

Dossier CMP Arles : 783

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Client / Customer : AIR LIQUIDE AGS GmbH

Engineered System N° :

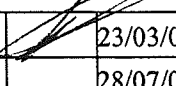


# 1 RESERVOIR DE STOCKAGE LIN 1000 MT

## 1 X 1000 MT LIN STORAGE TANK

### ITEM B 72001

## PLAN DE GENIE CIVIL

### CIVIL ENGINEERING

4		23/03/05	REMY		23/03/05	HULIN		23/03/05	LEBOUCQ		
1		28/07/04	NANTIER		28/07/04	HULIN		28/07/04	LEBOUCQ		
EDITION EDITION N°	REFERENCE CLIENT REF.	DATE	NOM NAME	SIGN.	DATE	NOM NAME	SIGN.	DATE	NOM NAME	SIGN.	ETAT D'AVANC. STATUS
		REDACTEUR DRAWN UP BY			VERIFICATEUR CHECKED BY			APPROBATEUR APPROVED BY			

Projet : **ASU No. 9 KOSICE**  
ProjectClassement CMP Arles : **783-101**  
CMP Arles document N°

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Plan N° : 783-101

INDICE DE REVISION: 0/A/B/C/ / / /  
revision number

Page	DESIGNATION description	INDICE DE REVISION									
		revision number									
		0	A	B	C	D	E	F	G	H	
1	Front page	1	2	3	4						
2	List of current revisions / subject of modifications	1	2	3	4						
3	Data	1	2	3							
4	Elevation view	1	2	3							
5	Anchor orientations	1	2	3							
6	Sleeve in concrete	1	2	3							
7	Straps for inner vessel	1	2	3							
8	Outer casing anchoring	1	2	3							
9	Reinforcement concrete slab at level liquid outlet nozzle	3									
10	Notes	1	2	3	4						
11	Part list / packing list	1	2	3							
12	Part list / packing list	1	3								
13	Part list / packing list	1	2	3							
14	Part list / packing list	1	2	3							

**OBJET DES MODIFICATIONS***Subject of modifications*

INDICE DE L'EDITION Edition N°	OBJET DE LA MODIFICATION Subject of the modification
1	Première diffusion / First issue
2	Modified according edition 2
3	Added Reinforcement concrete slab at level liquid outlet nozzle
4	Modified WPS for J15

