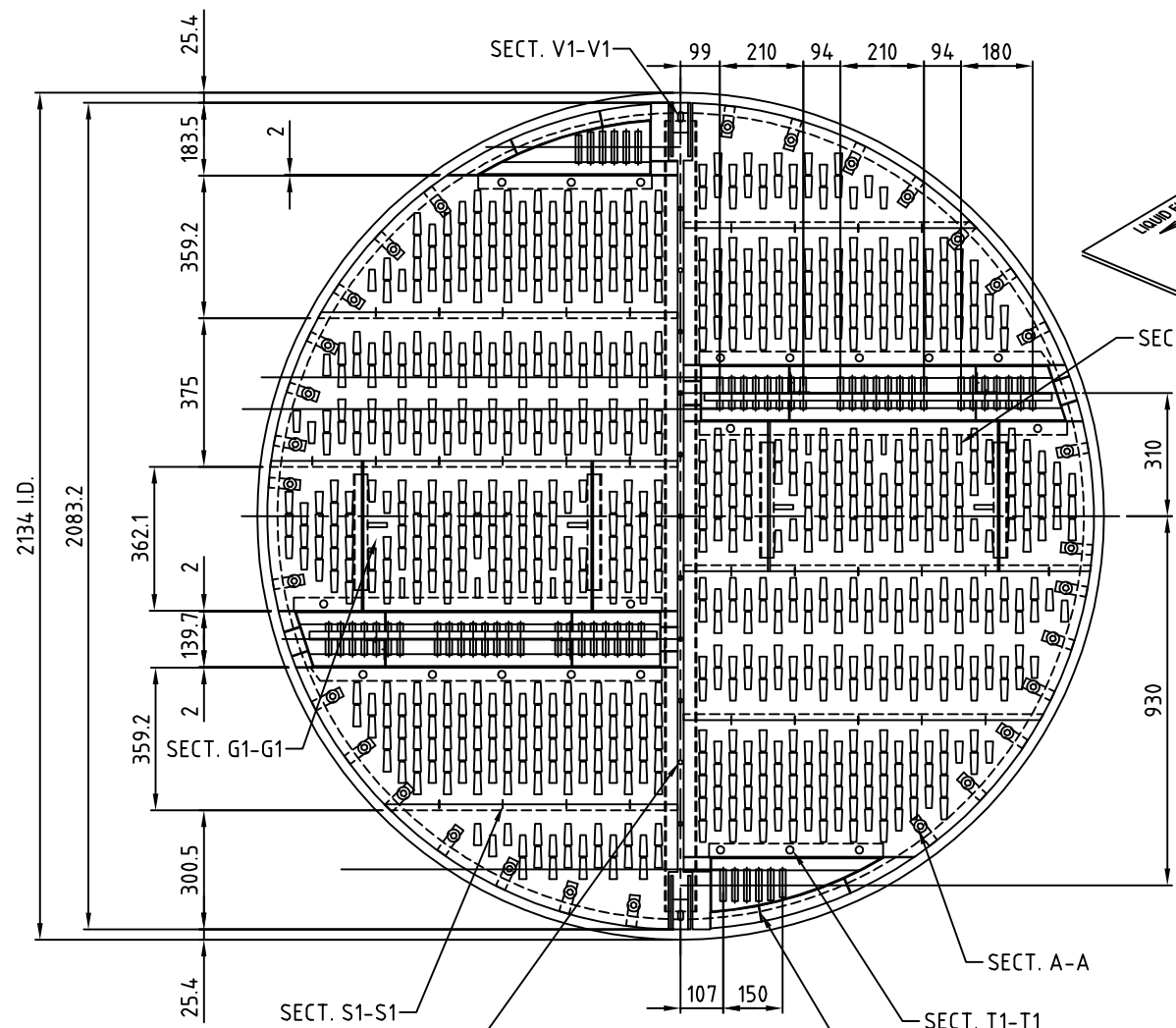


ELEVATION VIEW

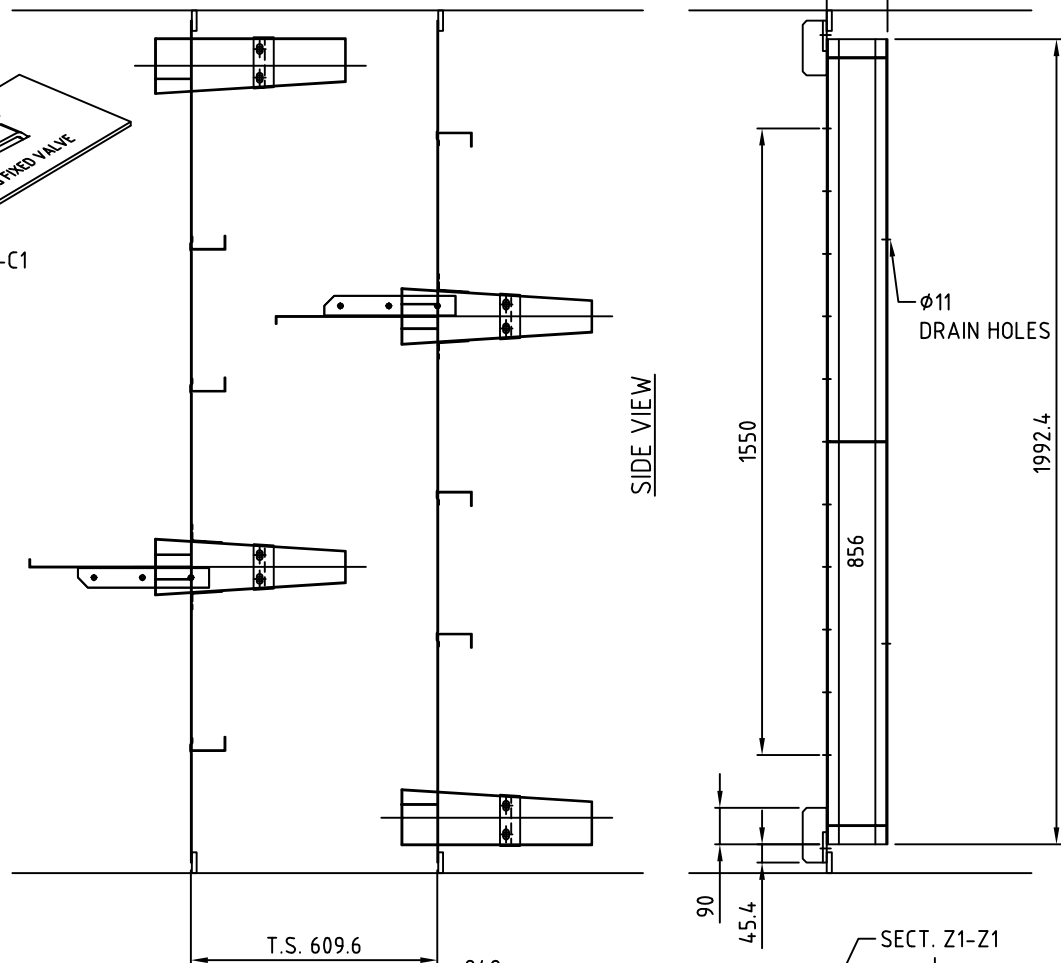
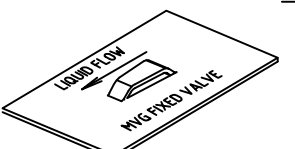
GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	
none	-

state: CERTIFIED

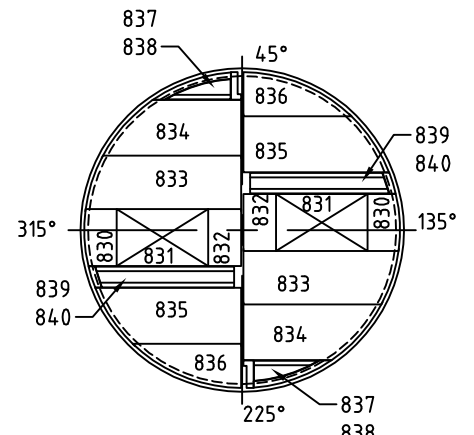
1	Certified Issue	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003
0	Original issue	TLS	24 JUL 03			XQ	7-25-03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: J055483		SULZER project no.: C028484			size: 11x17	scale: NTS	
2134 (84.0")		customer: ENAP/PARES & ALVARES		customer p.o.:			
col item: PV-16.01		plant:		customer-dwg.: 4550001388			
bed:		area: CRUDE TOPPING TOWER		ACAD 2000			
SULZER		ASSEMBLY				drawing no.: sheet no.:	
		RELFX NOZZLE N2A				C028484-01 2	
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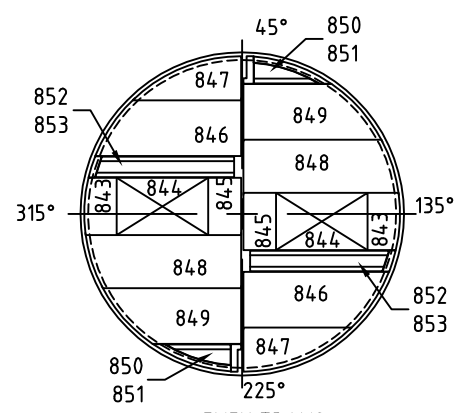
PLAN VIEW
TRAY No. 1 THRU 6



SIDE VIEW



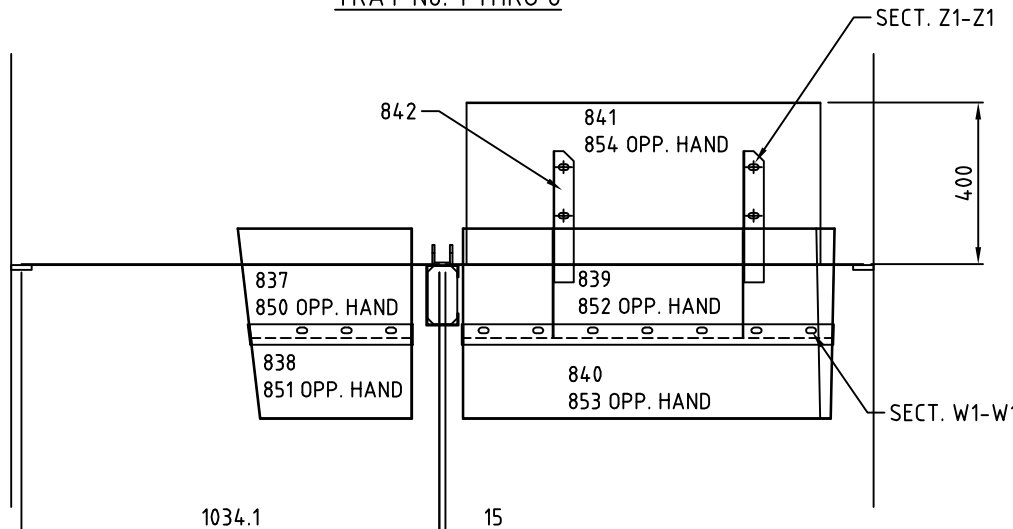
ODD TRAYS
No. 1 THRU 5



EVEN TRAYS
No. 2 THRU 6

GENERAL NOTES:

1. VESSEL MANWAY I.D. IS: 431.8
2. ALL COMPONENTS ARE PIECE MARKED BY SULZER.
3. TRAY MANWAYS ARE REMOVABLE FROM TOP OR BOTTOM.
4. V-GRIDS TYPE: MVG (8.3 LIFT)
No. PER TRAY: 776
5. TRAY MATERIAL: 10 GA. C.S.
6. CLAMP MATERIAL: C.S.
7. TRAY HARDWARE MATERIAL: C.S.
TRAY BOLTS: A193 GR B6
TRAY NUTS: A194 GR 6
8. MANWAY HARDWARE MATERIAL: C.S.
MANWAY STUDS: A193 GR B6
MANWAY NUTS: A194 GR 6
9. TRAYS ARE NUMBERED: TOP TO BOTTOM
10. TRAY SPACINGS, WEIR HEIGHTS AND DOWNCOMER CLEARANCES SHOWN ARE FROM TOP OF TRAY DECKS. (TOLERANCE TO BE ± 0.125)
11. ALL DIMENSIONS ARE IN: MILLIMETERS



ELEVATION VIEW
TRAY No. 2 THRU 6

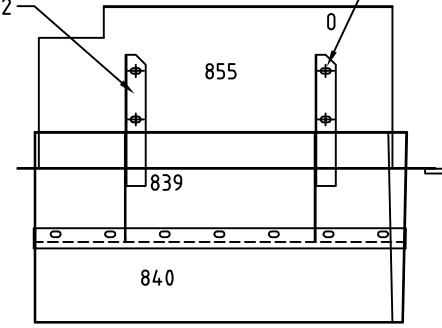
AS BUILT

GENERAL NOTES

All parts shall pass through man ways:431.8 I.D.
All components are marked by SULZER.
The assembled part is checked after manufact.

surface treatment:		
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only	
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized	
shop data files:		
none		

state:
AS BUILT

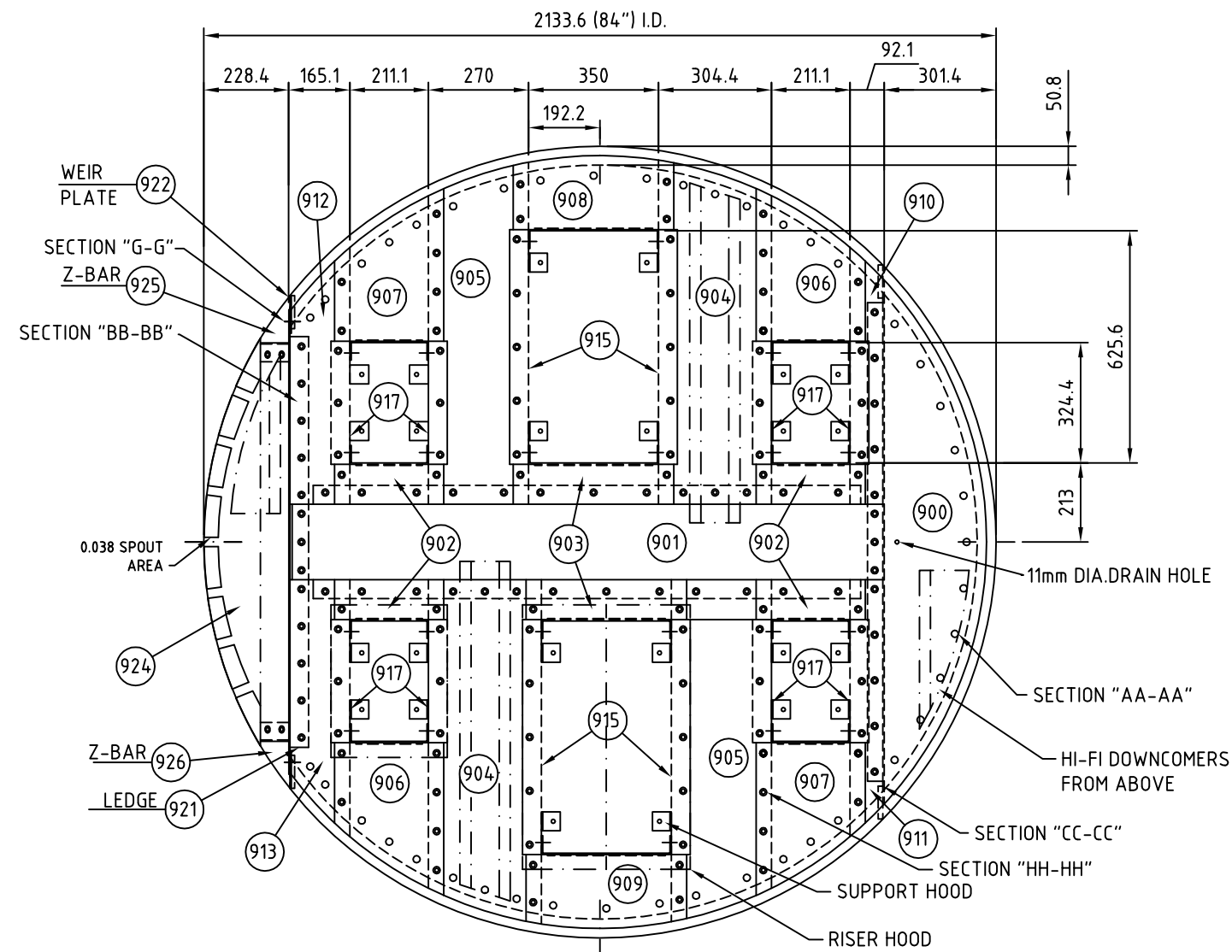


ELEVATION VIEW
TRAY No. 1 ONLY

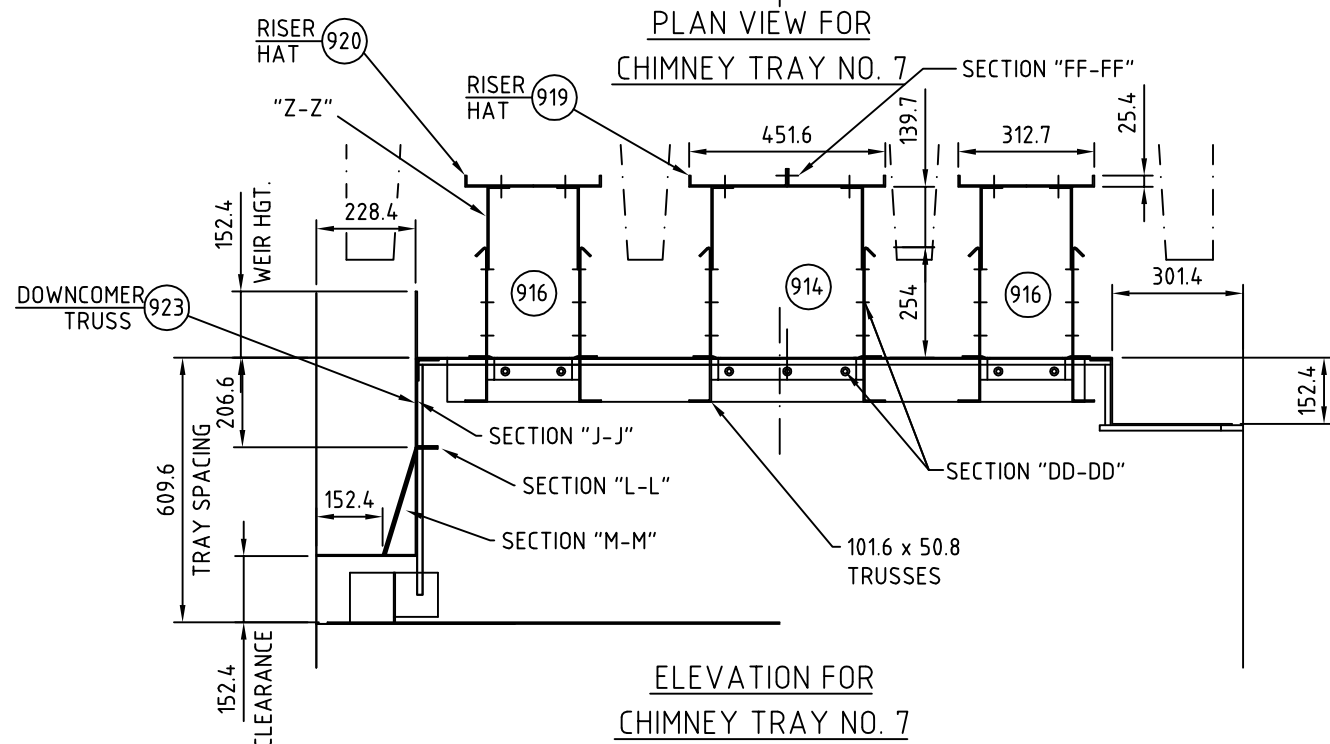
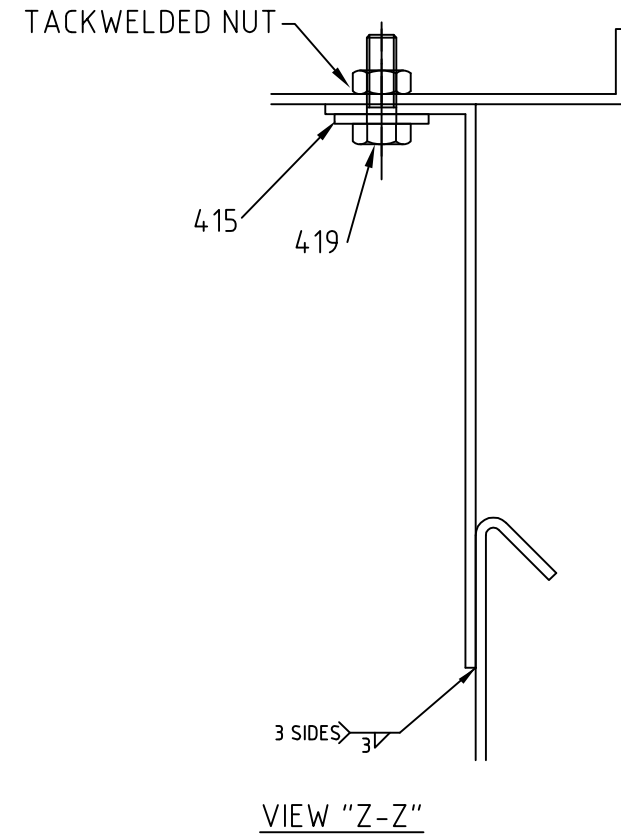
2	AS BUILT			ATT	24/10/03	SLO	24/OCT/03
1	CERTIFIED	PAZ	26/AUG/03	ATT	26/AUG/03	SLO	26/AUG/03
0	Original issue	TLS	24JUL03			XQ	7-25-03
rev.	revision remarks	issued by	date	checked	date	approved	date

job no.: J055481	SULZER project no.: C028484	size: 11x17	scale: NTS
2134 (84.0")	customer: ENAP/PARES & ALVARES	customer p.o.:	
col item: PV-16.01	plant:	customer-dwg.: 4550001388	
bed:	area: CRUDE TOPPING TOWER	ACAD 2000	
SULZER	ASSEMBLY	drawing no.:	sheet no.:
	HIFI TRAY No. 1 THRU 6	C028484-01	3

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AS BUILT



GENERAL NOTES:

1. VESSEL MANWAY I.D. IS 431.8 (17")
2. ALL TRAY COMPONENTS ARE PIECE MARKED BY SULZER.
3. TRAY MANWAY IS THROUGH CHIMNEY RISER.
4. TRAY MATERIAL: 10 GA C.S. A1011 GR B
5. TRAY HARDWARE MATERIAL: C.S.
BOLTING: A193 GR B6
NUTS: A194 GR6
GASKET: 1.6mm FIBERGLASS

GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D.	
All components are marked by SULZER.	
The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files: none	

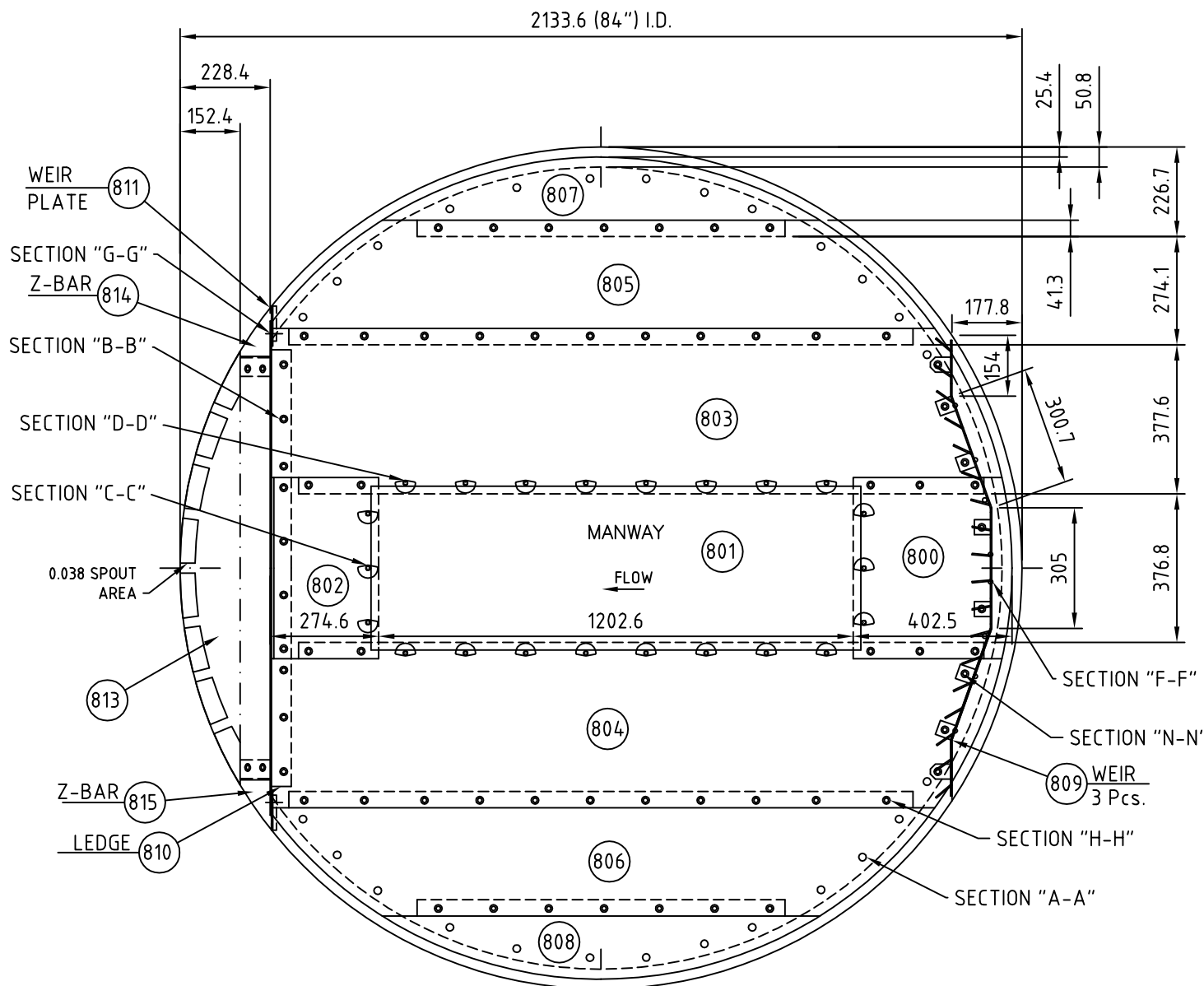
state: AS BUILT

rev.	revision remarks	issued by	date	checked	date	approved	date
1	AS BUILT					ATT	24/OCT/03
1	GENERAL REVIEW	PAZ_J	19-AUG-03			ATT	19-AUG-03
0	Original issue	RJ	7/17/03			DD	7/25/03

job no.: J055471	SULZER project no.: C028484	size: 11x17	scale: NTS
col ID: 2133.6 (84")	customer: ENAP/PARES & ALVARES	customer p.o.: 4550001388	
col item: PV-16.01	plant: -	customer-dwg.: -	
bed: ##	area: CRUDE TOPPING TOWER	ACAD 2000	

SULZER	ASSEMBLY	drawing no.:	sheet no.:
	CHIMNEY TRAY NO.7	C028484-01	4

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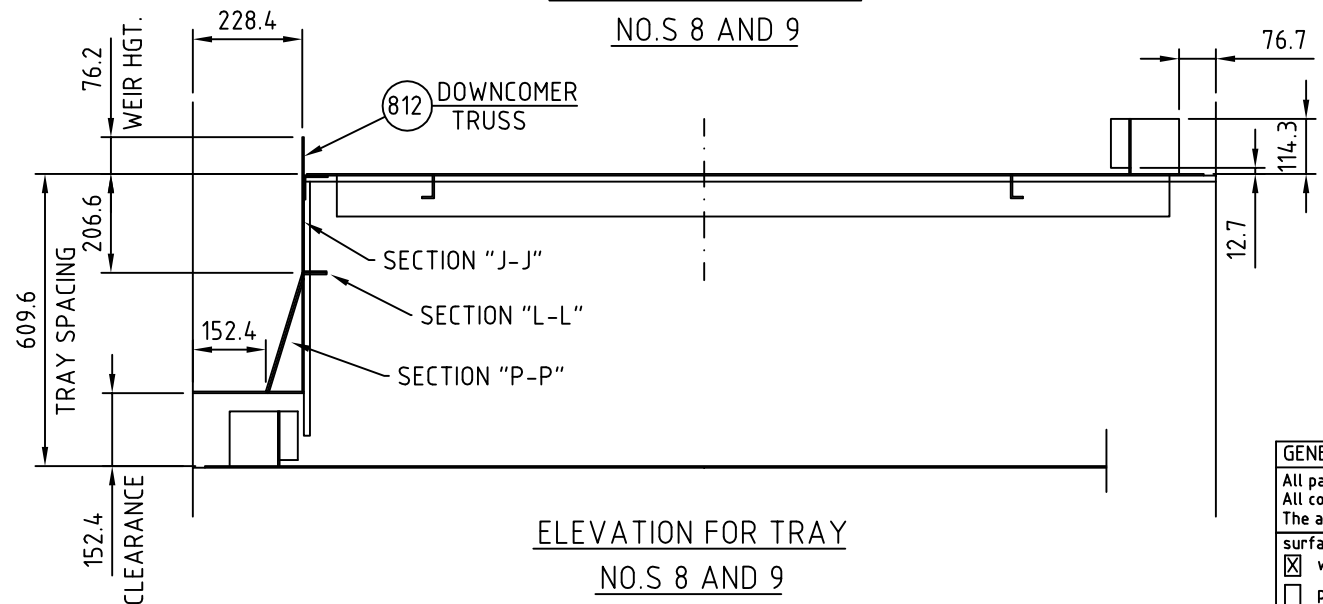


PLAN VIEW FOR TRAY
NO.S 8 AND 9

AS BUILT

GENERAL NOTES:

1. VESSEL MANWAY I.D. IS: 431.8 (17")
2. ALL COMPONENTS ARE PIECE MARKED BY SULZER.
3. TRAY MANWAYS ARE REMOVABLE FROM TOP OR BOTTOM.
4. VALVE TYPE: MVG WITH 8.5mm LIFT
PUSH VALVES WITH 6.35mm LIFT
No. PER TRAY: 889 - MVG VALVES
86 - PUSH VALVES
5. TRAY MATERIAL: 10 C.S. A1011-GR.B
6. CLAMP MATERIAL: C.S.
7. TRAY HARDWARE MATERIAL: C.S.
TRAY BOLTS: A193 GR B6
TRAY NUTS: A194 GR6
8. MANWAY HARDWARE MATERIAL: C.S.
MANWAY STUDS: C.S.
MANWAY NUTS: A194 GR6
9. TRAYS ARE NUMBERED: TOP TO BOTTOM
10. TRAY SPACINGS, WEIR HEIGHTS AND DOWNCOMER CLEARANCES SHOWN ARE FROM TOP OF TRAY DECKS. (TOLERANCE TO BE ± 3mm)
9. ALL DIMENSIONS ARE IN: METRIC



ELEVATION FOR TRAY
NO.S 8 AND 9

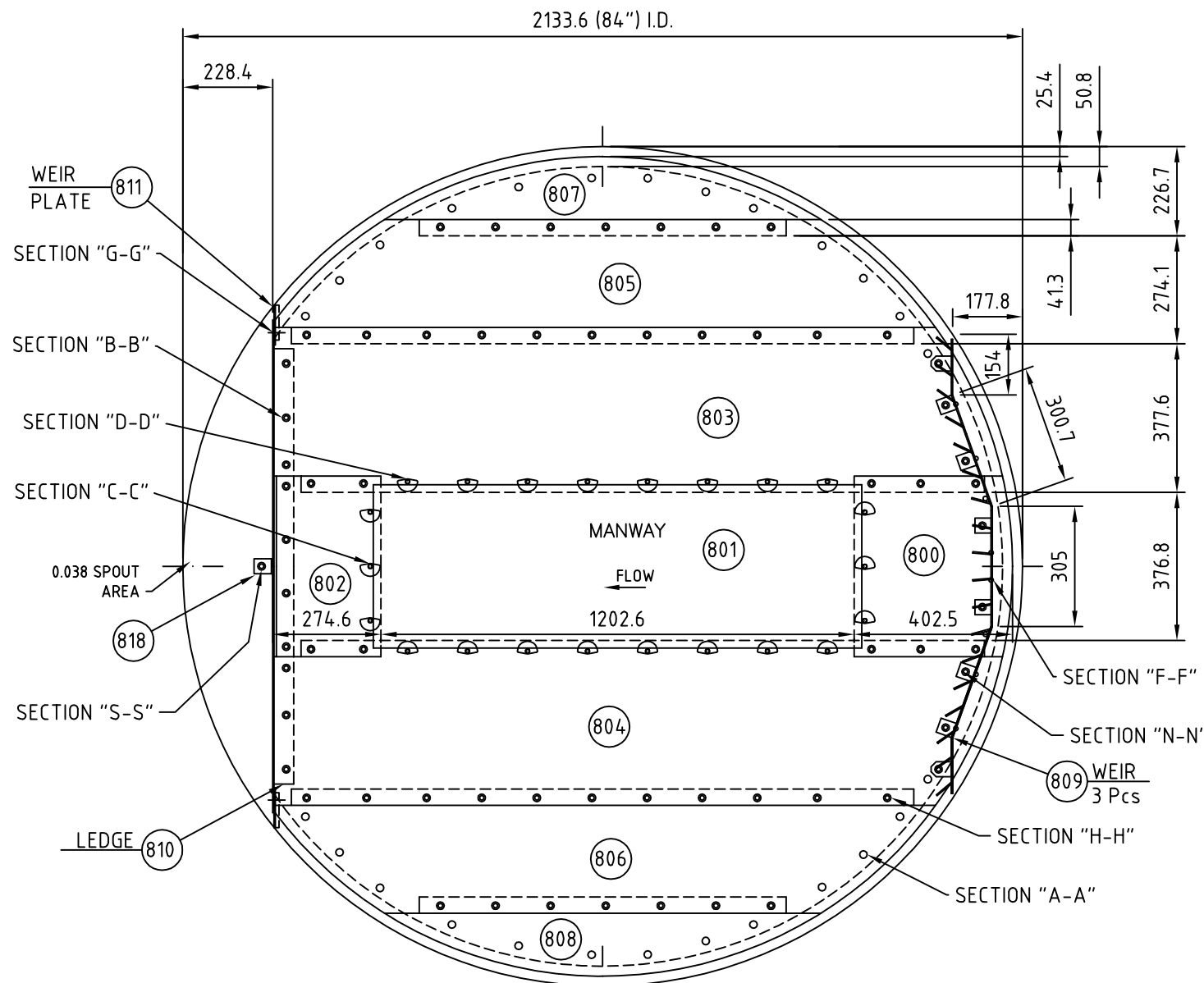
GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D.	
All components are marked by SULZER.	
The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files: none	

state: AS BUILT

1	AS BUILT			ATT	24/OCT/03	SLO	24/OCT/03
0	Original issue	RJ	7/17/03			DD	7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: J055469		SULZER project no.: C028484		size: 11x17	scale: NTS		
col ID: 2133.6 (84")		customer: ENAP/PARES & ALVARES		customer p.o.: 4550001388			
col item: PV-16.01		plant: -		customer-dwg.: -			
bed: ##		area: CRUDE TOPPING TOWER		ACAD 2000			

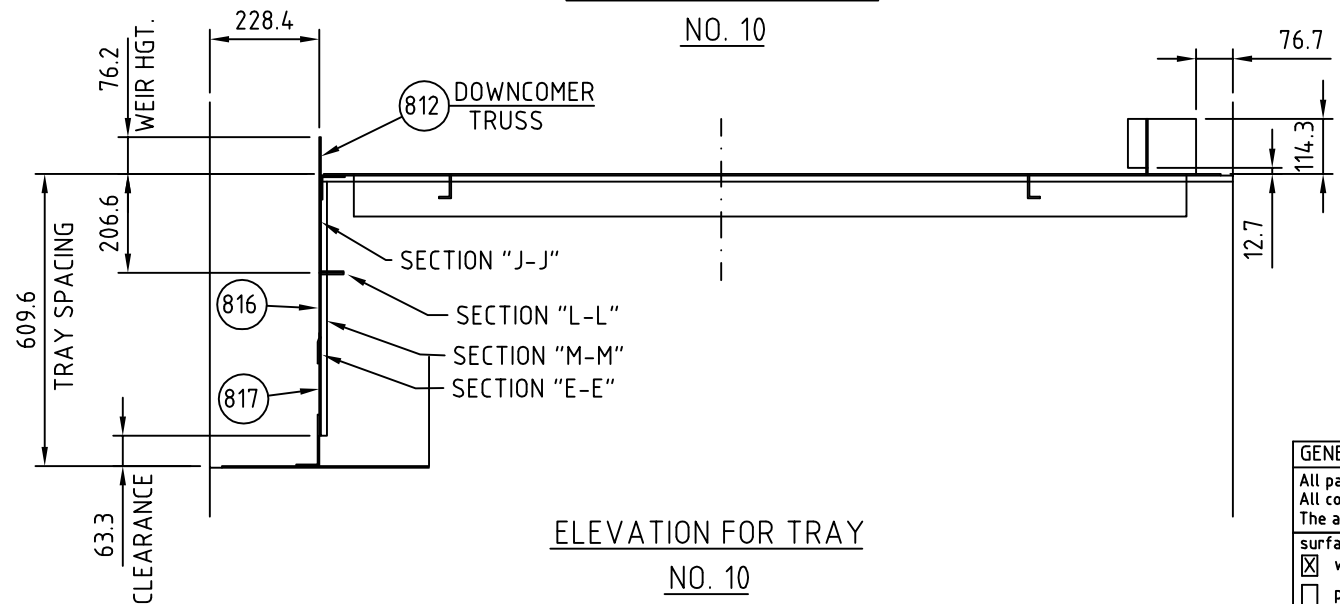
SULZER ASSEMBLY MVGT TRAY NO.S 8 AND 9
drawing no.: C028484-01 sheet no.: 5

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PLAN VIEW FOR TRAY
NO. 10

AS BUILT



ELEVATION FOR TRAY
NO. 10

GENERAL NOTES:

1. VESSEL MANWAY I.D. IS: 431.8 (17")
2. ALL COMPONENTS ARE PIECE MARKED BY SULZER.
3. TRAY MANWAYS ARE REMOVABLE FROM TOP OR BOTTOM.
4. VALVE TYPE: MVG WITH 8.5mm LIFT
PUSH VALVES WITH 6.35mm LIFT
No. PER TRAY: 889 - MVG VALVES
86 - PUSH VALVES
5. TRAY MATERIAL: 10 C.S. A1011-GR.B
6. CLAMP MATERIAL: C.S.
7. TRAY HARDWARE MATERIAL: C.S.
TRAY BOLTS: A193 GR B6
TRAY NUTS: A194 GR6
8. MANWAY HARDWARE MATERIAL: C.S.
MANWAY STUDS: C.S.
MANWAY NUTS: A194 GR6
9. TRAYS ARE NUMBERED: TOP TO BOTTOM
10. TRAY SPACINGS, WEIR HEIGHTS AND DOWNCOMER CLEARANCES SHOWN ARE FROM TOP OF TRAY DECKS. (TOLERANCE TO BE ± 3mm)
9. ALL DIMENSIONS ARE IN: METRIC

GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D.	
All components are marked by SULZER.	
The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files: none	

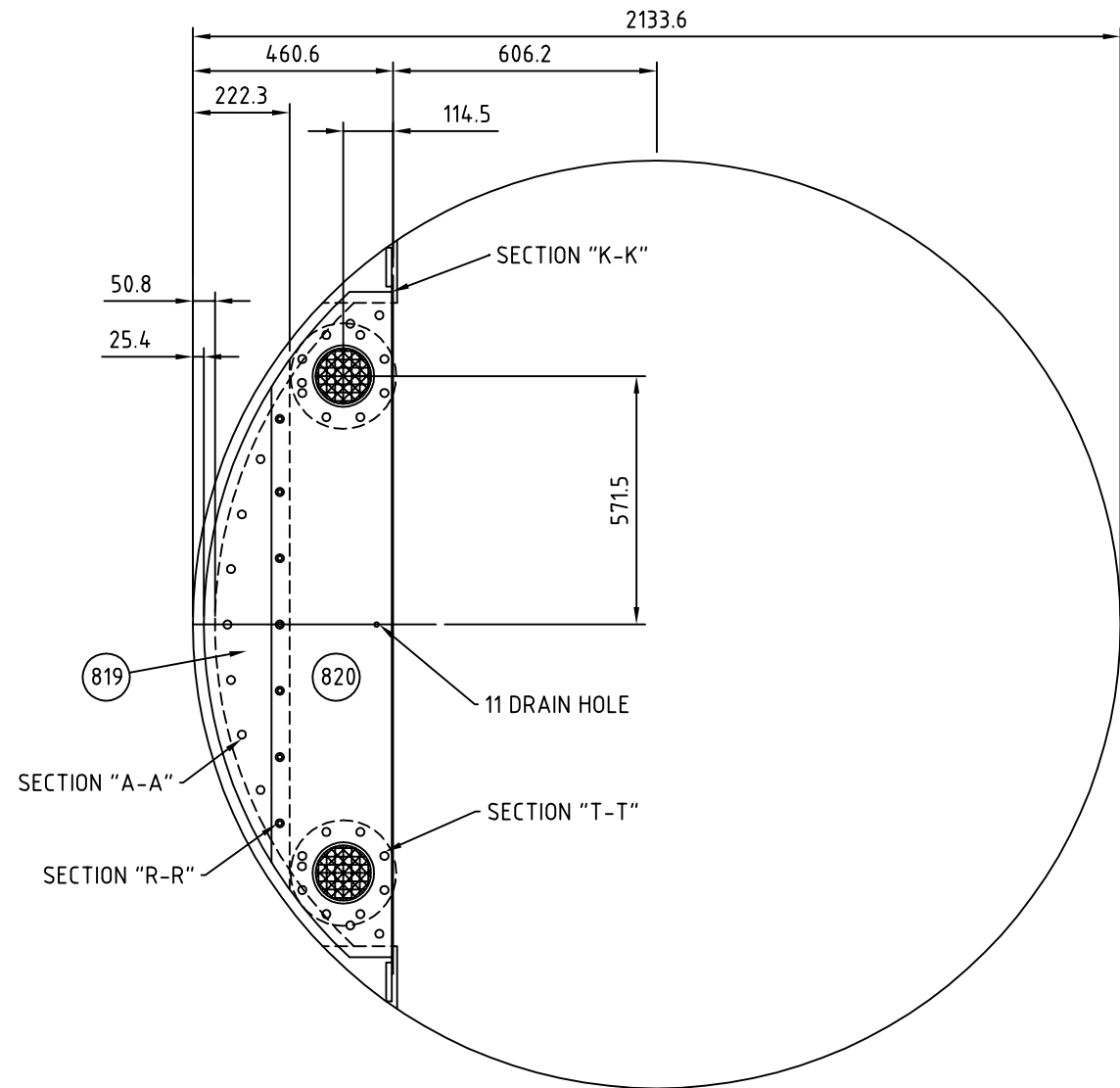
state: AS BUILT

1	AS BUILT	ATT	7/17/03		24/OCT/03	SLO	24/10/03
0	Original issue	RJ	7/17/03			DD	7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: J055469		SULZER project no.: C028484			size: 11x17	scale: NTS	
col ID: 2133.6 (84")		customer: ENAP/PARES & ALVARES		customer p.o.: 4550001388			
col item: PV-16.01		plant: -		customer-dwg.: -			
bed: ##		area: CRUDE TOPPING TOWER		ACAD 2000			

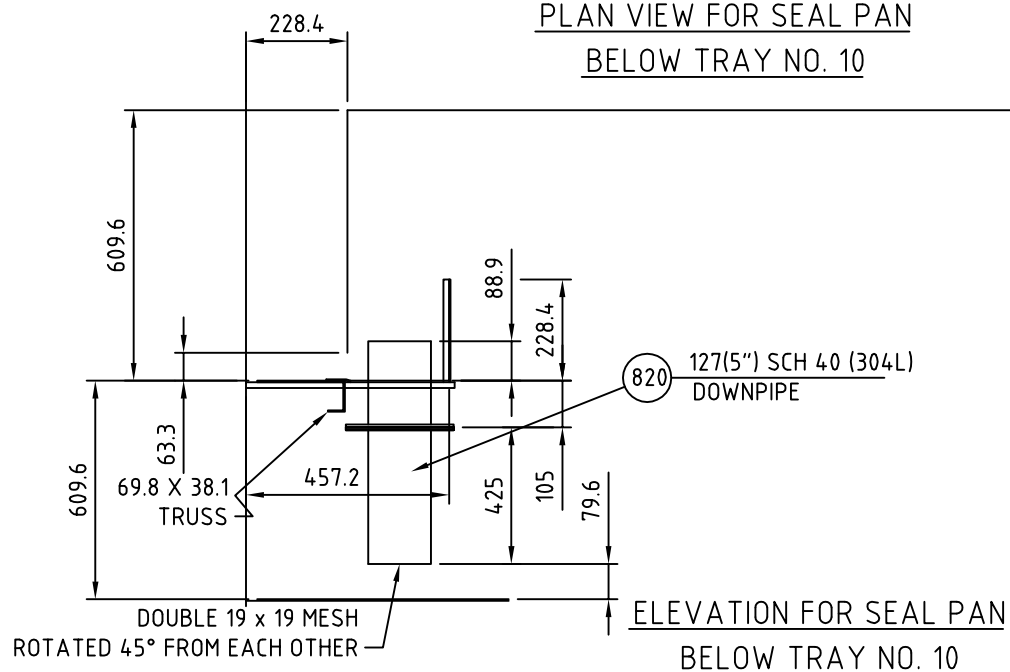
SULZER ASSEMBLY MVGT TRAY NO. 10

drawing no.: C028484-01 sheet no.: 6

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PLAN VIEW FOR SEAL PAN
BELOW TRAY NO. 10