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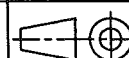
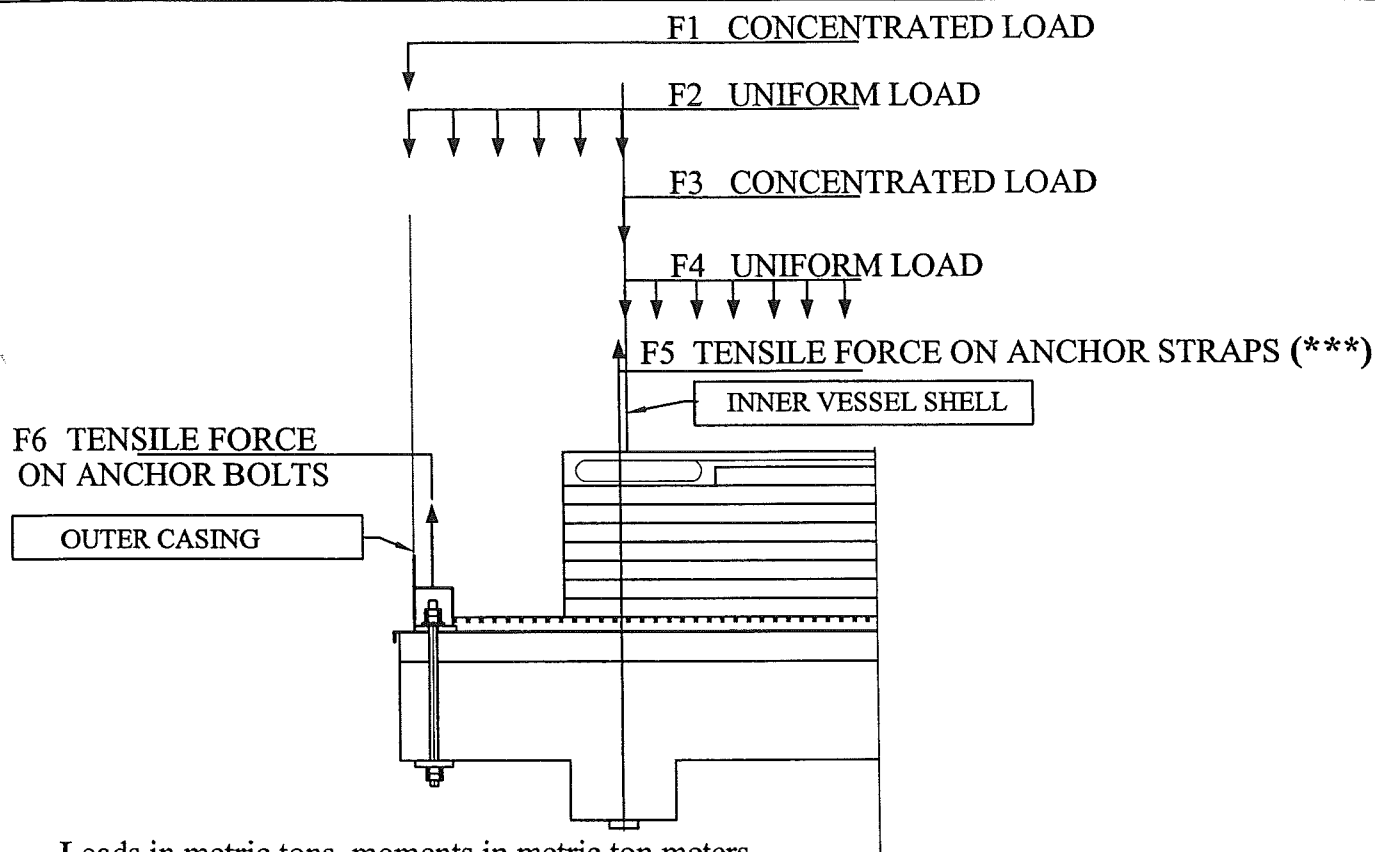
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**Client / Customer : AIR LIQUIDE AGS GmbH****Engineered System N° :**

Rev B

**Plan N° : 783-101****CIVIL ENGINEERING DATA FOR CIVIL ENGINEERING**Echelle/Scale  
/

Loads in metric tons, moments in metric ton meters

**A/ FULL OF LIQUID WITHOUT GAS PRESURE**

F1=51 F2=55,1 F3=37.1 F4=1081.4 F5=0

**B/ FULL OF LIQUID WITH GAS PRESURE**

F1=51 F2=55,1 F3=0 F4=1234.4 F5=3.63x32=116.16

**C/ HYDROPNEUMATIC TEST**

F1=51 F2=6.8 F3=0 F4=1507.4 F5=5.03x32=160.96

**D/ LOADS DUE TO THE SNOW(see note 5)**

F1=18

**E/ LOADS DUE TO WIND (see note 5)**

SHEAR FORCE: 27 MOMENT(at 0.00CMP):290.8 F6=8x12=96

**F/ LOADS DUE TO EARTHQUAKE (see note 5)**

SHEAR FORCE: 142 MOMENT(at 0.00CMP):1223.9

F5=12.51x32=400.5 F6=3.9x12=46.8

**(\*\*\*) 10% of straps (with a mini of 4 straps, every 90°)****shall be individually tested at the force of 16.4Tons , at time of slab acceptance.**