ELEVATION FOR SEAL PAN
BELOW TRAY NO. 10

AS BUILT

SEE SHEET NO. 6 FOR GENERAL NOTES

GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	-

state:
AS BUILT

2	AS BUILT			ATT	24/OCT/03	SLO	24/OCT/03
1	CERTIFIED ISSUE	ATT	08/22/03			DD	-
0	Original issue	RJ	7/17/03			DD	7/25/03
rev.	revison remarks	issued by	date	checked	date	approved	date
job no.: J055469		SULZER project no.: C028484		size: 11x17	scale: NTS		
col ID: 2133.6 (84")		customer: ENAP/PARES & ALVARES		customer p.o.: 4550001388			
col item: PV-16.01		plant: -		customer-dwg.: -			
bed: ##		area: CRUDE TOPPING TOWER		ACAD 2000			

SULZER

ASSEMBLY
SEAL PAN FOR TRAY NO.10

drawing no.: sheet no.:
C028484-01 7

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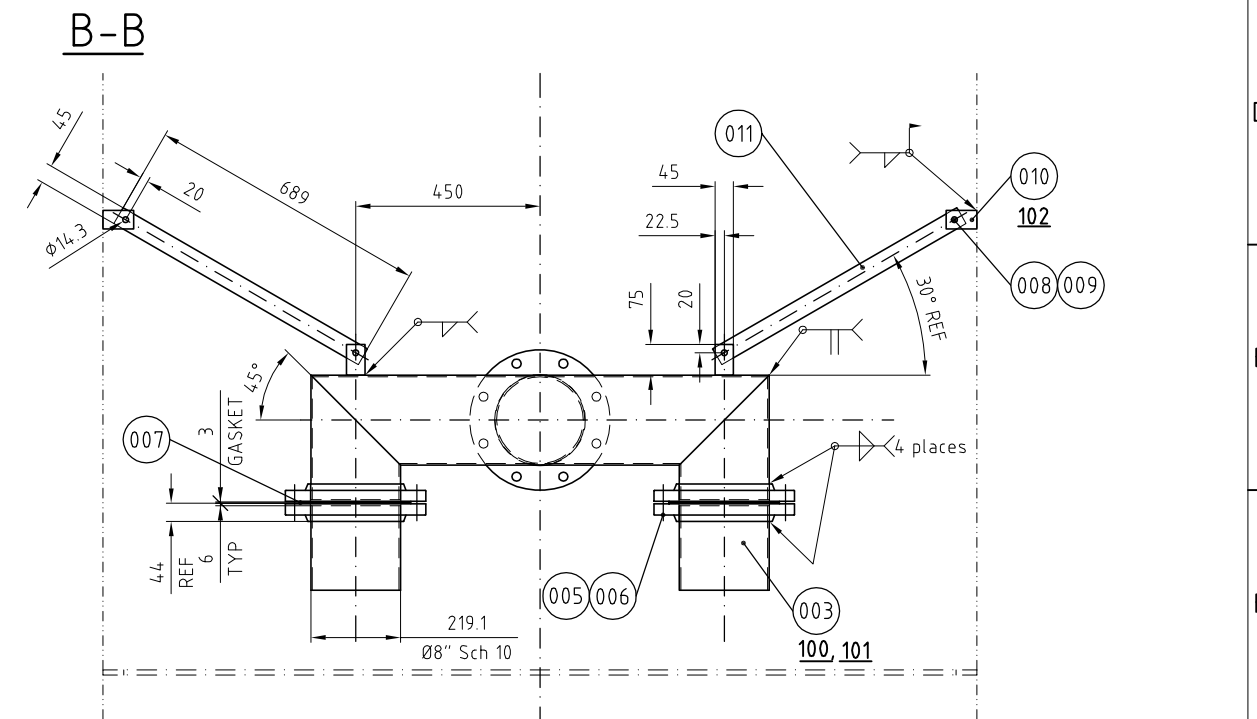
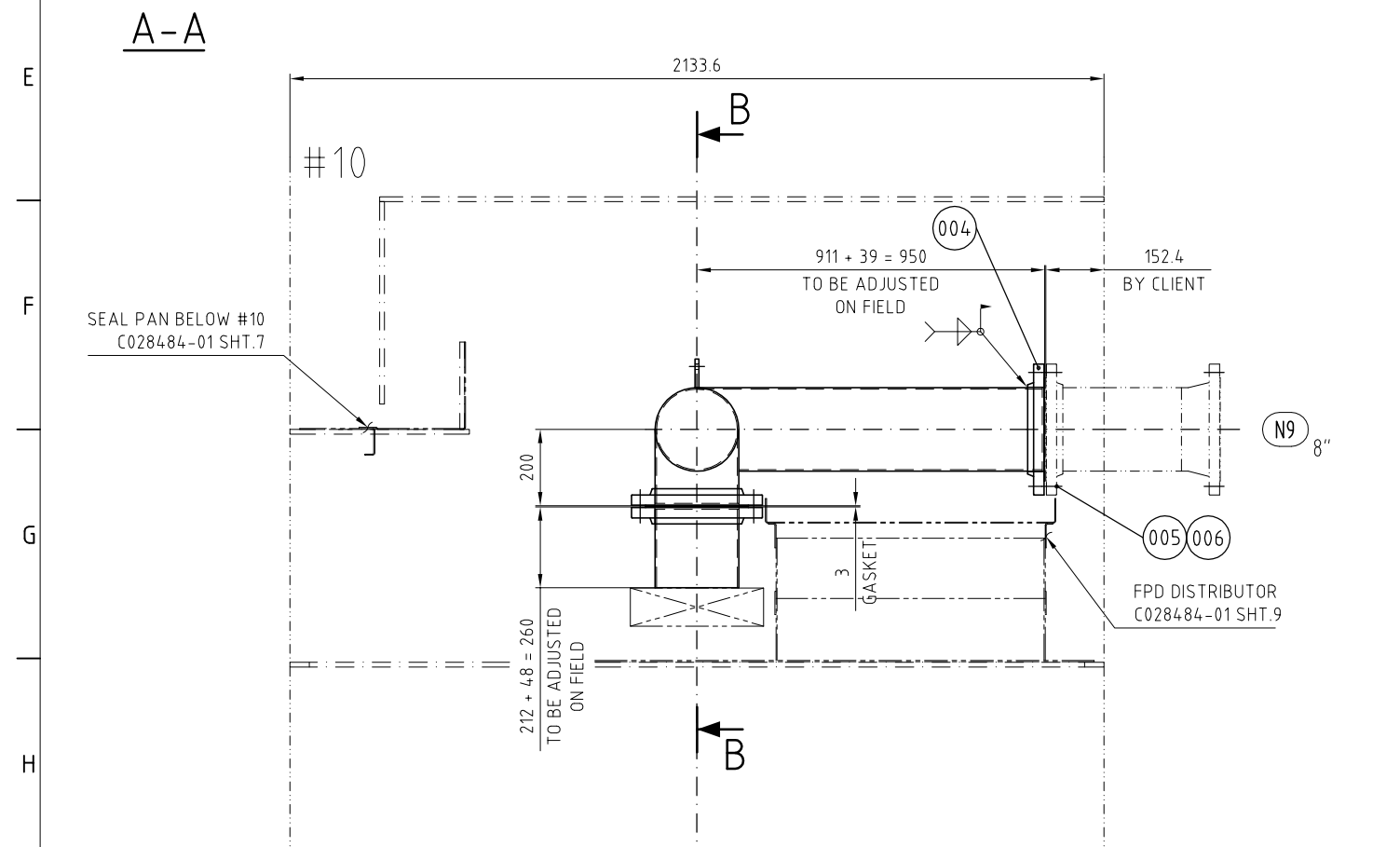
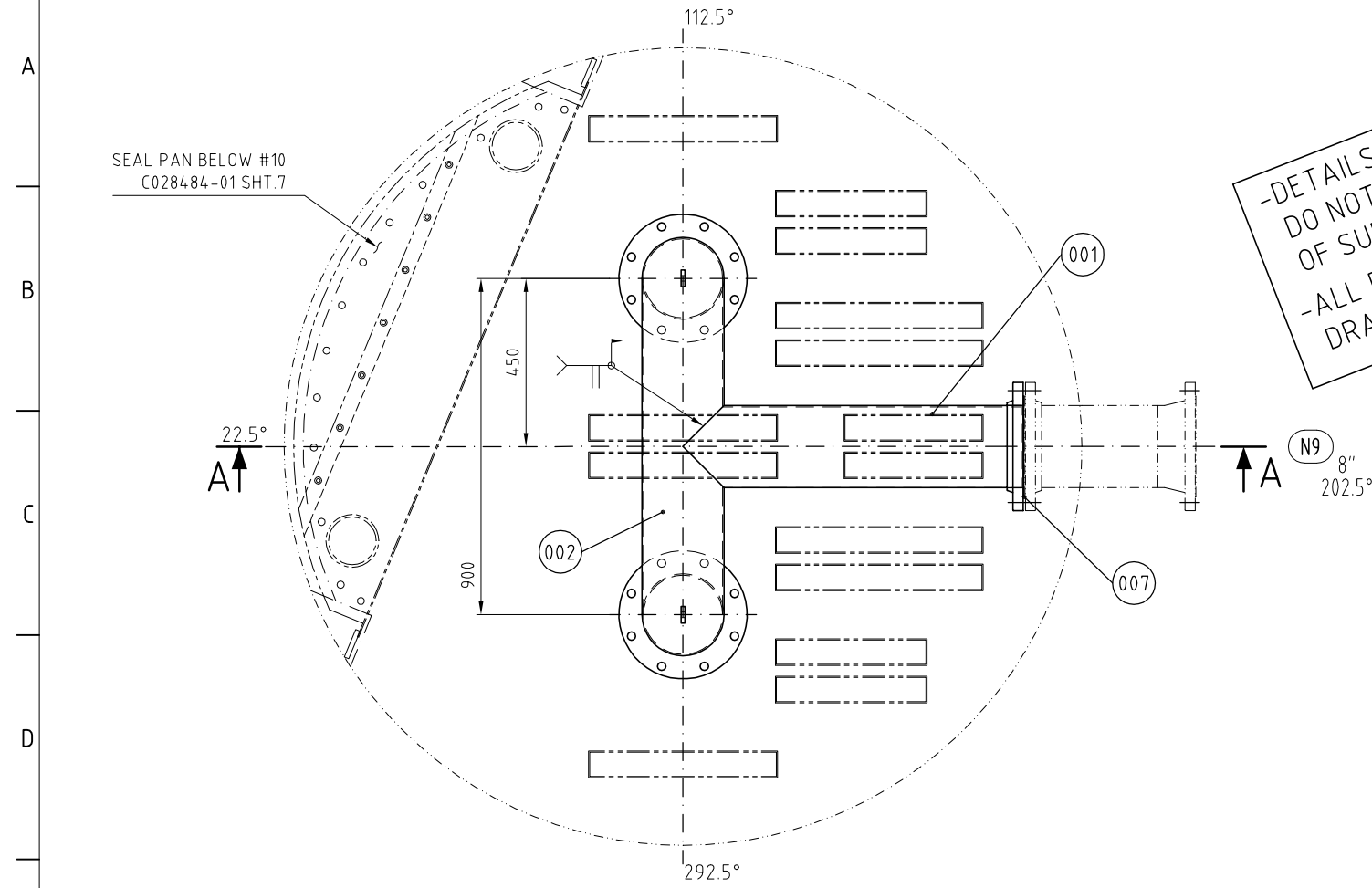
item	set	spare	unit	drawing- or part-no.	description	remarks	material	wght. (kg)
000	1	-	pcs.		N9 FEED PIPE		304	117.2
001	1	-	pcs.		INLET PIPE			
002	1	-	pcs.		FEED PIPE			
003	2	-	pcs.		DISCHARGE PIPE			
004	1	-	pcs.		LOOSE FLANGE Ø8"-150#; SORF		304	12.7
005	24	2	pcs.		HEX BOLT Ø3/4" x 3-1/2" Lg		304	7.4
006	24	2	pcs.		HEX NUT Ø3/4"		304	1.1
007	3	1	pcs.		GASKET Ø8"	[3mm Thk]	GARLOCK 3000	
008	4	1	pcs.		HEX BOLT Ø1/2" x 1-1/2" Lg		304	0.3
009	4	1	pcs.		HEX NUT Ø1/2"		304	0.1
010	2	-	pcs.		LOOSE LUG	75 x 45 x 10 Thk	304	
011	2	-	pcs.		STIFFENER	45 x 689 x 10 Thk	304	
100	3.2	-	m		PIPE Ø8" Sch 10		304/304L	65
101	2	-	pcs.		FLANGE Ø8"-150#; SORF		304	25.4
102	0.1	-	m2		PLATE 3/8" (10mm) Thk		304	5.2

001 - 099: parts / 100 - 199: materials

GENERAL NOTES:

1.- ITEM 001 AND 002 MUST BE WELDED INSIDE COLUMN.

-DETAILS ON THIS DRAWING
 DO NOT BELONG TO SCOPE
 OF SUPPLY FROM SULZER
 -ALL PARTS ON THIS
 DRAWING BY OTHERS



GENERAL NOTES
 All parts shall pass through man ways: 430 I.D.
 All components are marked by SULZER.
 The assembled part is checked after manufact.

1	Certified Issue.	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003
0	ORIGINAL ISSUE FOR APPROVAL	ATT	22-07-2003	ATT	22-07-2003	DD	24/07/2003
rev.	revision remarks	issued by	date	checked	date	approved	date
job no:	J0055483	SULZER project no:	C028484	size:	A-2	scale:	%
col. ID:	2134mm [84in]	customer:	ENAP/PARES & ALVAREZ	customer p.o.:	4550001388		
col item:	PV-16,01	plant:	-	customer dwg.:	-		
bed:	DIESEL BED	area:	CRUDE TOPPING TOWER	ACAD	2000		
SULZER		N9 FEED PIPE		drawing-no.:		C028484-01 08	
BY CLIENT							

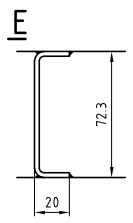
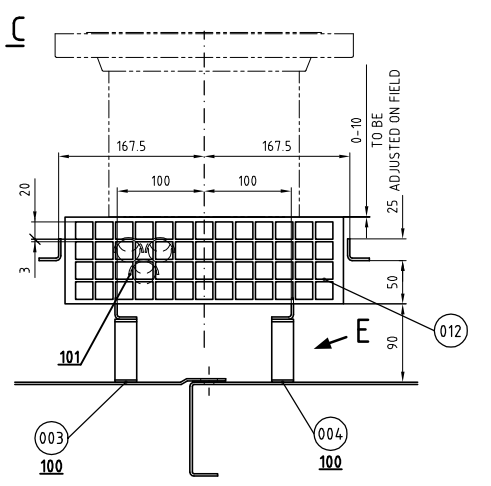
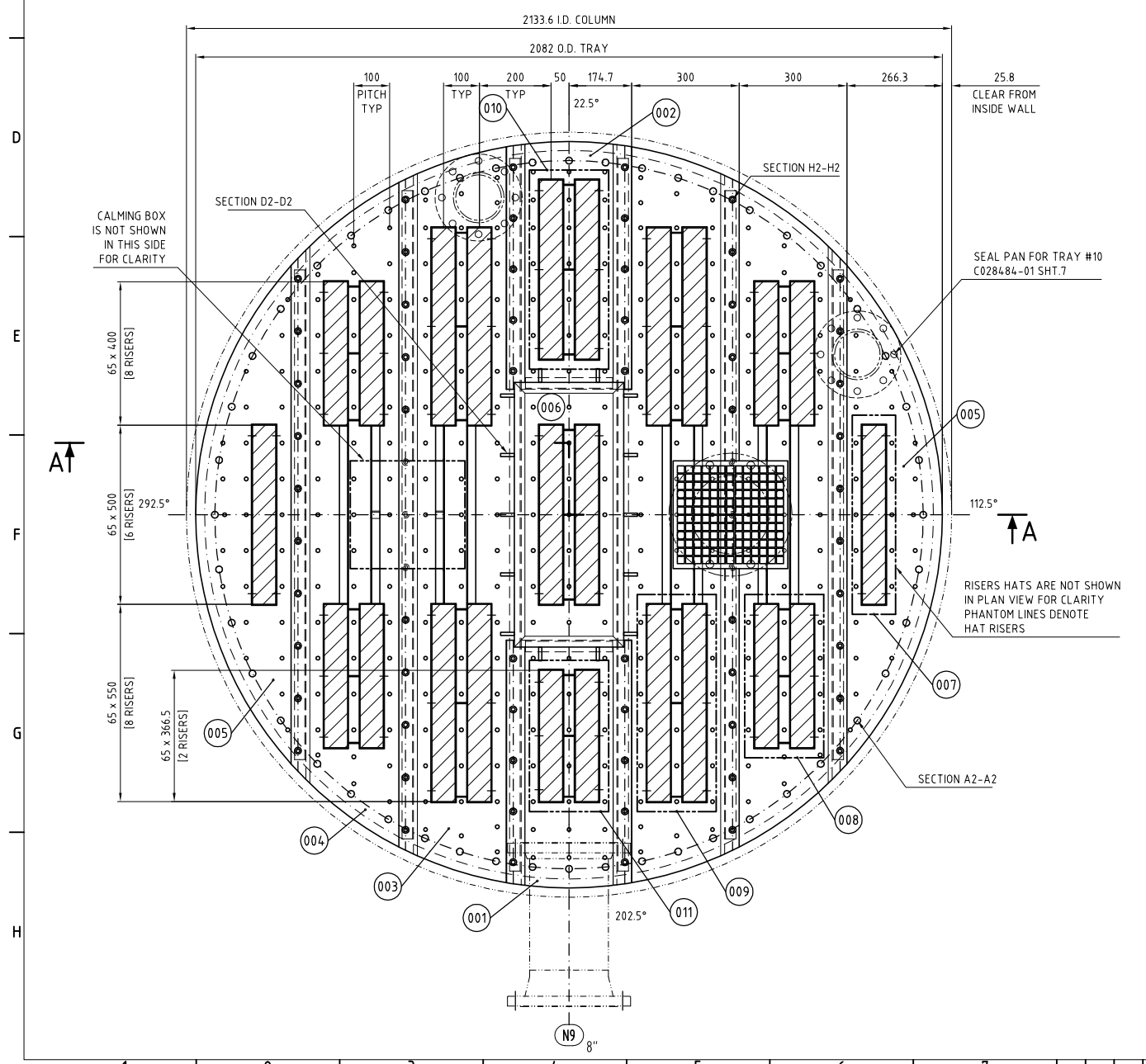
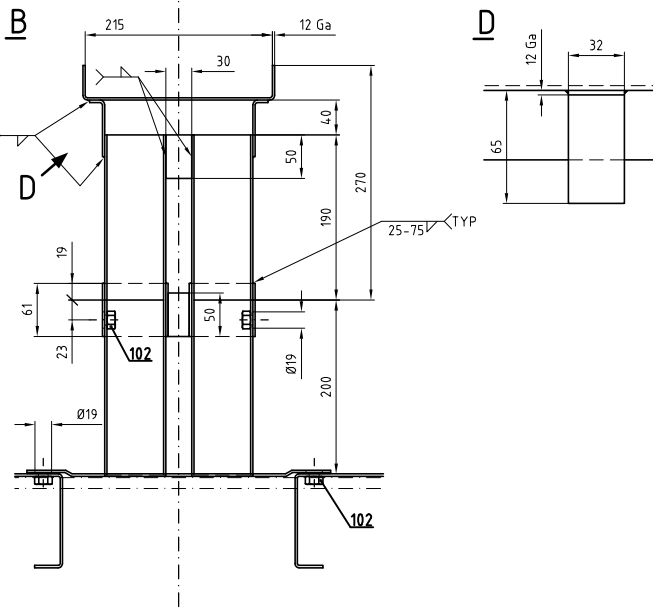
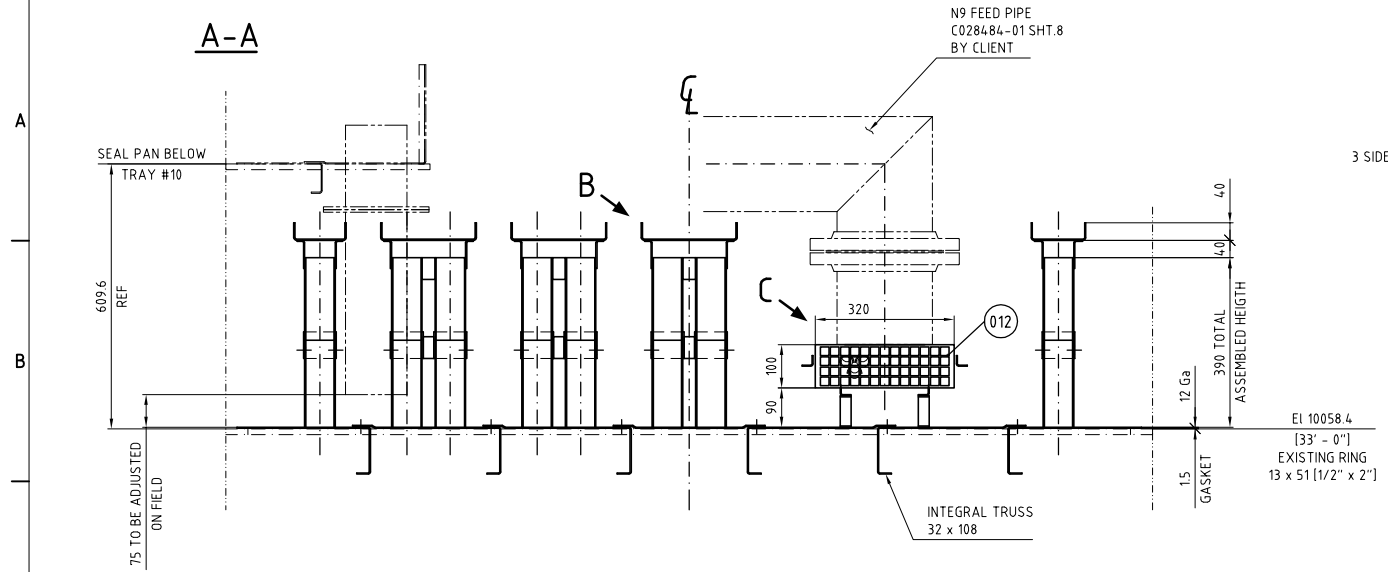
state:
CERTIFIED

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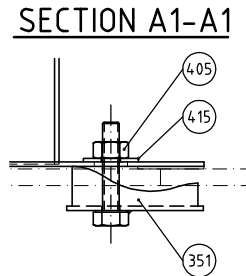
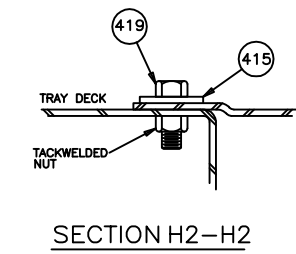
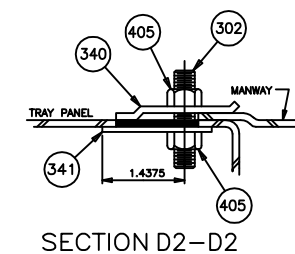
Item	set	spare	unit	drawing- or part-n.	Description	remarks	material	kg/ft. (kg)
000	1	-	pcs.		FPD DISTRIBUTOR		410S	301.3
-	1	-	set	001-005	SET OF FLOOR PANELS	8 pcs		
006	1	-	pcs.		CENTRAL FLOOR PANEL			
-	1	-	set	007-011	UPPER RISER	13 pcs		
012	2	-	pcs.		CALMING BOX	Wx: 350x400		
013	18.8	-	m		GASKET 1.5 Thk x 38		FIBER-GLASS	
301	14	1	pcs.		SQUARE STUD SPECIAL Ø3/8" x 2" Lg		A-193-Gr B6	0.4
340	14	1	pcs.		SLIDE FASTENER		410S	0.8
341	14	1	pcs.		WASHER-SLIDE FASTENER		410S	0.3
351	48	2	pcs.		UNIVERSAL ONE WAY CLAMP/W TWELED CAPSCR		410S/A-194-Gr 6	5.7
405	108	5	pcs.		HEX NUT Ø3/8"		A-194-Gr 6	0.6
415	192	8	pcs.		WASHER Ø3/8" x 1-1/4" O.D.		410S	4.0
419	144	7	pcs.		HEX BOLT Ø3/8" x 1-1/4" Lg		A-193-Gr B6	4.7
100	13.5	-	m2		SHEET 12 Ga (2.6mm) Thk		410S	279.2
101	0.03	-	m3		NUTTER RING #1		410S	5.0
102	144	-	pcs.		HEAVY HEX NUT Ø3/8"	tackwelded	A-194-Gr 6	0.9

001 - 099: parts / 100 - 199: materials

Distributor Data				
I.D. column		2134 [mm]		
I.D. manhole		430 [mm]		
number of holes		344 [-]		
distribution density		80 [1/m2]		
DN inlettube		8" Sch 10 [mm]		
number of inlettubes		2 [-]		
orifice size arm trough:		11 [mm]		
orifice size maintrough:		- [mm]		
armtroughs:				
Flow	ln3/hl	spec. Flow	ln3/m2hl	levels above orifice [mm]
min.	90.34		25.23	86
max.	180.69		50.54	288
100%	150.57			
maintrough:				
min.				levels above orifice [mm]
max.				-



AS BUILT



HEX BOLT Ø3/8" x 2" Lg TACKWELDED (FOR OTHERS SECTIONS SEE STANDARD SECTIONS SHEET)

GENERAL NOTES
All parts shall pass through man ways: 430 I.D.
All components are marked by SULZER.
The assembled part is checked after manufacture.