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Rev B

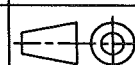
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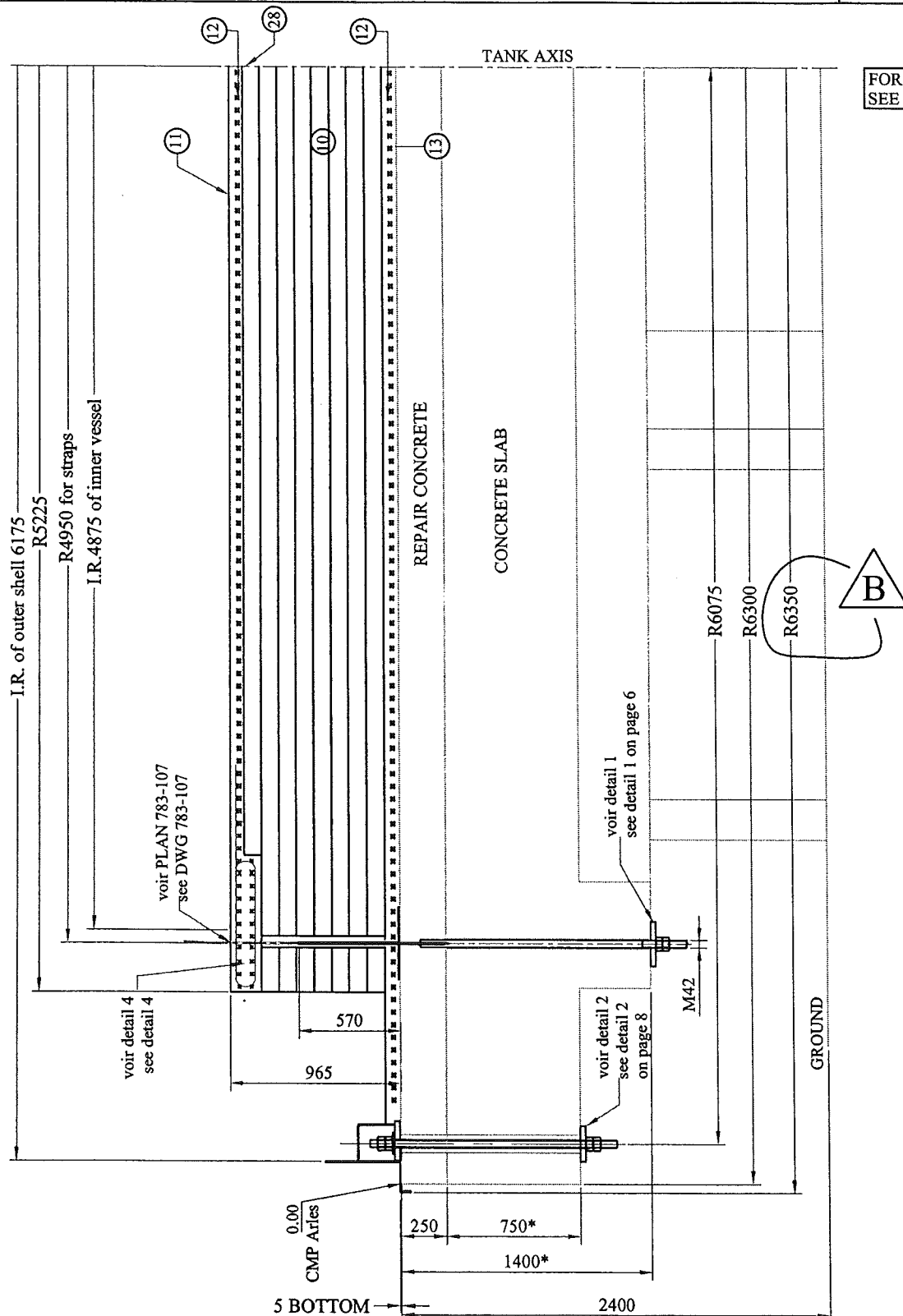
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CIVIL ENGINEERING

ELEVATION



Echelle/Scale



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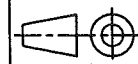
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Rev B

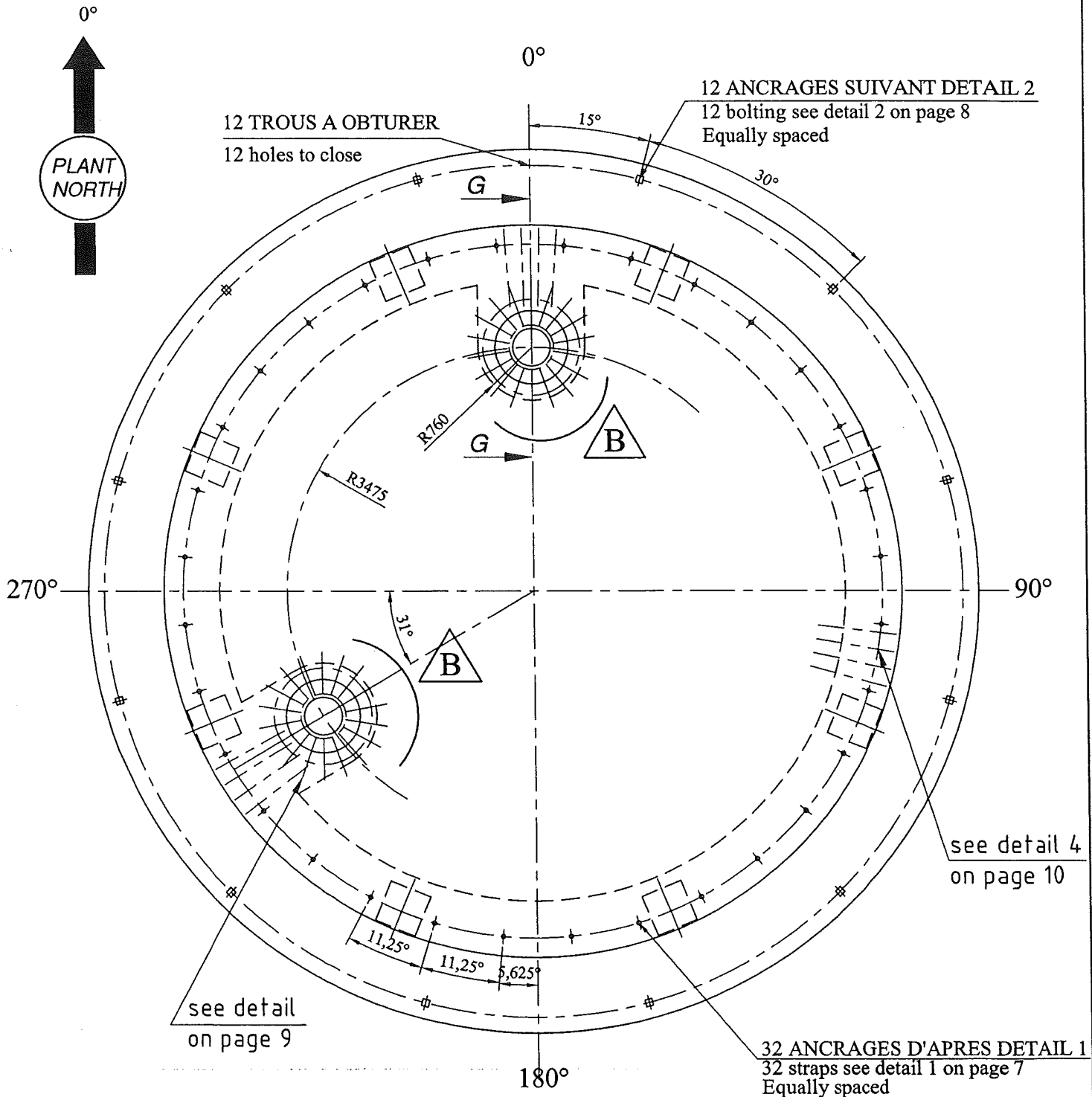
**Plan N° : 783-101****CIVIL ENGINEERING ANCHOR ORIENTATIONS**

(PLAN VIEW)