SULZER
BY CLIENT

rev.	revision remarks	issued by	date	checked	date	approved	date
2	AS BUILT				24/OCT/19	SLO	24/OCT/19
1	CERTIFIED ISSUE				21-08-2019	DD	
0	ORIGINAL ISSUE	ATT	22-07-2019	ATT	22-07-2019	DD	24-07-2019

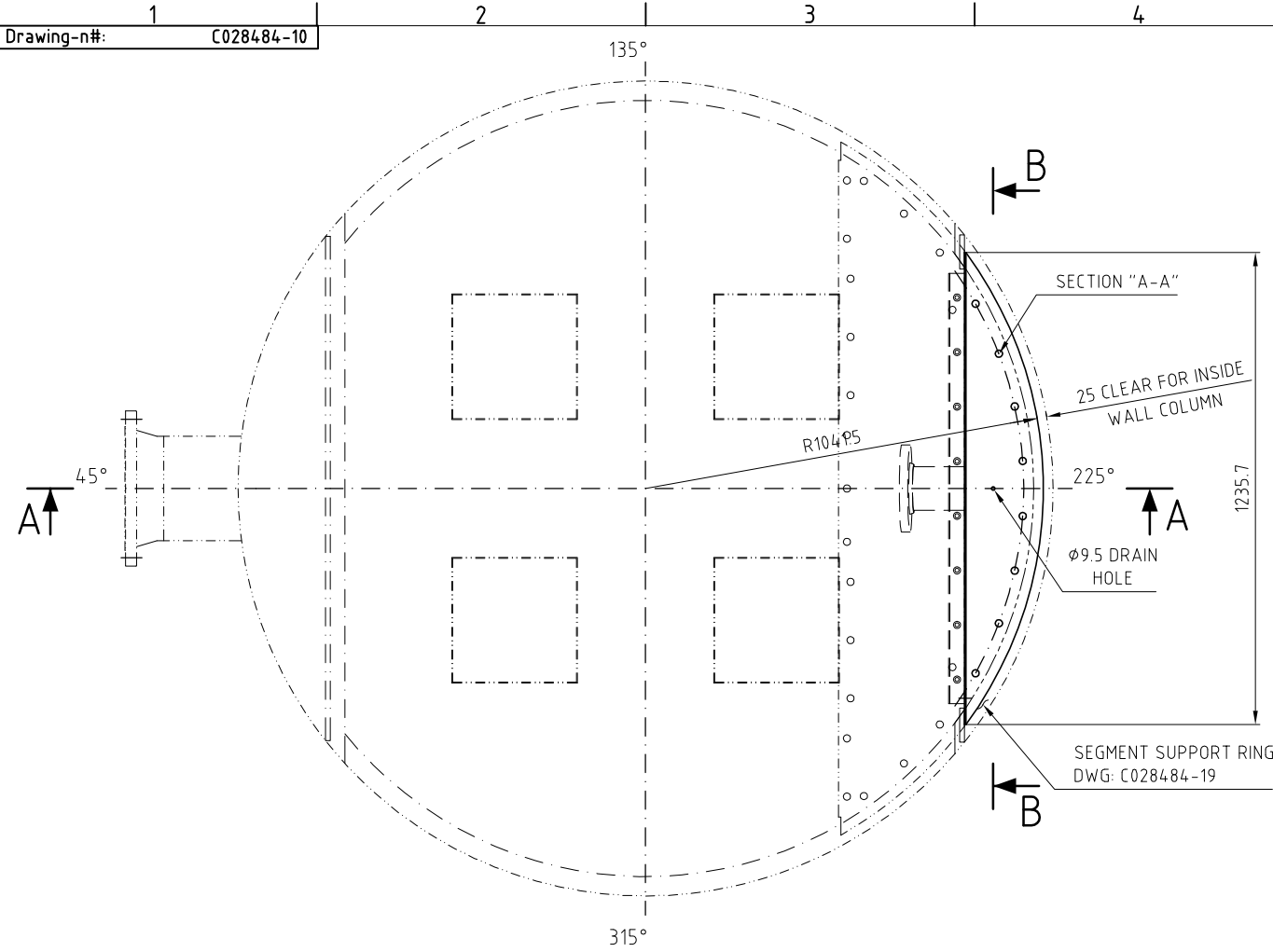
job no.: J055474
SULZER project no.: C028484
col id: 2133.6mm [84in]
customer: ENAP/PARES & ALVAREZ
customer p.o.: 4550001388
col item: PV-16.01
plant:
area: CRUDE TOPPING TOWER
ACAD 2000
bed: DIESEL BED
customer-dwg:
SULZER
FPD DISTRIBUTOR
23% OPEN AREA
drawing-no.: C028484-01 09

AS BUILT

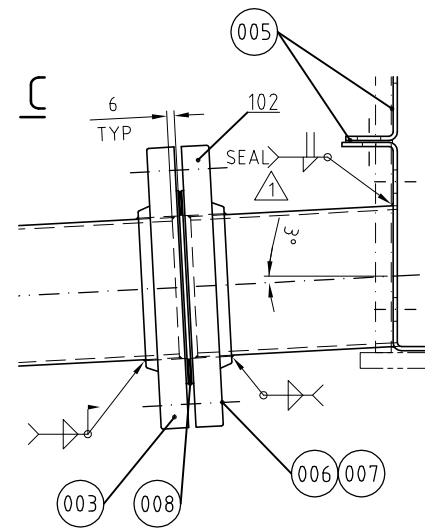
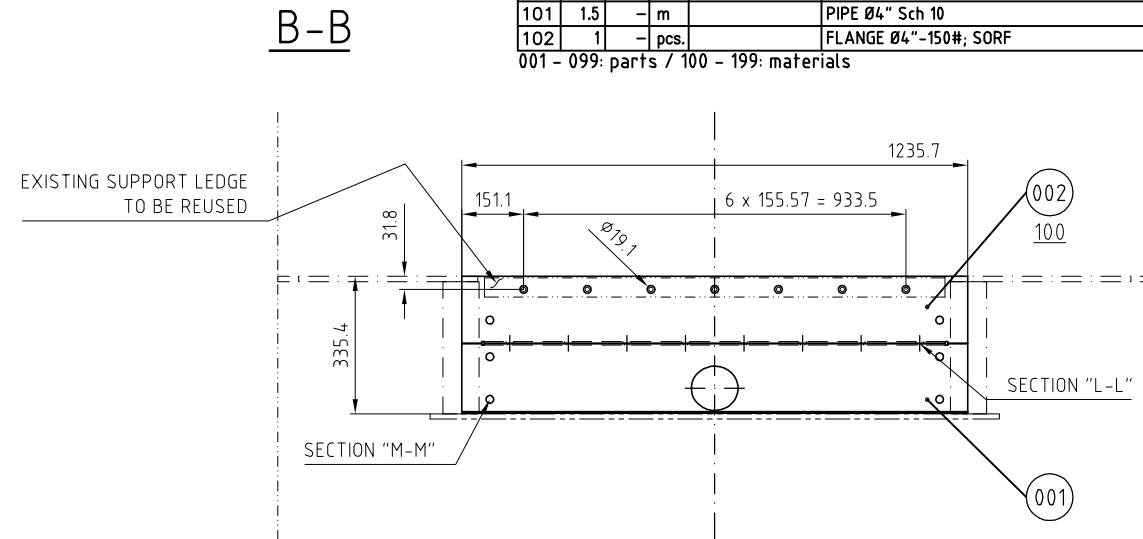
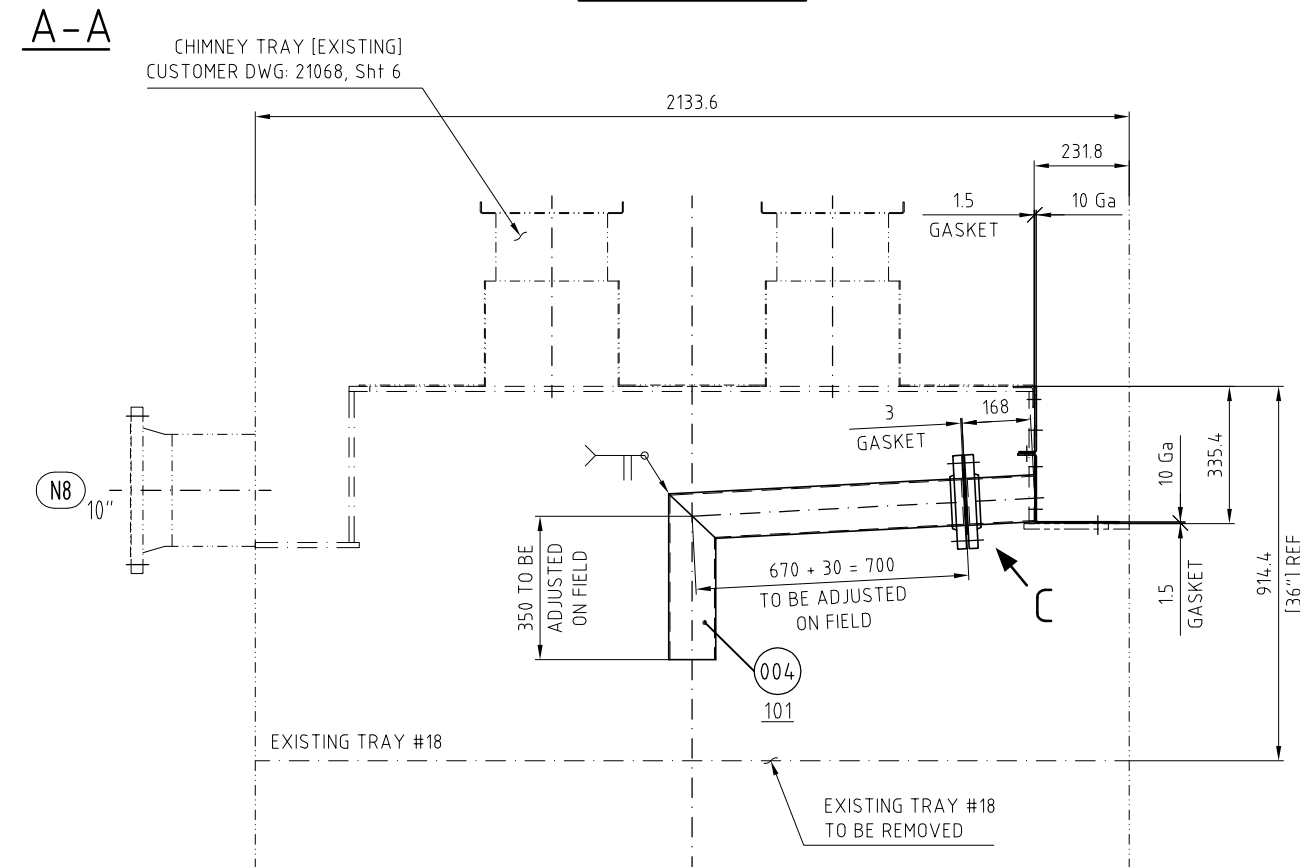
Drawing-n#: C028484-10

item	set	spare	unit	drawing- or part-no.	description	remarks	material	wght. (kg)
000	1	-	pcs.		SEAL PAN MODIFICATIONS		410S/304L	47.7
001	1	-	pcs.		SEAL PAN WALL W/PIPE			
002	1	-	pcs.		SEAL PAN WALL			
003	1	-	pcs.		LOOSE FLANGE Ø4"-150#; SORF		A-182-F304	5.4
004	1	-	pcs.		DISCHARGE PIPE			
005	4	-	m		GASKET 1.5 Thk x 38 Width	spare included	FIBERGLASS	
006	8	1	pcs		HEX BOLT Ø5/8" x 3" Lg		A-193-Gr B6	1.6
007	8	1	pcs		HEX NUT Ø5/8"		A-194-Gr 6	0.2
008	1	-	pcs		GASKET FOR FLANGE Ø4"		GARLOCK 3000	
334	14	1	pcs		UNIVERSAL ONE WAY CLAMP		410S	1.1
404	15	1	pcs		HEX BOLT Ø3/8" x 2" Lg		A-193-Gr B6	0.7
405	29	1	pcs		HEX NUT Ø3/8"		A-194-Gr 6	0.2
415	29	1	pcs		WASHER Ø3/8" x 1-1/4" O.D.		410S	0.01
419	15	1	pcs		HEX BOLT Ø3/8" x 1-1/4" Lg		A-193-Gr B6	0.5
100	0.8	-	m2		SHEET 10 Ga (3.4mm) thk		410S	19.8
101	1.5	-	m		PIPE Ø4" Sch 10		304/304L	12.8
102	1	-	pcs.		FLANGE Ø4"-150#; SORF		A-182-F304	5.4

001 - 099: parts / 100 - 199: materials



PLAN VIEW



AS BUILT

GENERAL NOTES
 All parts shall pass through man ways: 430 I.D.
 All components are marked by SULZER.
 The assembled part is checked after manufact.

 SULZER
 BY CLIENT

rev.	revision remarks	issued by	date	checked	date	approved	date
2	AS BUILT	-	-	ATT	24/OCT/03	SLO	24/OCT/03
1	CERTIFIED ISSUE	-	-	ATT	21-08-2003	SLO	-
0	ORIGINAL ISSUE	ATT	21-07-2003	ATT	23-07-2003	DD	24/07/2003

job no.: J0055475 SULZER project no: C028484 size: A-2 scale: %
 col. ID: 2134mm [84in] customer: ENAP/PARES & ALVAREZ customer-ref.: 4550001388
 col item: PV-16,01 plant: - customer-dwg.: -
 bed: ABOVE WASH BED area: CRUDE TOPPING TOWER ACAD 2000

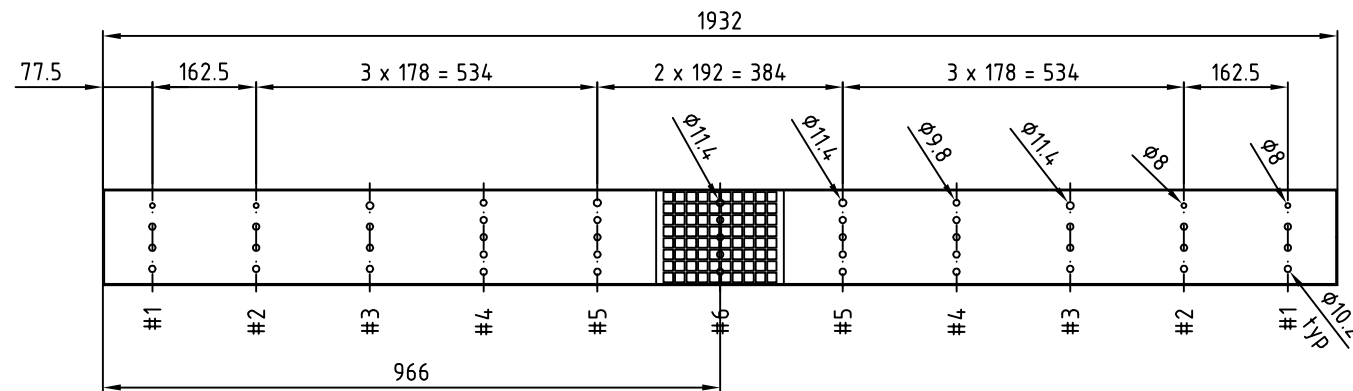
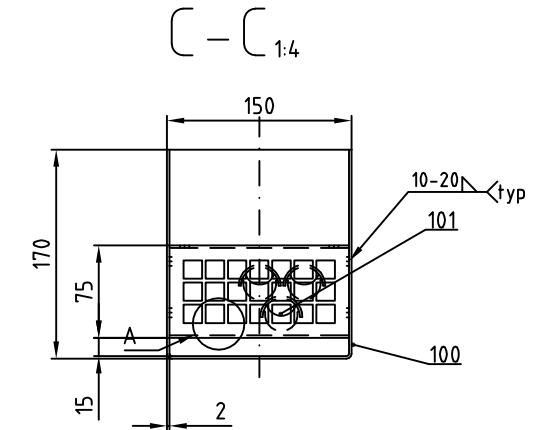
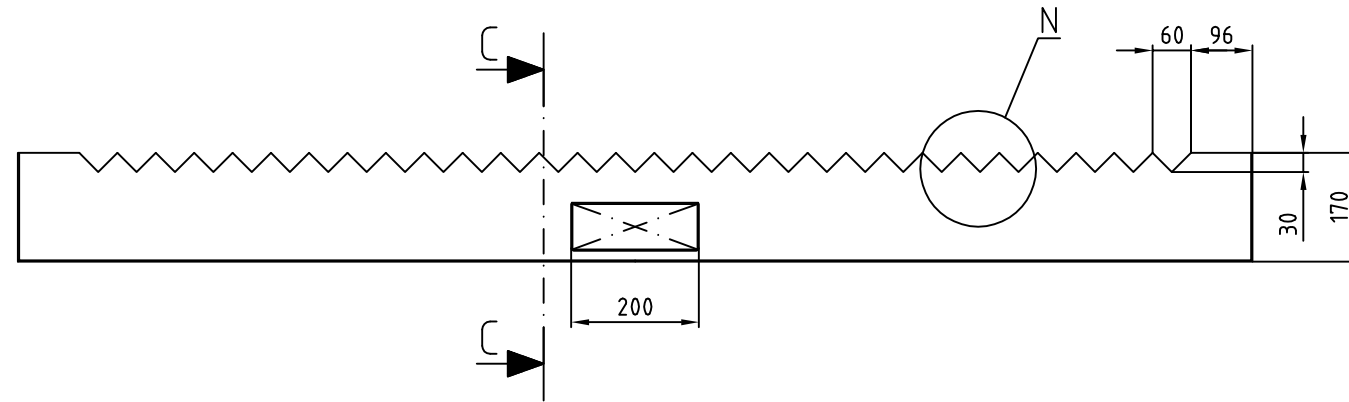
SULZER SEAL PAN MODIFICATIONS ABOVE WASH BED drawing-no.: C028484-01 10

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Drawing-n#: C028484-12

item	set	spare	unit	drawing- or part-no.	description	remarks	material	wght. (kg)
000	1	-	pcs.		IV PREDISTRIBUTOR		410S	12.8
100	0.8	-	m2		SHEET 14 Ga (2mm) thk		410S	12.4
102	0.01	-	m3		NUTTER RING 1"		410S	0.4

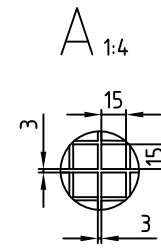
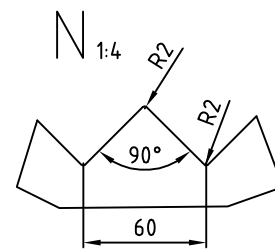
001 - 099: parts / 100 - 199: materials



AS BUILT

Pre Distributor Data			
DN inlet tube	4" Sch 10 [mm]		
Number of Inlet Pipes:	1 [-]		
Belongs to Distributor:	C028484-11		
	Flow [m3/h]	level above orifice [mm]	
min.	16.98	130	
max.	33.96	overflow over notches	

GENERAL NOTES
 All parts shall pass through man ways: 430 I.D.
 All components are marked by SULZER.
 The assembled part is checked after manufact.