Echelle/Scale

1/100

**SECTION G-G  
SEE PAGE 9**

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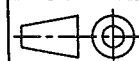
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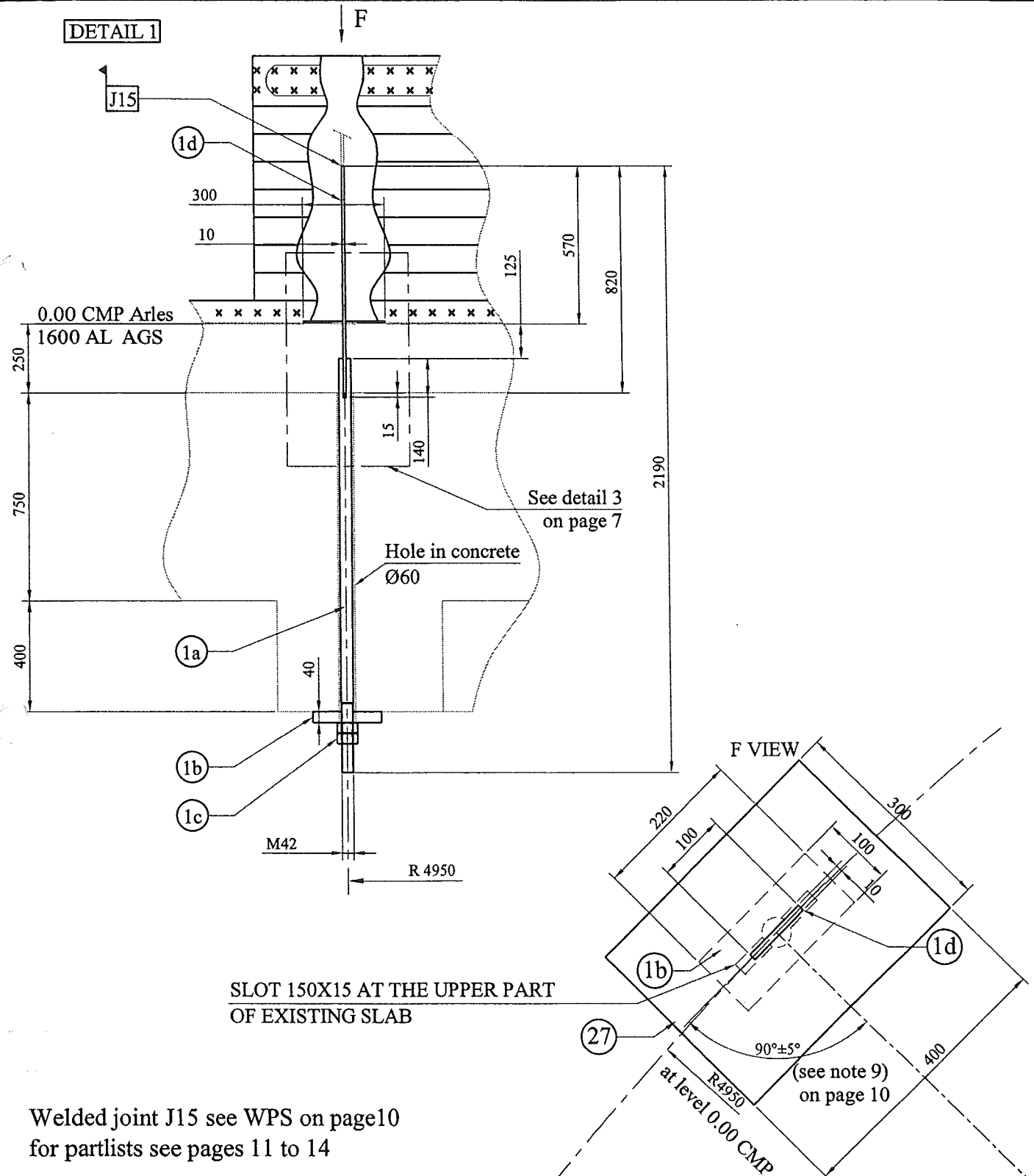
Rev B