2	AS BUILT	-	-	ATT	24/OCT/03	SLO	24/OCT/03
1	CERTIFIED ISSUE (GENERAL REVIEW)	-	-	ATT	20/08/2003	DD	20/08/2003
0	ORIGINAL ISSUE	ATT	14-07-2003	ATT	14-07-2003	DD	24/07/2003
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: J0055476		SULZER projec no: C028484		size: A-2	scale: %		
col. ID: 2134mm [84in]		customer: ENAP/PAREZ & ALVAREZ		customer p.o.: 4550001388			
col item.: PV-16,01		plant: -		customer dwg.:			
bed.: WASH BED		area: CRUDE TOPPING TOWER		ACAD 2000			
SULZER						IV PREDISTRIBUTOR	
L: 4.7 - 9.5 [m3/m2h]						drawing-no.: C028484-01 12	

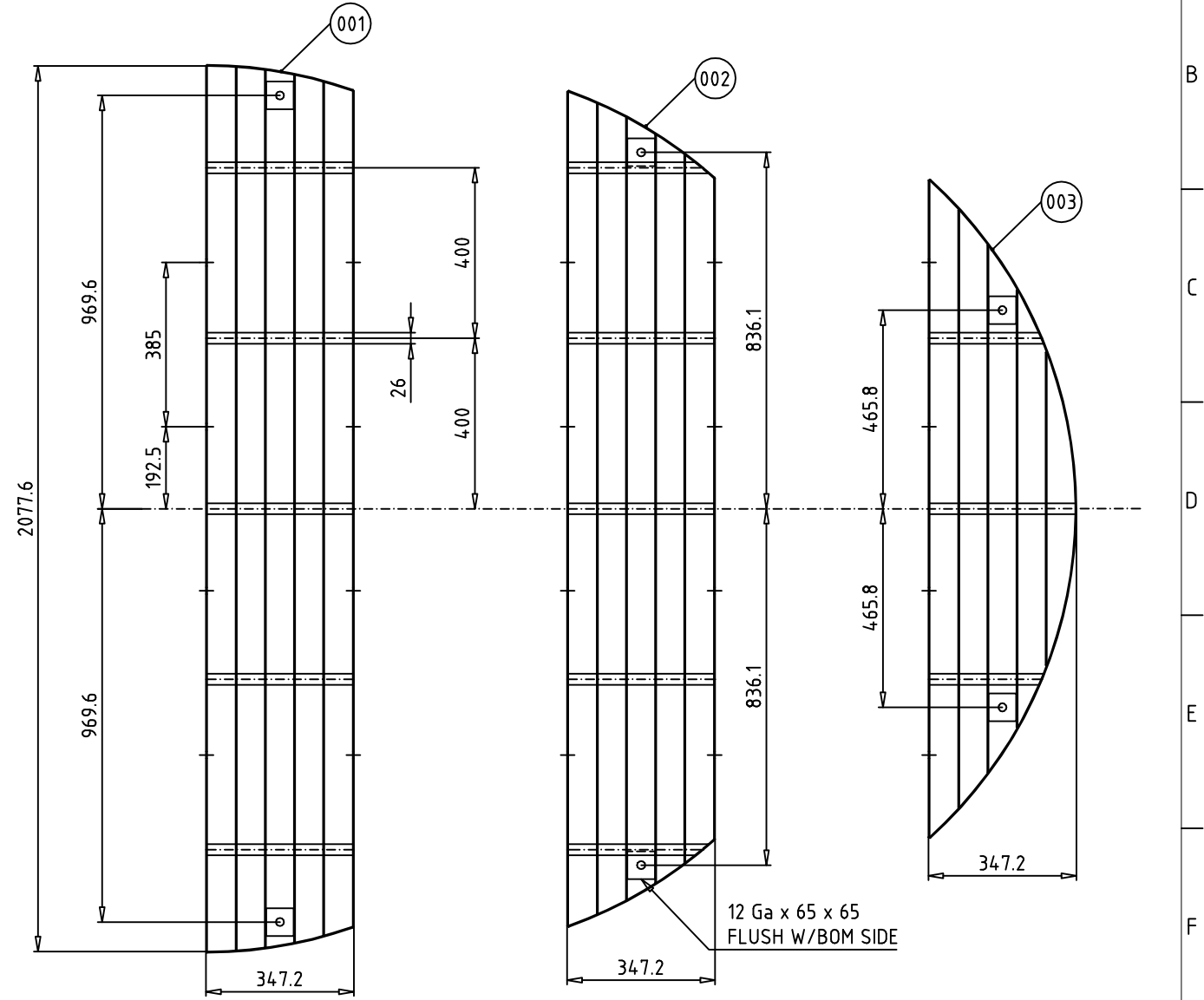
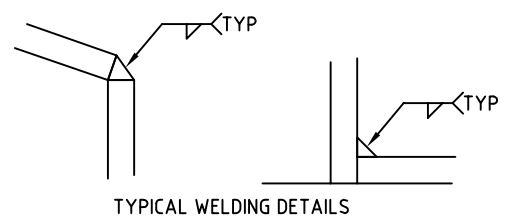
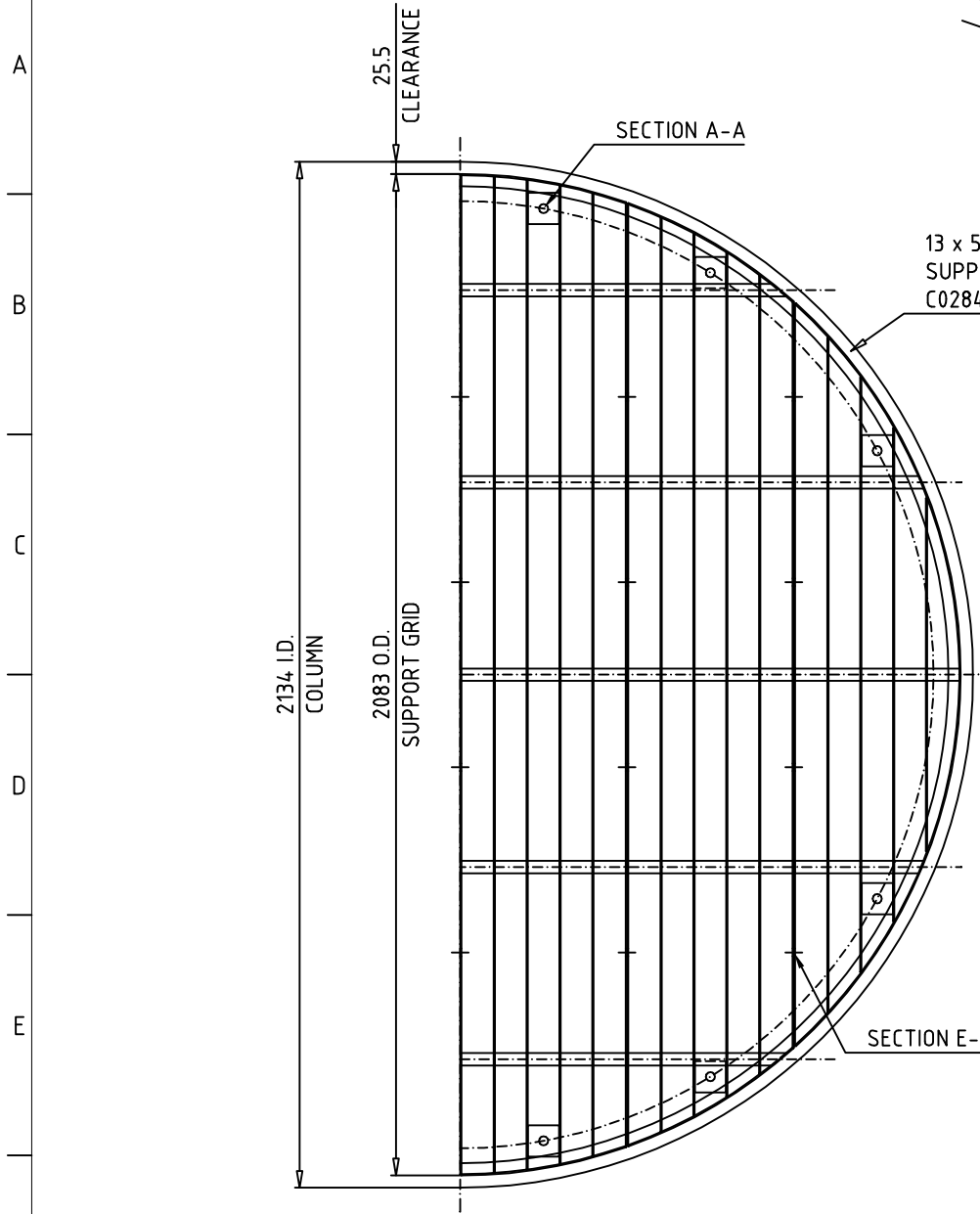
state: AS BUILT

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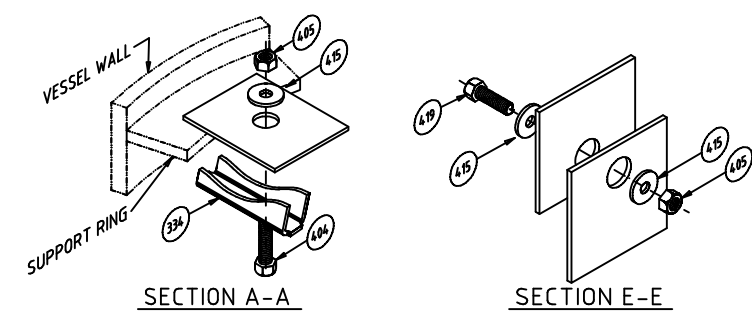
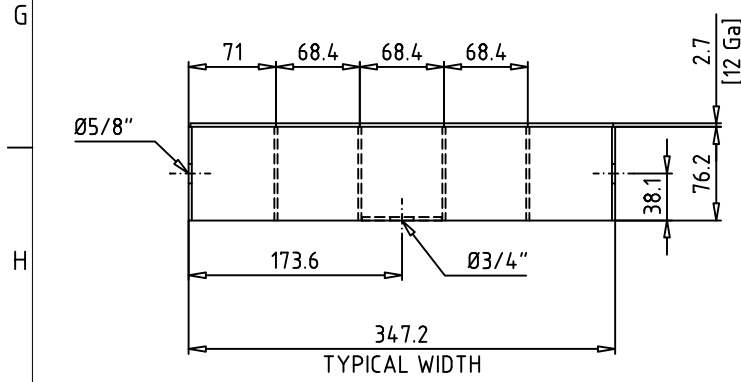
Drawing-n#: C02848-13

item	set	spare	unit	drawing- or part-no.	description	remarks	material	wght. (kg)
000	1	-	set		SPS SUPPORT GRID		410S	111
-	6	-	pcs.	001-003	SEGMENTS			
334	12	2	pcs.		ONE WAY UNIVERSAL CLAMP		410S	1.0
404	12	1	pcs.		HEX BOLT Ø3/8" x 2" Lg		A-193-Gr B6	0.5
405	32	2	pcs.		HEX NUT Ø3/8"		A-194-Gr 6	0.2
415	52	3	pcs.		WASHER 7/16"ID x 1-1/4" OD		410S	1.1
419	20	1	pcs.		HEX BOLT Ø3/8" x 1-1/4" Lg		A-193-Gr B6	0.7
101	5.2	-	m2		SHEET 12 Ga (2.7mm) Thk		410S	107.2

001 - 099: parts / 100 - 199: materials



AS BUILT

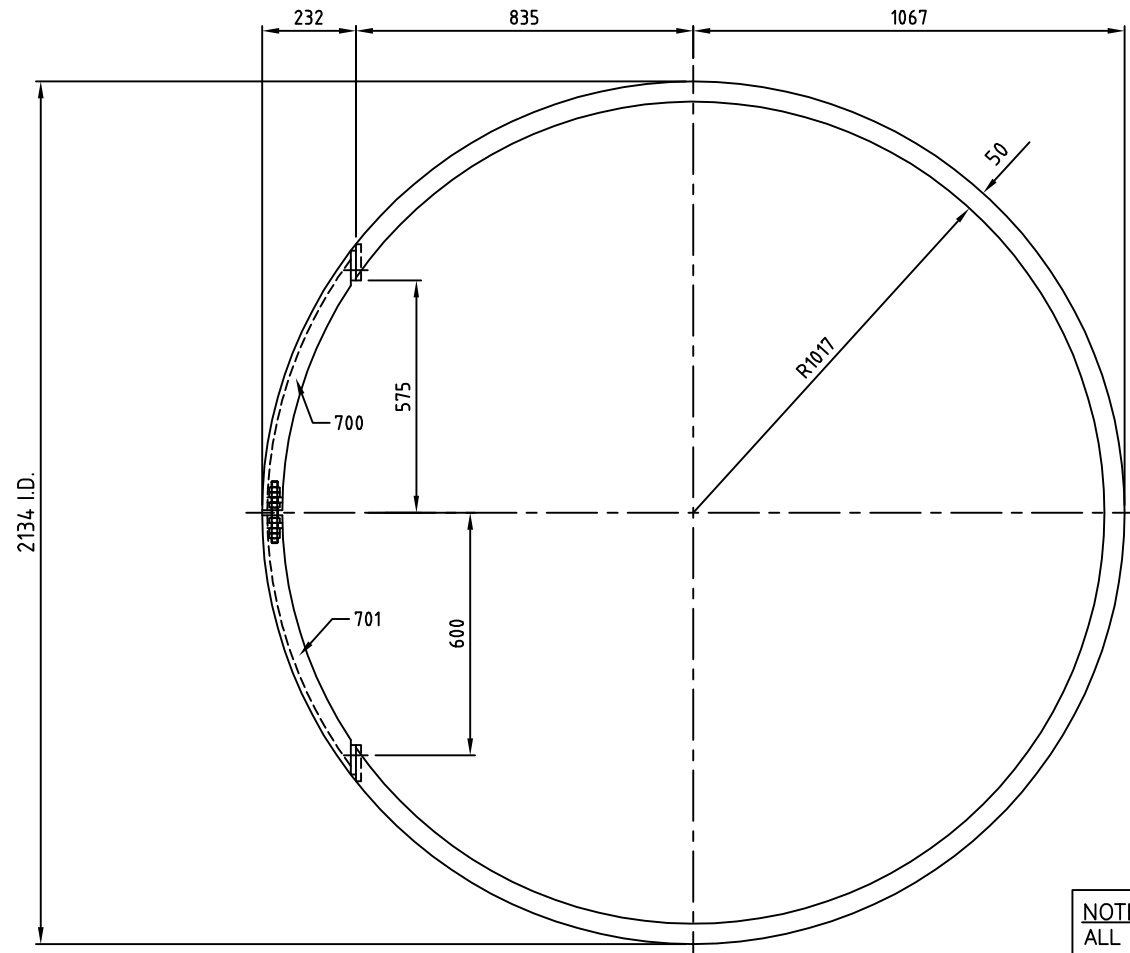


GENERAL NOTES
 All parts shall pass through man ways: 430 I.D.
 All components are marked by SULZER.
 The assembled part is checked after manufact.

2	AS BUILT			ATT	24/OCT/03	SLO	24/OCT/03
1	CERTIFIED ISSUED			ATT	21-08-2003	DD	21-08-2003
0	ORIGINAL ISSUE			ATT	14-07-2003	DD	24/07/2003
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: J055478		SULZER project no: C028484		size: A-2		scale: %	
col.-ID: 2134mm [84in]		customer: ENAP/PARES & ALVAREZ		customer p.o.: 45510001388			
col item: PV-16,01		plant: -		customer dwg.: -			
bed.: WASH BED		area: CRUDE TOPPING TOWER		ACAD 2000			
SULZER			SPS SUPPORT GRID			drawing-no.: C028484-01 13	
Load: 3.8 [kN/m2]							

state: AS BUILT

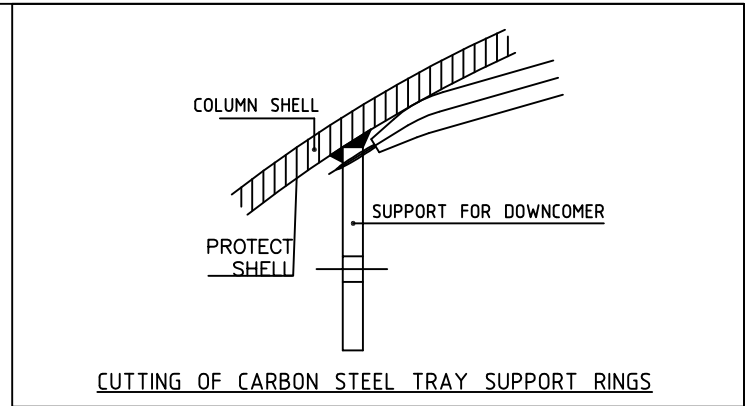
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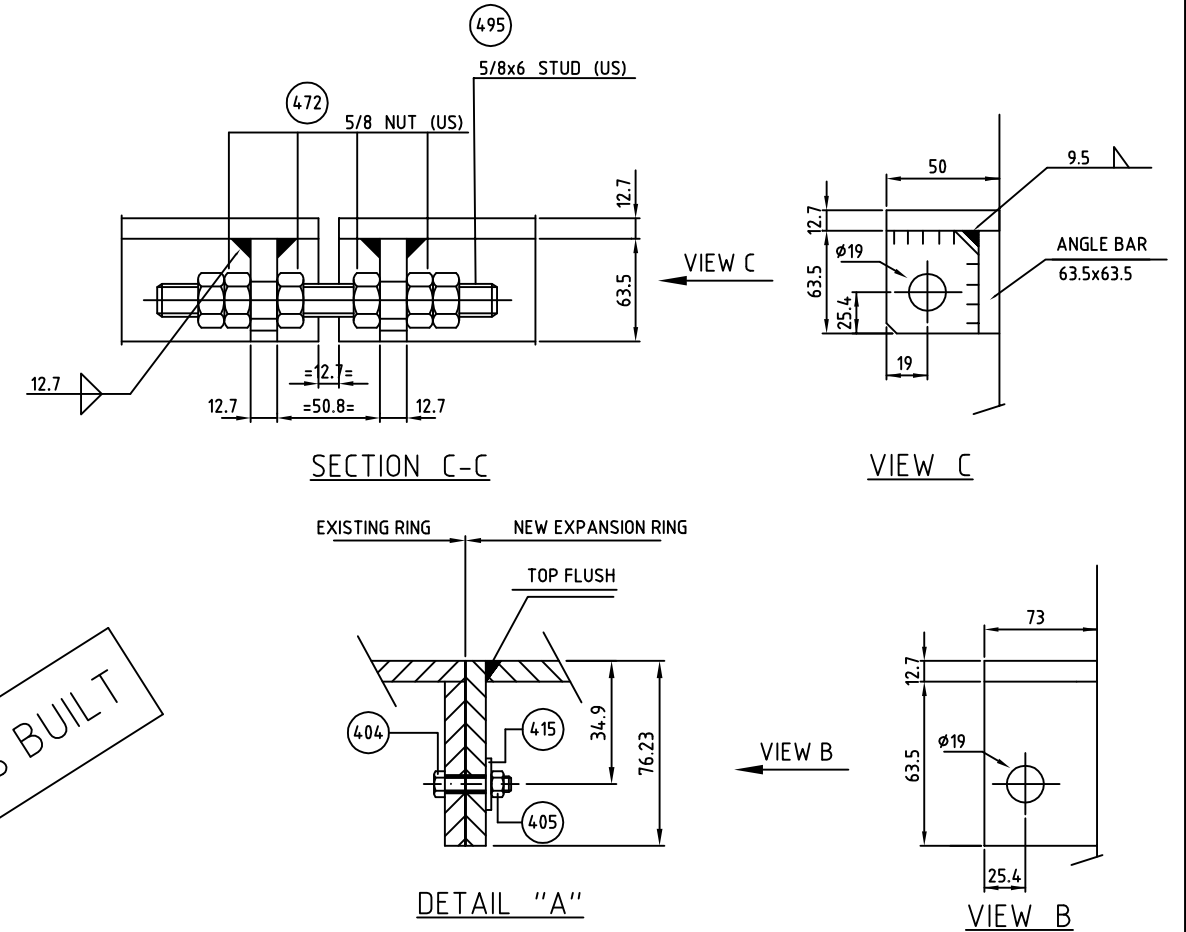
PLAN VIEW
TRAY No. 1 THRU 6

SHOP NOTES:

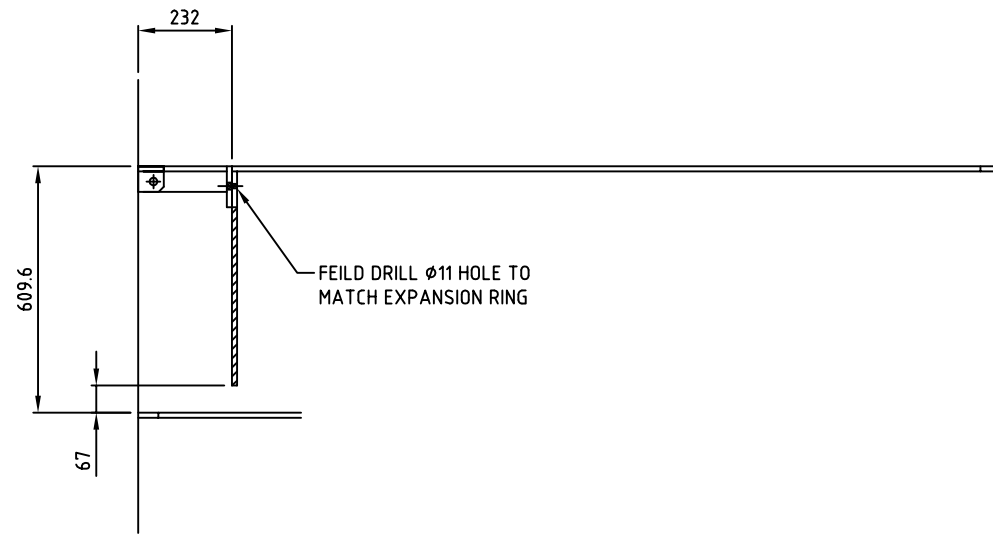
1. MAXIMUM HORIZONTAL LEVEL DEVIATIONS: ± 3
2. ALL WELD IN MATERIAL: 12.7 (0.5") THK C.S.
(WELD INS ARE EXISTING EXCEPT FOR PARTS REQUIRED FOR MODIFICATIONS. MODIFICATION PARTS TO BE SUPPLIED BY SULZER.)
3. NEW EXPANSION RING TO BE INSTALLED WITHOUT ANY WELDING TO COLUMN SHELL.



NOTE:
ALL AREAS WITH CROSS HATCHING ARE EXISTING SUPPORT TO BE REMOVED.



AS BUILT

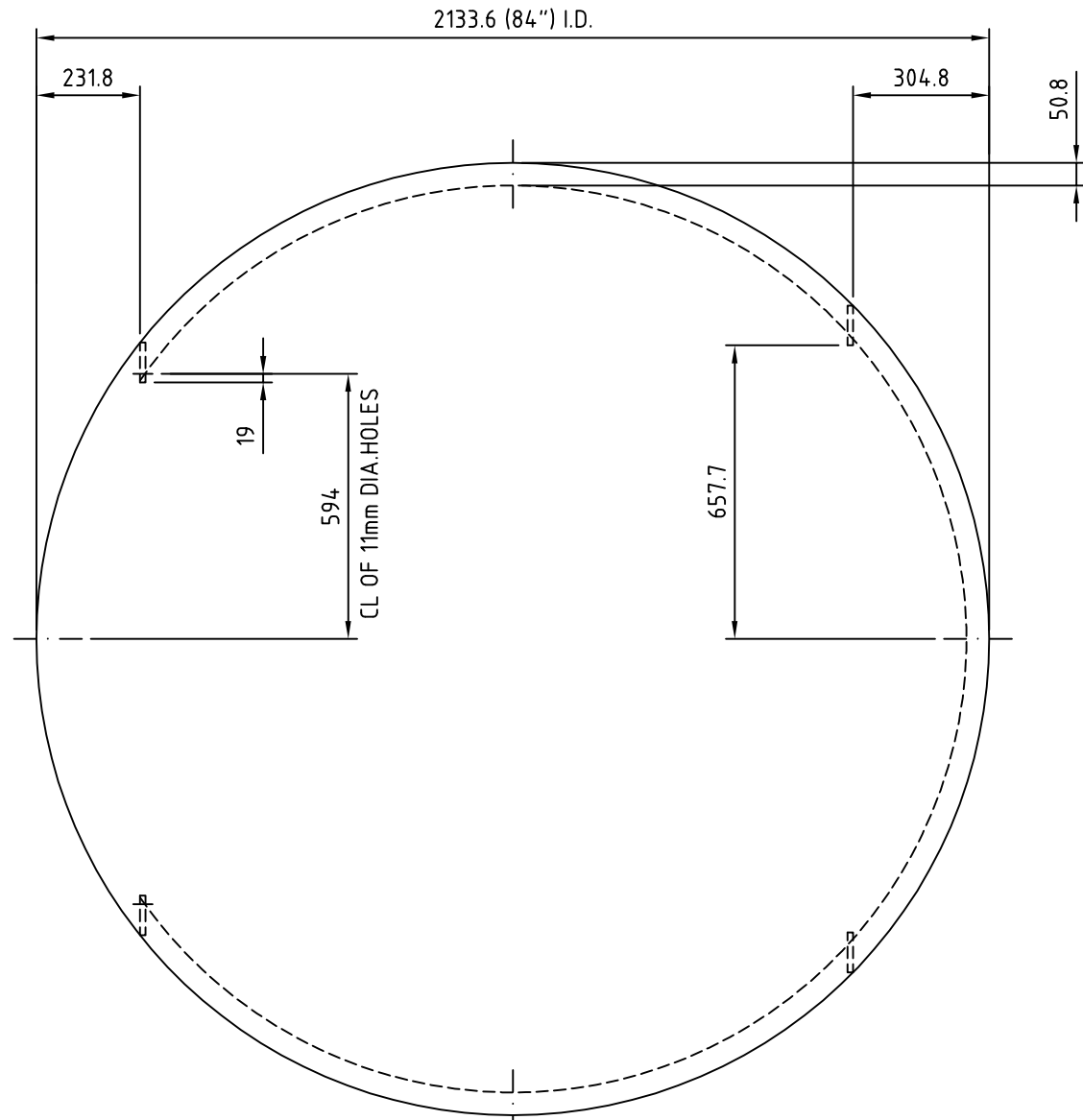


ELEVATION VIEW

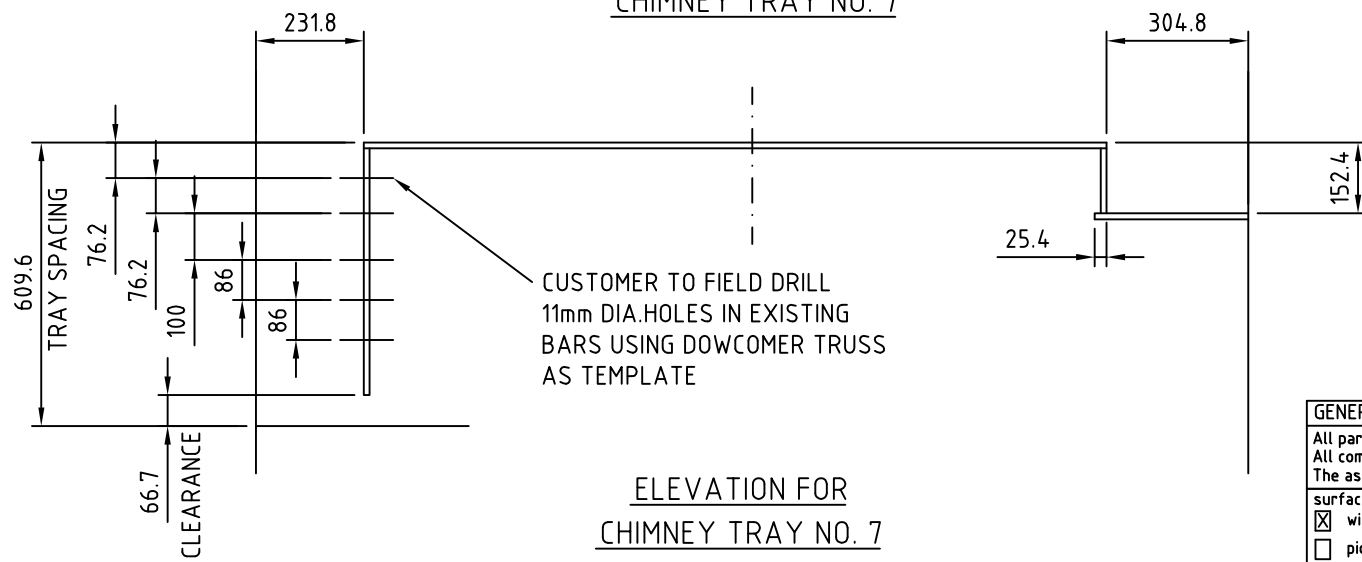
GENERAL NOTES	
All parts shall pass through man ways: 431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	
none	-

AS BUILT

2	AS BUILT			ATT	24/OCT/03	SLO	24/OCT/03
1	CERTIFIED ISSUE		25/08/03	ATT		SLO	25/08/03
0	Original issue	TLS	24 JUL 03			XQ	7-25-03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: N/A		SULZER project no.: C028484		size: 11x17	scale: NTS		
2134 (84.0")		customer: ENAP/PARES & ALVARES		customer p.o.:			
col item: PV-16.01		plant:		customer-dwg.: 4550001388			
bed:		area: CRUDE TOPPING TOWER		ACAD 2000			
SULZER		ASSEMBLY				drawing no.: sheet no.:	
		HIFI TRAY No. 1 THRU 6 WELDINS				C028484-01 14	
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PLAN VIEW FOR
CHIMNEY TRAY NO. 7



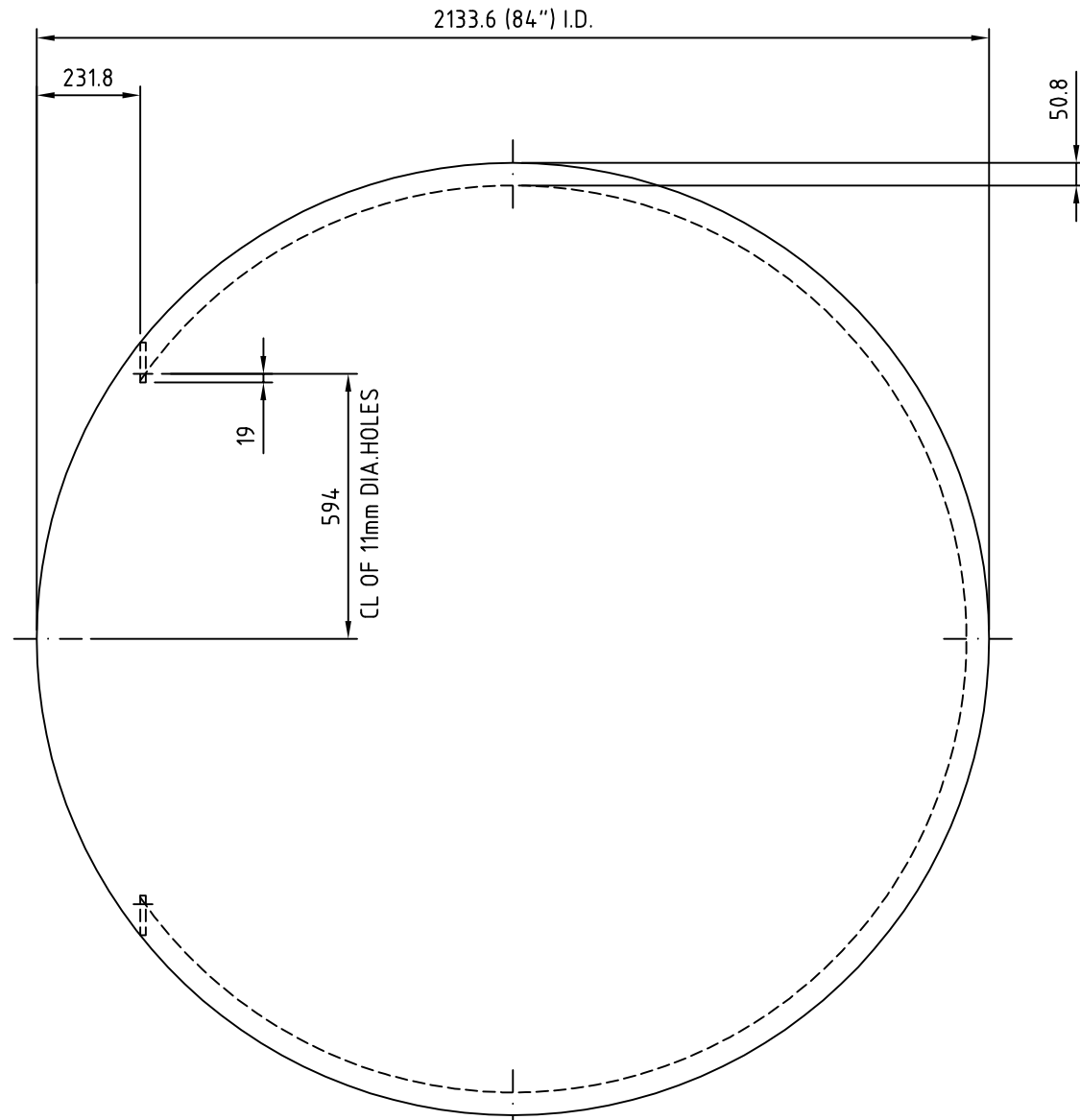
ELEVATION FOR
CHIMNEY TRAY NO. 7

ALL PARTS THIS SHEET ARE EXISTING
12.7mm THK. C.S. AND TO BE RE-USED
WITH MODIFICATIONS AS NOTED.

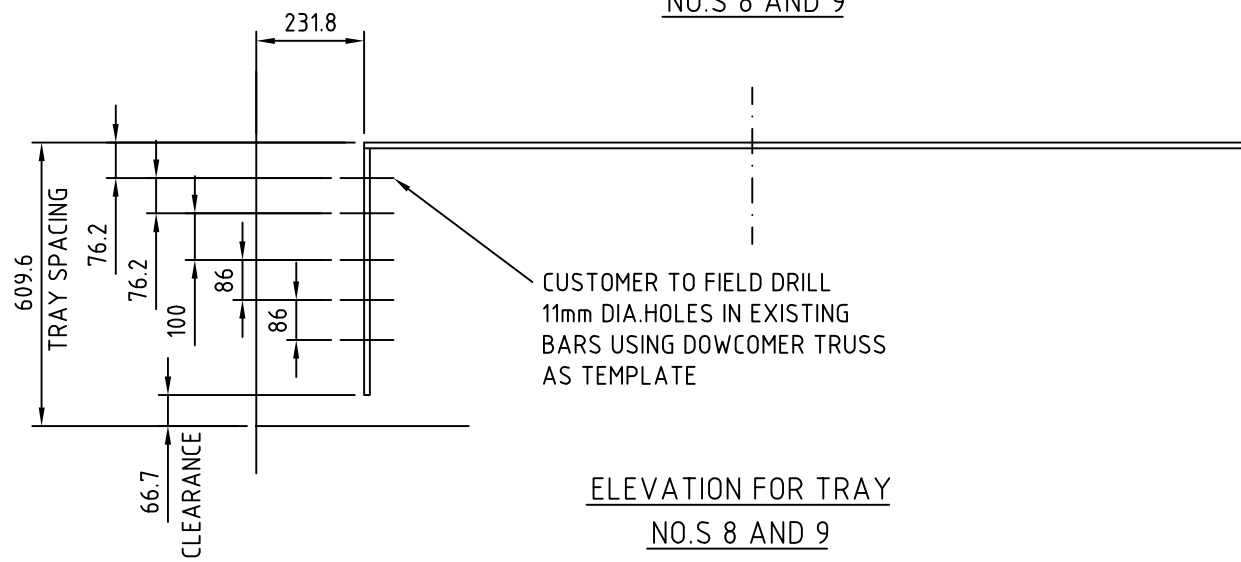
GENERAL NOTES	
All parts shall pass through man ways-431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	-

State:
CERTIFIED

1	Certified Issue.	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003
0	Original issue	RJ	7/17/03		DD		7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.:	----	SULZER project no.: C028484		size: 11x17	scale: NTS		
col ID:	2133.6 (84")	customer: ENAP/PARES & ALVARES		customer p.o.: 4550001388			
col item:	PV-16.01	plant: -		customer-dwg: -			
bed:	##	area: CRUDE TOPPING TOWER		ACAD 2000			
SULZER		ASSEMBLY				drawing no.: sheet no.:	
		TRAY NO.7 EXISTING WELD-INS				C028484-01 15	
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PLAN VIEW FOR TRAY
NO.S 8 AND 9



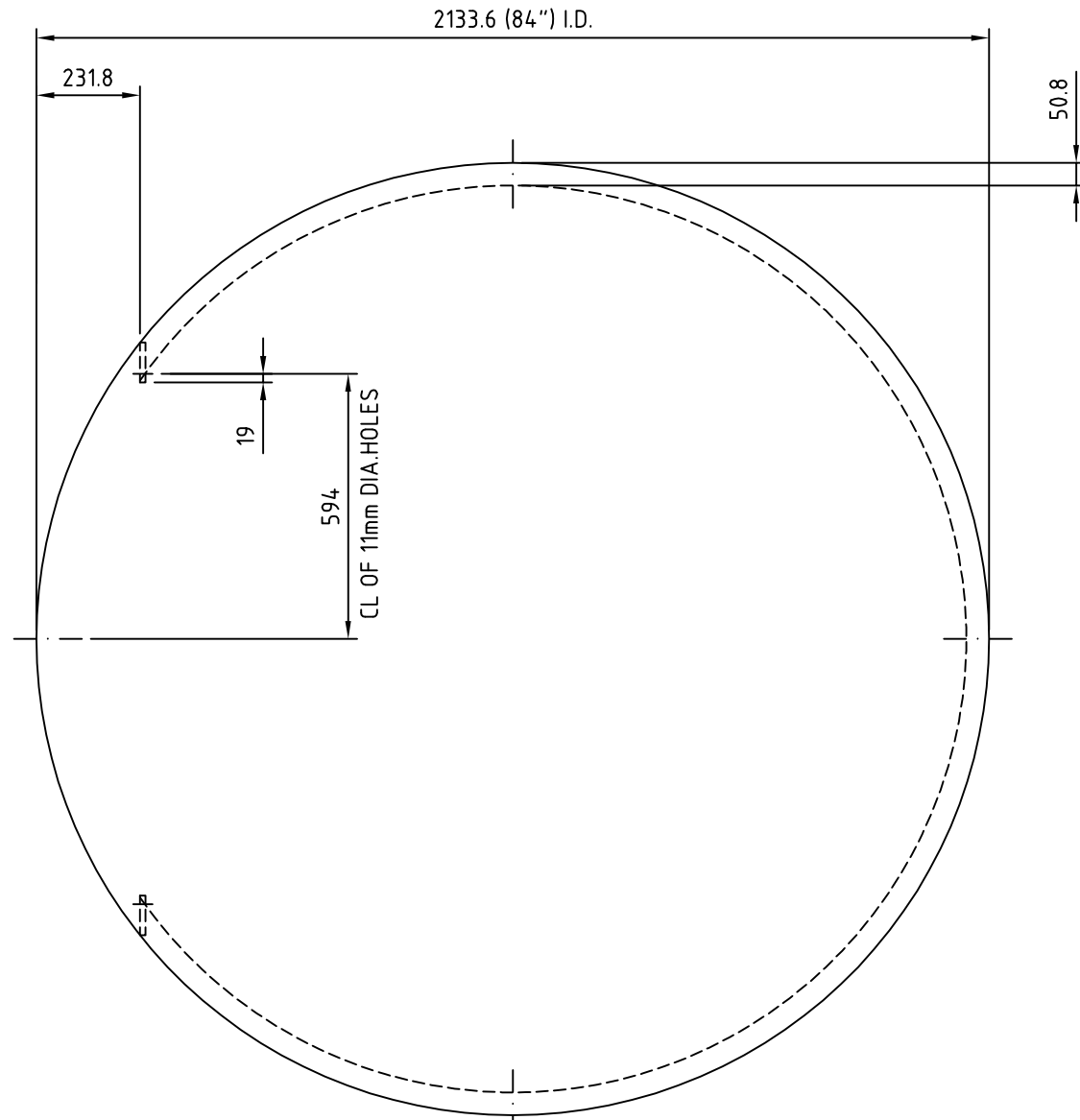
ELEVATION FOR TRAY
NO.S 8 AND 9

ALL PARTS THIS SHEET ARE EXISTING
12.7mm THK. C.S. AND TO BE RE-USED
WITH MODIFICATIONS AS NOTED.

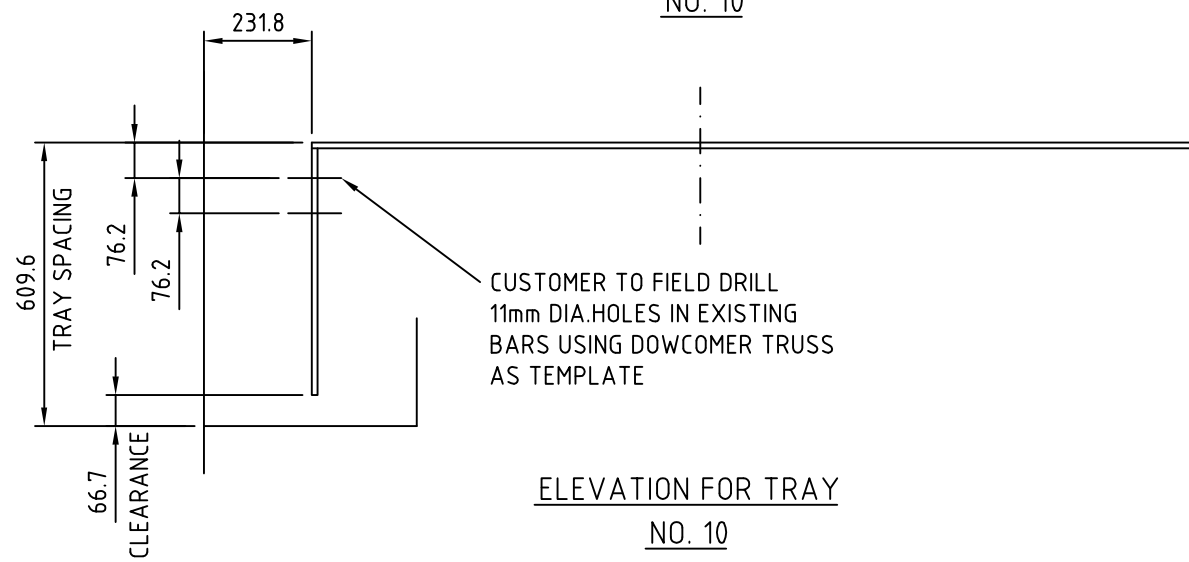
GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	-

state:
CERTIFIED

1	Certified Issue	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003
0	Original issue	RJ	7/17/03		DD		7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.:	----	SULZER project no.: C028484		size: 11x17	scale: NTS		
col ID:	2133.6 (84")	customer:	ENAP/PARES & ALVARES	customer p.o.:	4550001388		
col item:	PV-16.01	plant:	-	customer-dwg.:	-		
bed:	##	area:	CRUDE TOPPING TOWER	ACAD	2000		
SULZER		ASSEMBLY			drawing no.:	sheet no.:	
		TRAY NO.S 8 AND 9 EXISTING WELD-INS			C028484-01	16	
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PLAN VIEW FOR TRAY
NO. 10



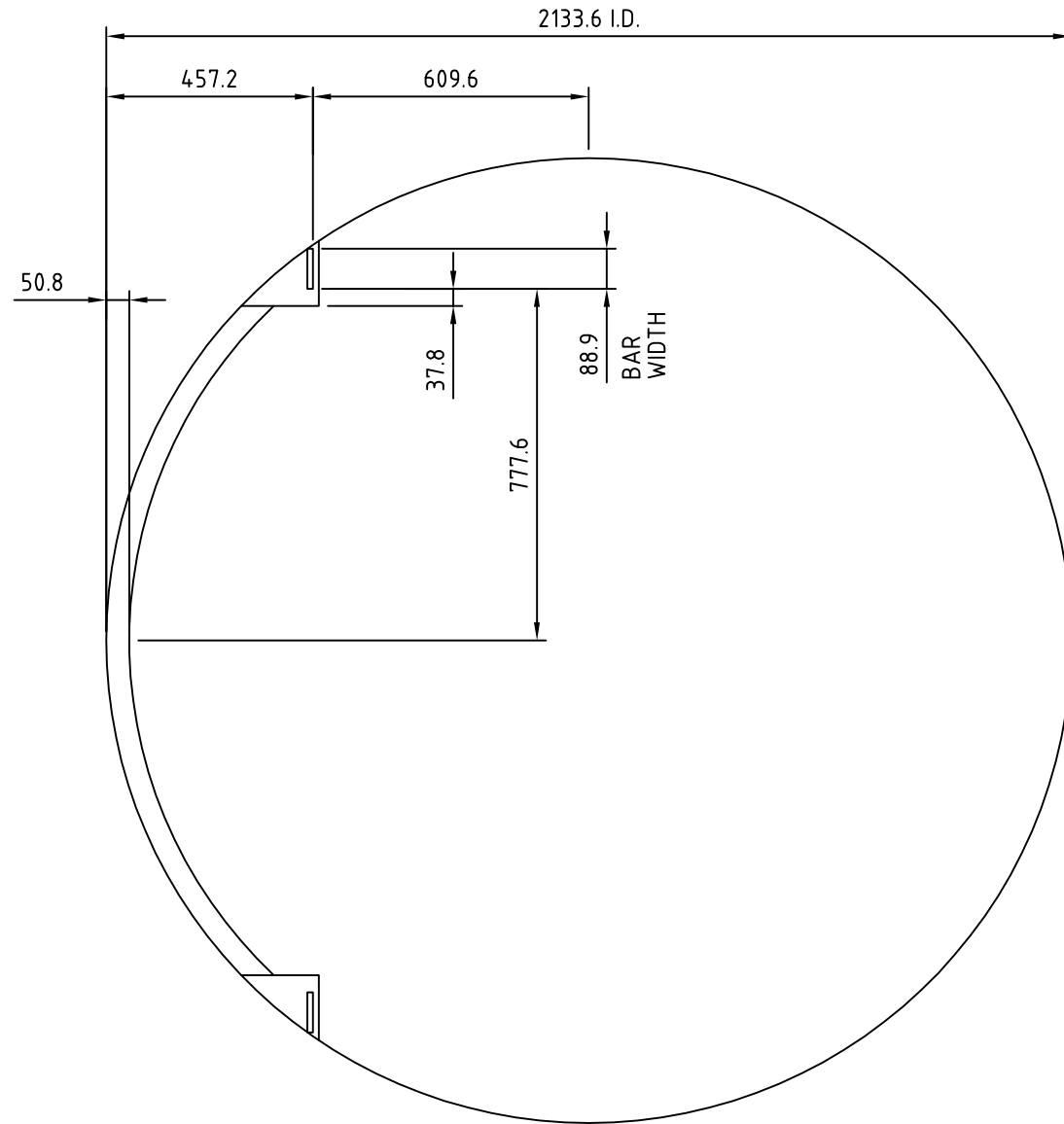
ELEVATION FOR TRAY
NO. 10

ALL PARTS THIS SHEET ARE EXISTING
12.7mm THK. C.S. AND TO BE RE-USED
WITH MODIFICATIONS AS NOTED.

GENERAL NOTES	
All parts shall pass through man ways-431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	-

State:
CERTIFIED

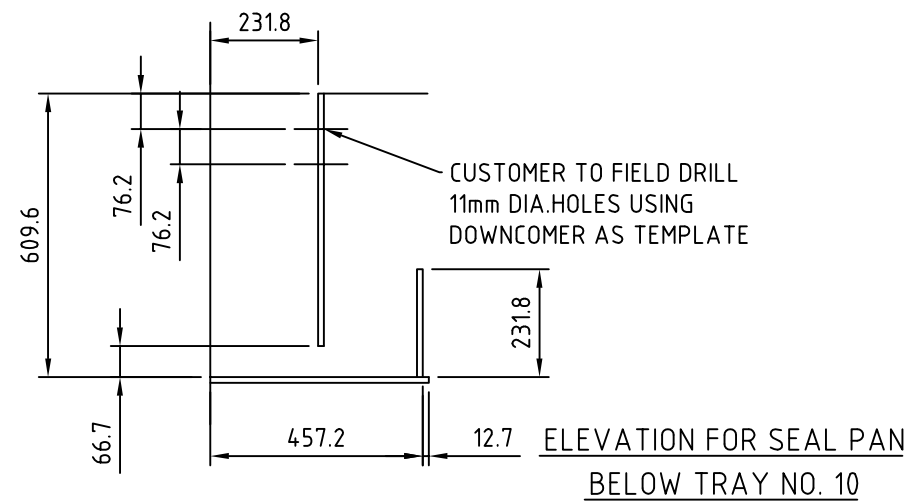
1	Certified Issue.	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003
0	Original issue	RJ	7/17/03			DD	7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.:	----	SULZER project no.: C028484		size: 11x17	scale: NTS		
col ID:	2133.6 (84")	customer:	ENAP/PARES & ALVARES	customer p.o.:	4550001388		
col item:	PV-16.01	plant:	-	customer-dwg.:	-		
bed:	##	area:	CRUDE TOPPING TOWER	ACAD	2000		
SULZER		ASSEMBLY				drawing no.:	sheet no.:
		TRAY NO.10 EXISTING WELD-INS				C028484-01	17
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PLAN VIEW FOR SEAL PAN
BELOW TRAY NO. 10

ALL PARTS THIS SHEET ARE EXISTING

SEE SHEET NO.17 FOR GENERAL NOTES



GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	-

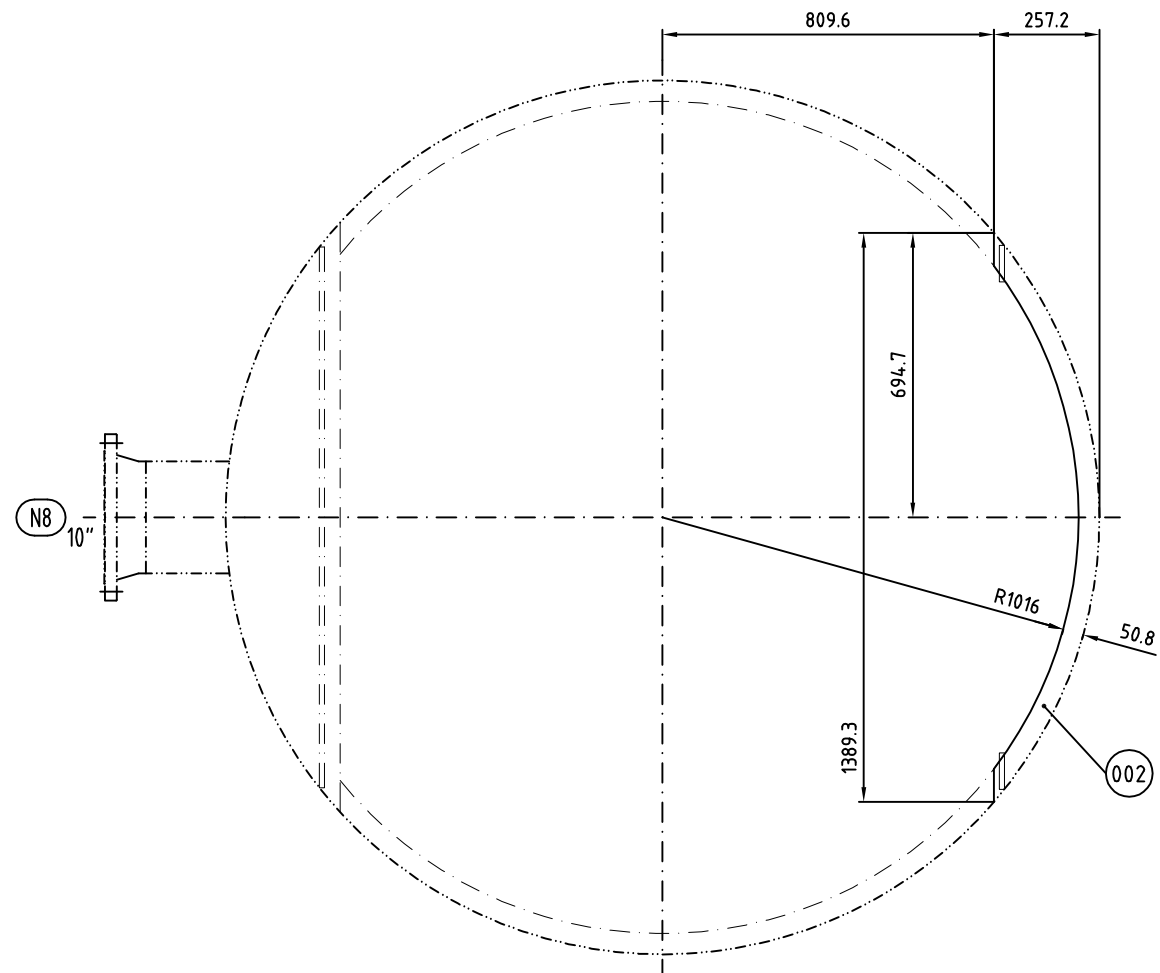
state:
CERTIFIED

1	Certified Issue	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003	Lopez_S	Oct 30, 2003
0	Original issue	RJ	7/17/03		DD		7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
job no.: ----		SULZER project no.: C028484		size: 11x17	scale: NTS		
col ID: 2133.6 (84")		customer: ENAP/PARES & ALVARES		customer p.o.: 4550001388			
col item: PV-16.01		plant: -		customer-dwg: -			
bed: ##		area: CRUDE TOPPING TOWER		ACAD 2000			
SULZER		ASSEMBLY				drawing no.: sheet no.:	
		SEAL PAN WELD-INS FOR TRAY NO.10				C028484-01 18	
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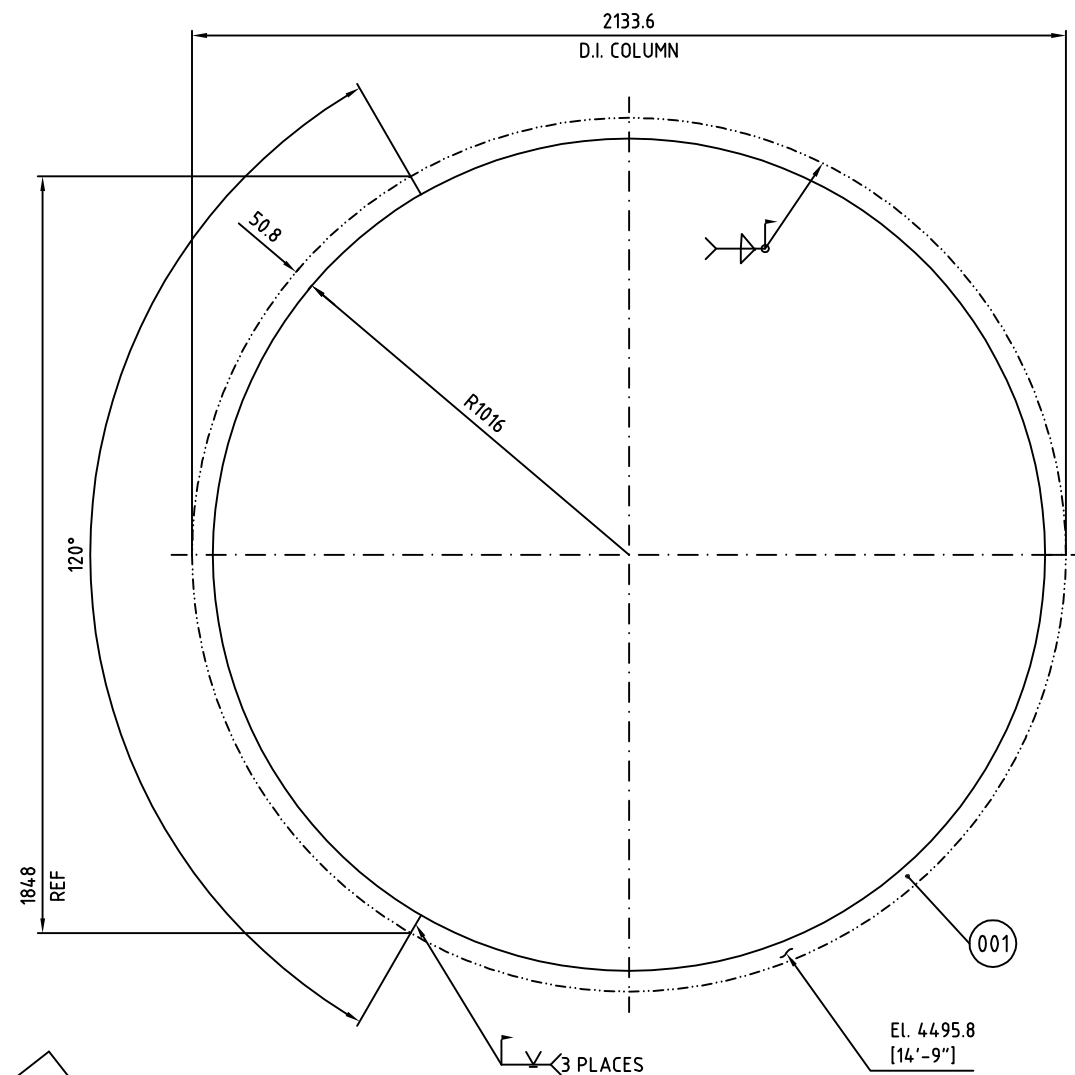
Drawing-n#: C028484-19

item	set	spare	unit	drawing- or part-no.	description	remarks	material	wght. (kg)
000	1	-	set		ATTACHMENTS		C.S.	
001	1	-	set		FULL SUPPORT RING SEGMENTED 13 x R1016 x 120°			
002	1	-	pcs		SEAL PAN MODIFICATION			
100	0.5	-	m2		PLATE 1/2" [12.7mm]		C.S.	30.8

001 - 099: parts / 100 - 199: materials

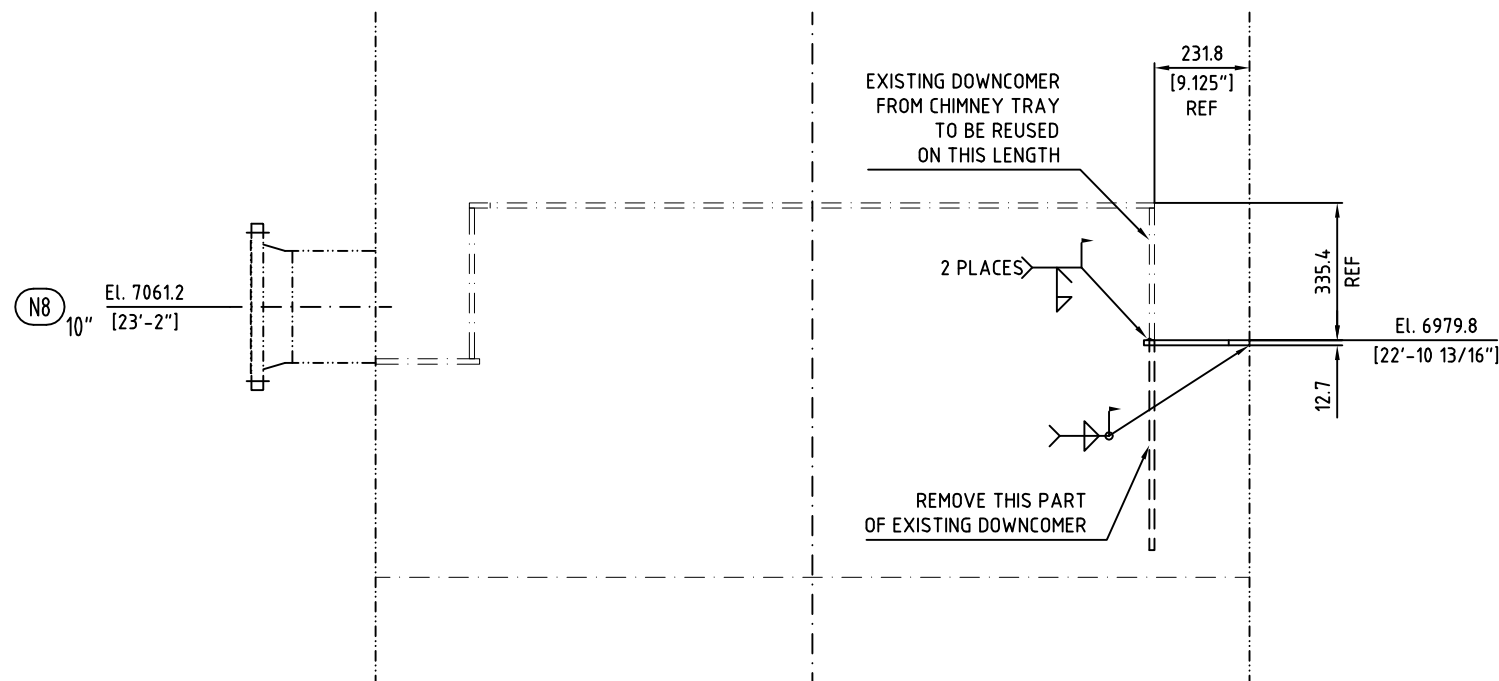


SEAL PAN MODIFICATIONS



SPS SUPPORT GRID

AS BUILT



EXISTING DOWNCOMER FROM CHIMNEY TRAY TO BE REUSED ON THIS LENGTH

2 PLACES

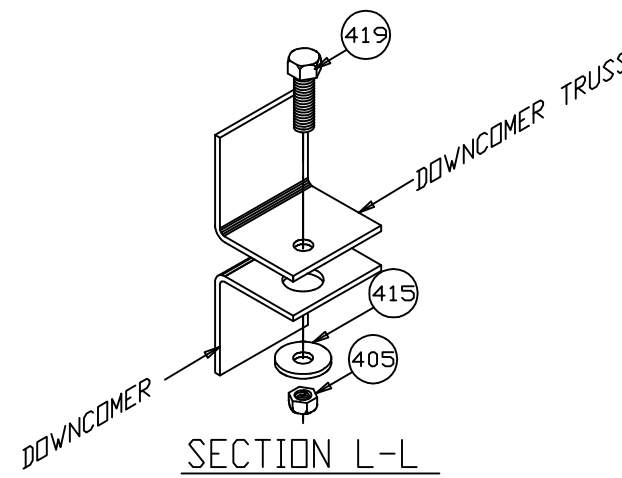
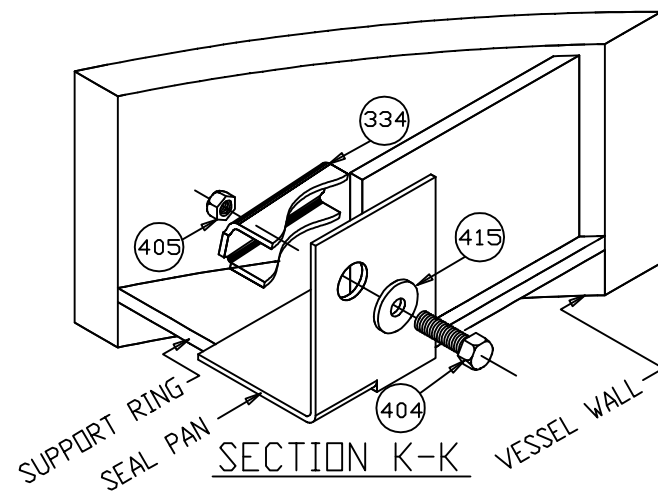
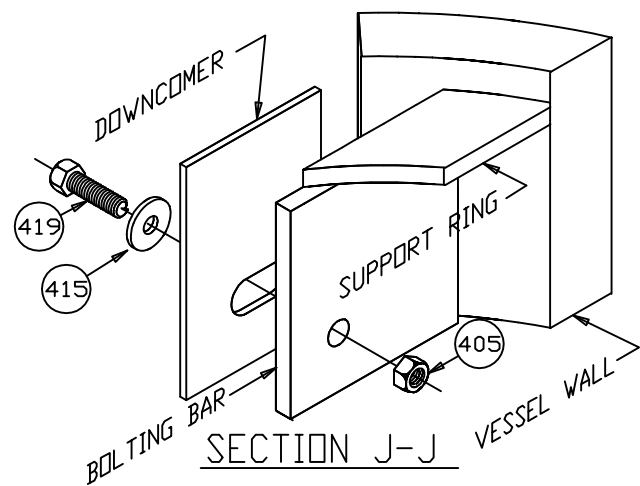
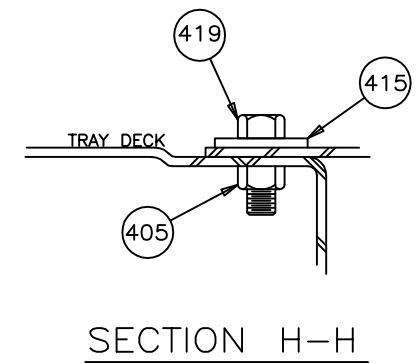
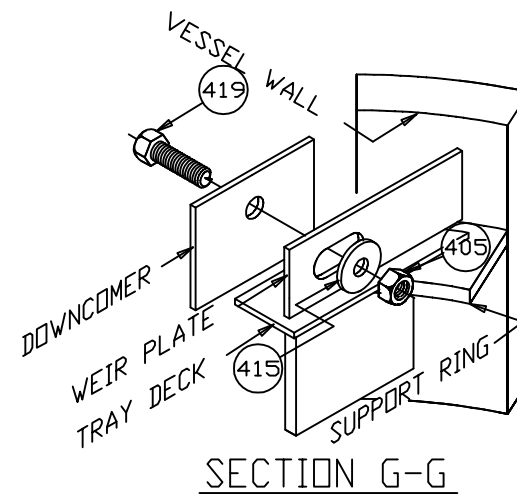
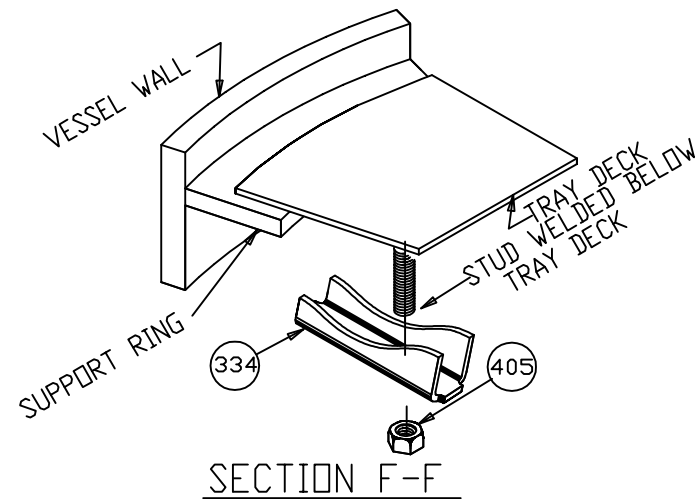
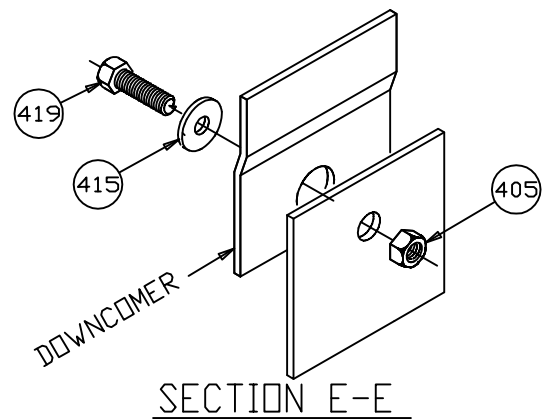
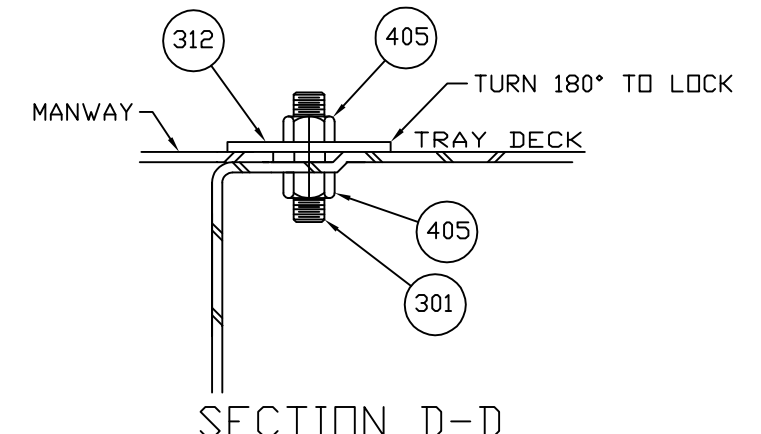
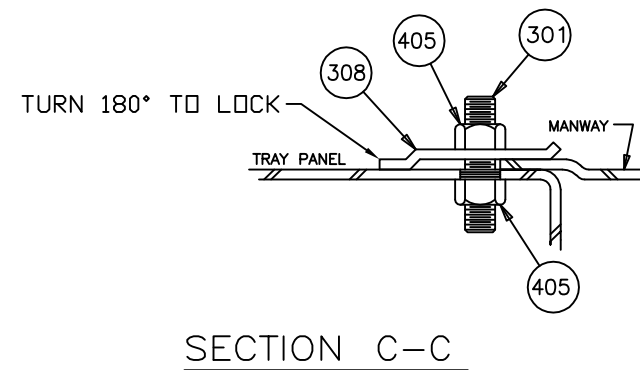
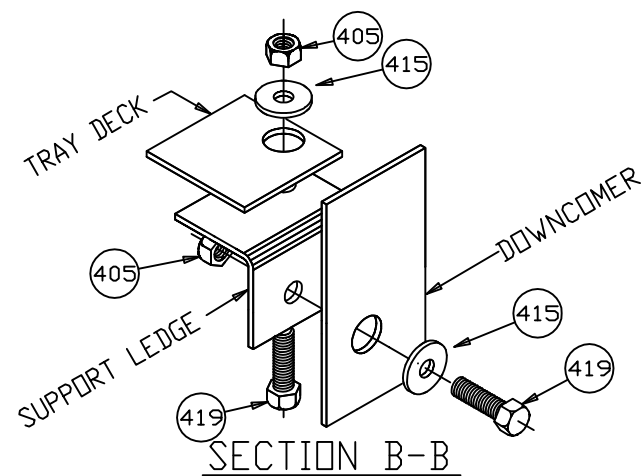
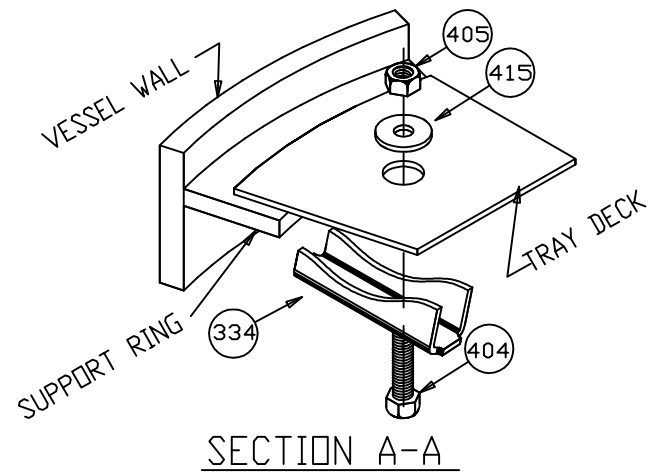
REMOVE THIS PART OF EXISTING DOWNCOMER

GENERAL NOTES
 All parts shall pass through man ways: 430 I.D.
 All components are marked by SULZER.
 The assembled part is checked after manufact.

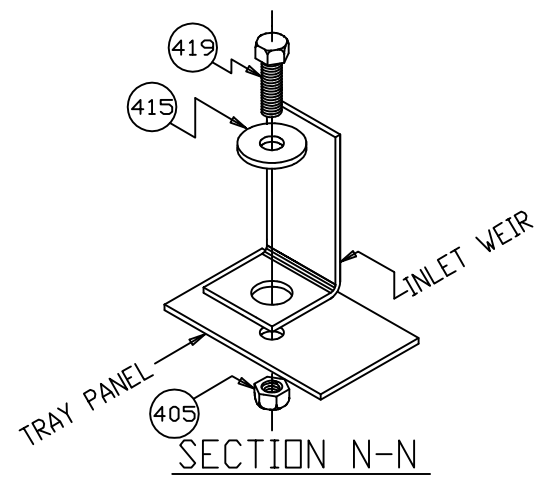
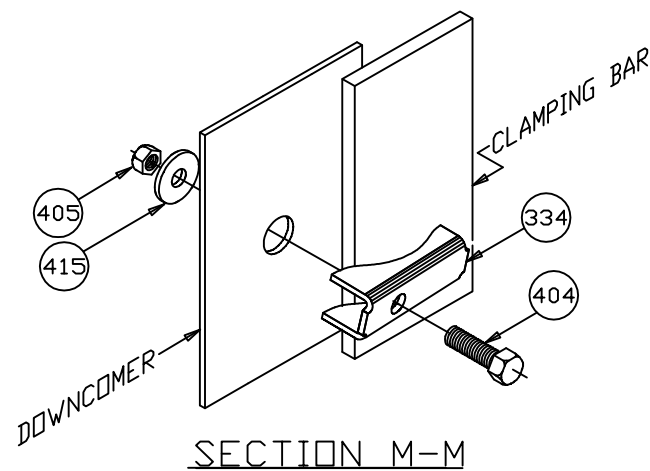
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rev.	revision remarks	issued by	date	checked	date approved
job no.:	J0055480	SULZER projec no.:	C028484	size:	A-2 scale: %
col. ID:	2134mm [84in]	customer:	ENAP/PAREZ & ALVAREZ	customer p.o.:	4550001388
col item.:	PV-16,01	plant:	-	customer dwg.:	
bed.:	WASH BED	area:	CRUDE TOPPING TOWER	ACAD 2000	
SULZER				ATTACHMENTS	
				drawing-no.: C028484-01 19	

state: AS BUILT

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PART NO.	HARDWARE DESCRIPTION
301	SQUARE STUD - SPECIAL
308	TWO WAY FASTENER
312	TWO WAY FASTENER
334	ONE WAY CLAMP
404	CAPSCREW - 0.375 x 2.0
405	NUT - 0.375 HEX HD.
415	WASHER - 0.375 x 1.25 O.D.
419	CAPSCREW - 0.375 x 1.25



1	CERTIFIED			ATT	8/25/03	SLD	8/25/03
0	ORIGINAL ISSUE	RJ	7/17/03			DD	7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
Job No.: J055473		Sulzer Project No.:C028484		size:11x17	scale:NTS		
COL I.D.: 2133.6 (84")		customer:ENAP/PARES & ALVARES		Customer Po No.: 4550001388			
COL ITEM: PV-16.01		plant: -		customer-dwg: -			
BED: ##		area: CRUDE TOPPING TOWER		ACAD 2000			

SULZER

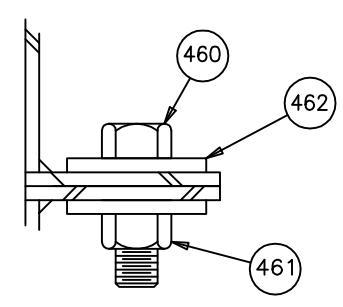
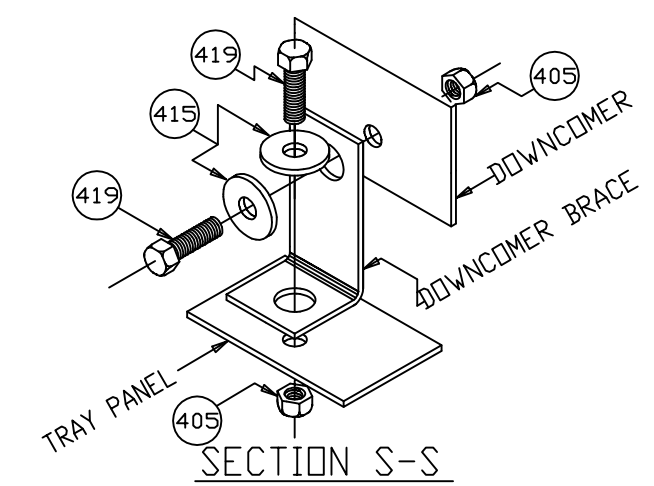
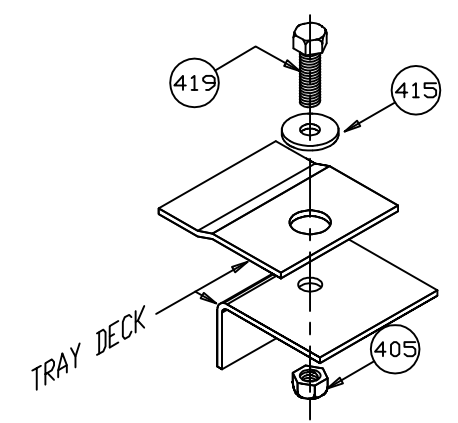
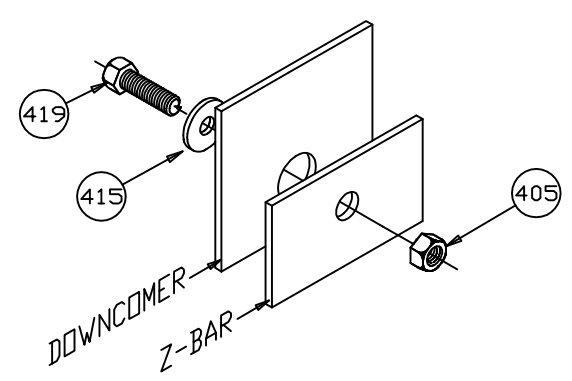
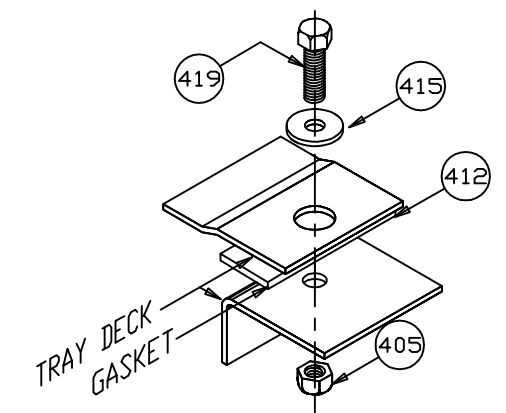
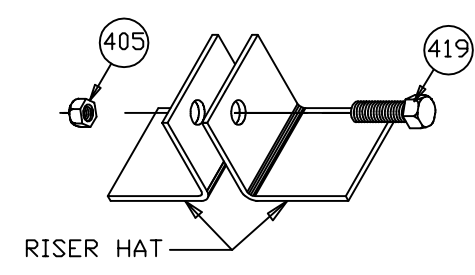
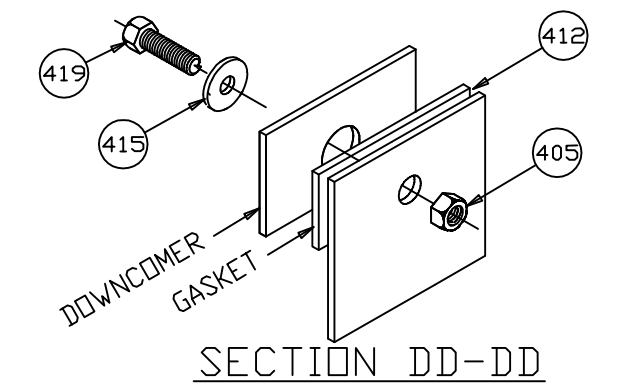
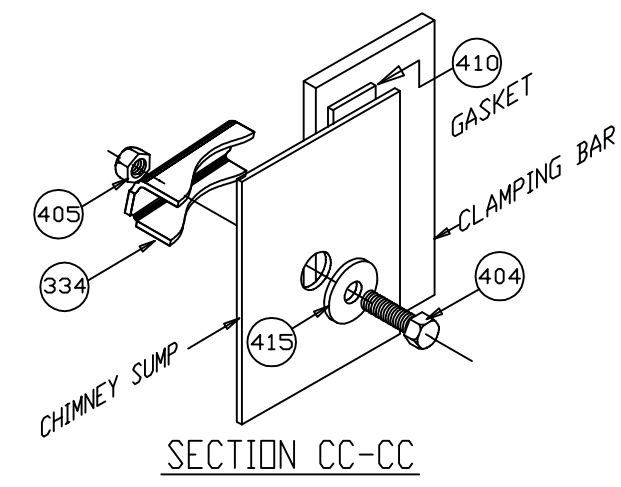
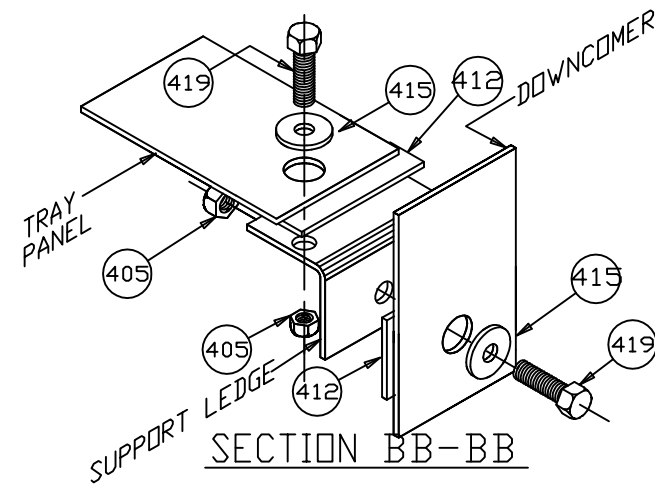
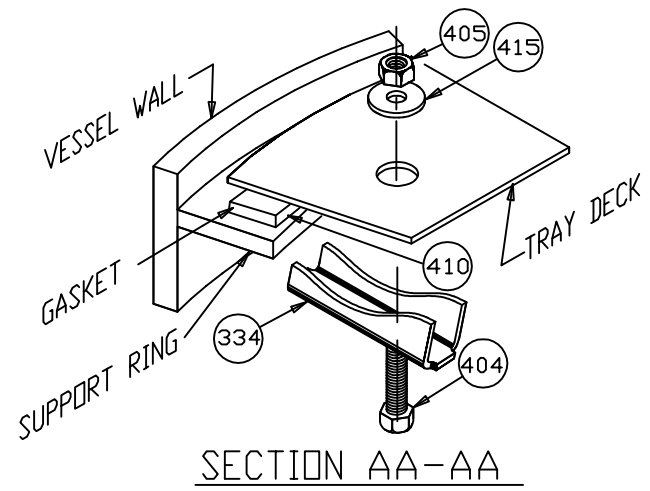
SECTION SHEET

Drawing No.: Sheet No.:

C028484-01 20

State:
CERTIFIED

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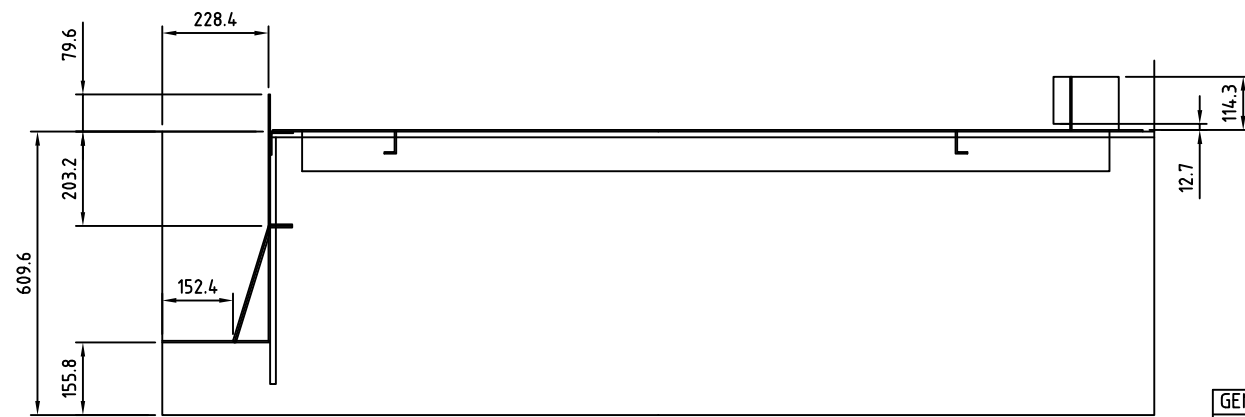
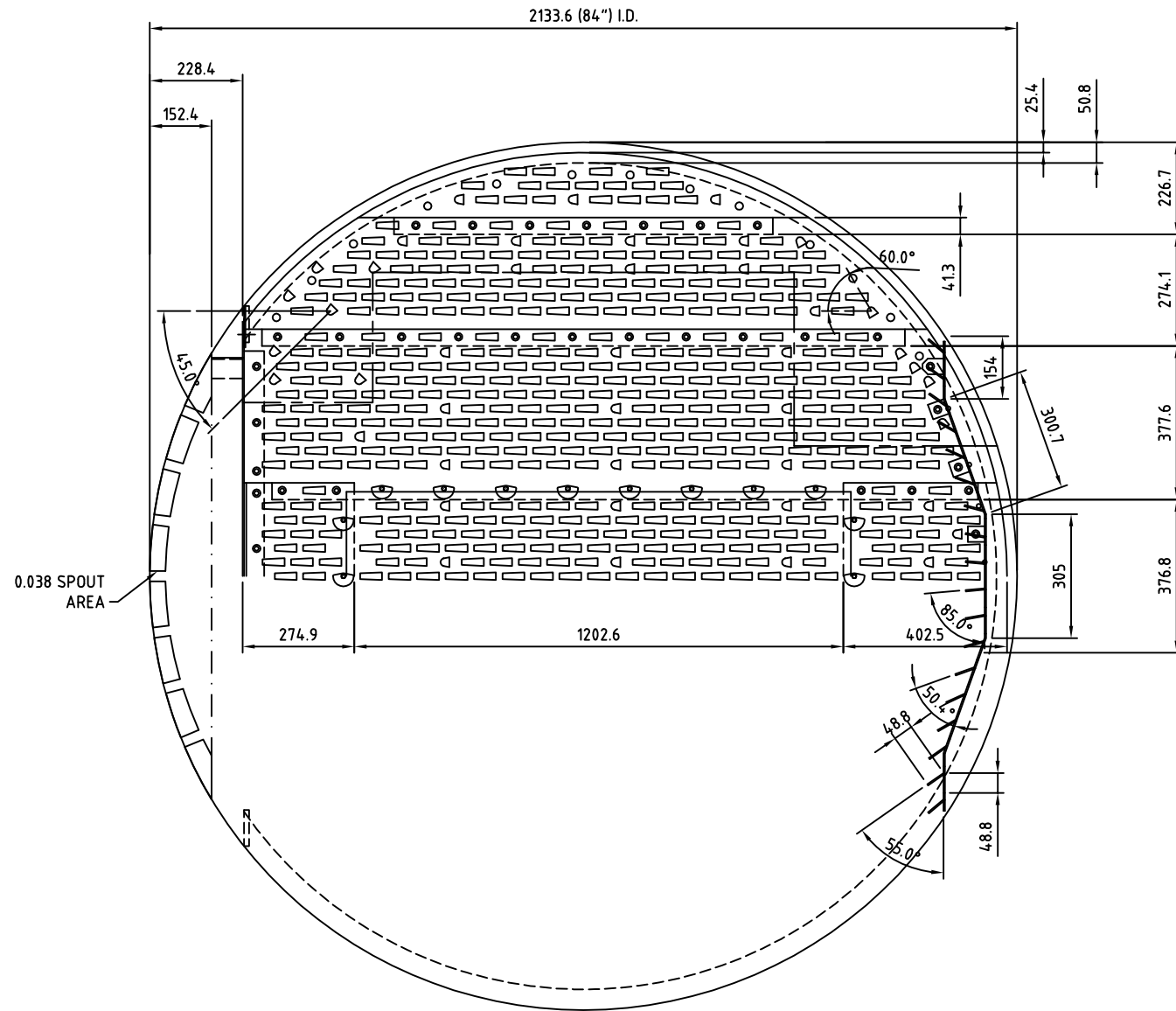


PART NO.	HARDWARE DESCRIPTION
301	SQUARE STUD - SPECIAL
340	SLIDE FASTENER
341	WASHER - SLIDE FASTENER
334	ONE WAY CLAMP
404	CAPSCREW - 0.375 x 2.0
405	NUT - 0.375 HEX HD.
415	WASHER - 0.375 x 1.25 O.D.
419	CAPSCREW - 0.375 x 1.25
410	GASKET-0.0625 X 1.0 FIBERGLASS
412	GASKET-0.0625 X 1.5 FIBERGLASS (DROP WARP)
460	CAPSCREW - 0.5 x 2.0
461	NUT - 0.5 HEX HD.
462	WASHER - 0.5 x 1.5 O.D.

1	CERTIFIED			ATT	8/25/03	SLD	8/25/03
0	ORIGINAL ISSUE	RJ	7/17/03			DD	7/25/03
rev.	revision remarks	issued by	date	checked	date	approved	date
Job No.: J055473		Sulzer Project No.:C028484		size:11x17	scale:NTS		
COL I.D.: 2133.6 (84")		customer:ENAP/PARES & ALVARES		Customer Po No.: 4550001388			
COL ITEM: PV-16.01		plant: -		customer-dwg: -			
BED: ##		area: CRUDE TOPPING TOWER		ACAD 2000			

SULZER SECTION SHEET Drawing No.: Sheet No.:
C028484-01 21

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GENERAL NOTES:

1. VESSEL MANWAY I.D. IS: 431.8 (17")
2. ALL COMPONENTS ARE PIECE MARKED BY SULZER.
3. TRAY MANWAYS ARE REMOVABLE FROM TOP OR BOTTOM.
4. VALVE TYPE: MVG WITH 8.5mm LIFT AND PUSH VALVES
No. PER TRAY: 889 – MVG VALVES
86 – PUSH VALVES
5. TRAY MATERIAL: 10 C.S. A1011-GR.B
6. CLAMP MATERIAL: C.S.
7. TRAY HARDWARE MATERIAL: C.S.
TRAY BOLTS: A193 GR B6
TRAY NUTS: A194 GR6
8. MANWAY HARDWARE MATERIAL: C.S.
MANWAY STUDS: C.S.
MANWAY NUTS: A194 GR6
9. TRAYS ARE NUMBERED: TOP TO BOTTOM
10. TRAY SPACINGS, WEIR HEIGHTS AND DOWNCOMER CLEARANCES SHOWN ARE FROM TOP OF TRAY DECKS. (TOLERANCE TO BE ± 3mm)
9. ALL DIMENSIONS ARE IN: METRIC

GENERAL NOTES	
All parts shall pass through man ways:431.8 I.D. All components are marked by SULZER. The assembled part is checked after manufact.	
surface treatment:	
<input checked="" type="checkbox"/> without	<input type="checkbox"/> welding only
<input type="checkbox"/> pickled	<input type="checkbox"/> neutralized
shop data files:	-

state: APPROVAL

0	Original issue	RJ	7/17/03		DD	7/25/03
rev.	revision remarks	issued by	date	checked	date	approved date
job no.: J055469		SULZER project no.: C028484		size: 11x17	scale: NTS	
col ID: 2133.6 (84")		customer: ENAP/PARES & ALVARES		customer p.o.: 4550001388		
col item: PV-16.01		plant: -		customer-dwg: -		
bed: ##		area: CRUDE TOPPING TOWER		ACAD 2000		
SULZER		LAYOUT MVGT TRAY NO.S 8-9-10			drawing no.: sheet no.:	
					C028484-01 L1	
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