Plan N° : 783-101

CIVIL ENGINEERING INNER VESSEL STRAPS



Echelle/Scale /



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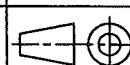
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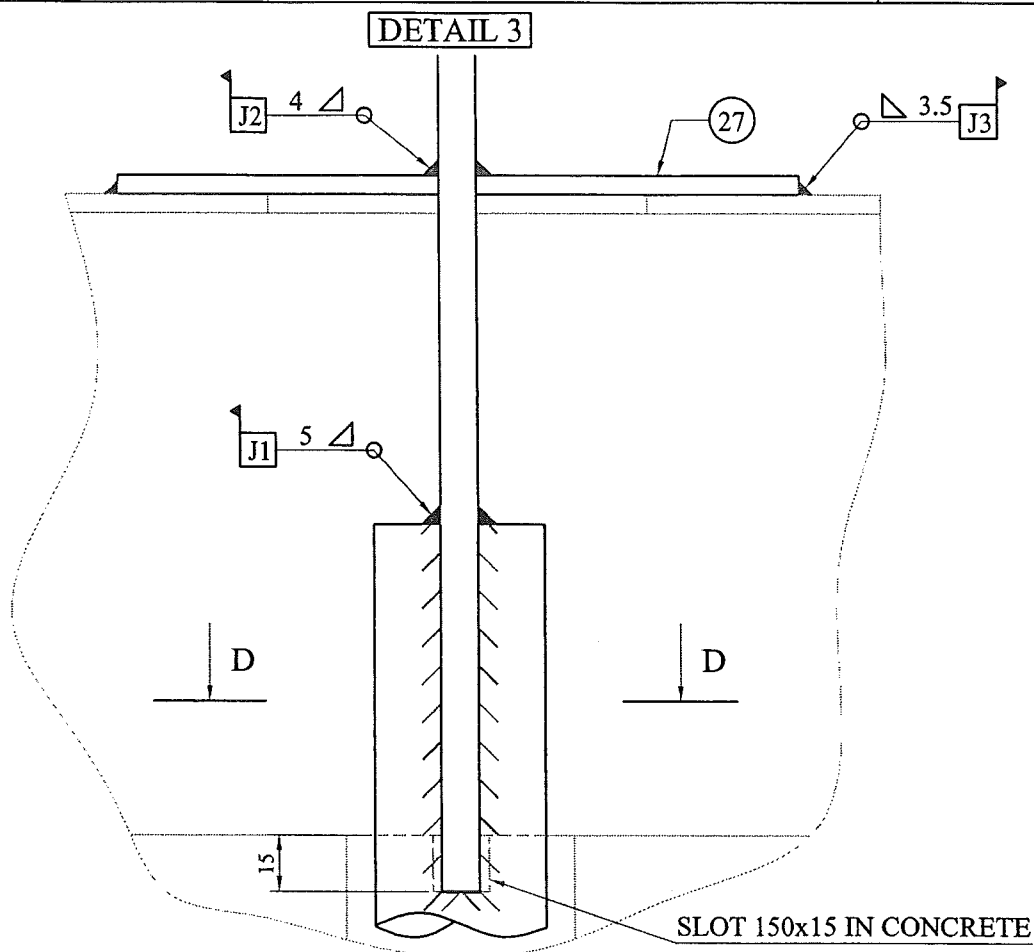
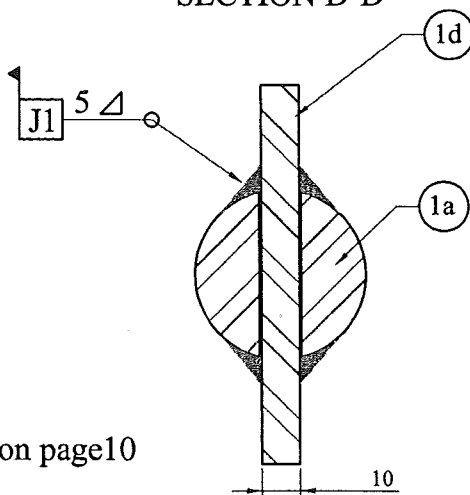
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Rev B

**Plan N° : 783-101****CIVIL ENGINEERING** INNER VESSEL STRAPS

Echelle/Scale

/

**SECTION D-D**

Welded joints J1 to J3 see WPS on page10  
for partlists see pages 11 to 14

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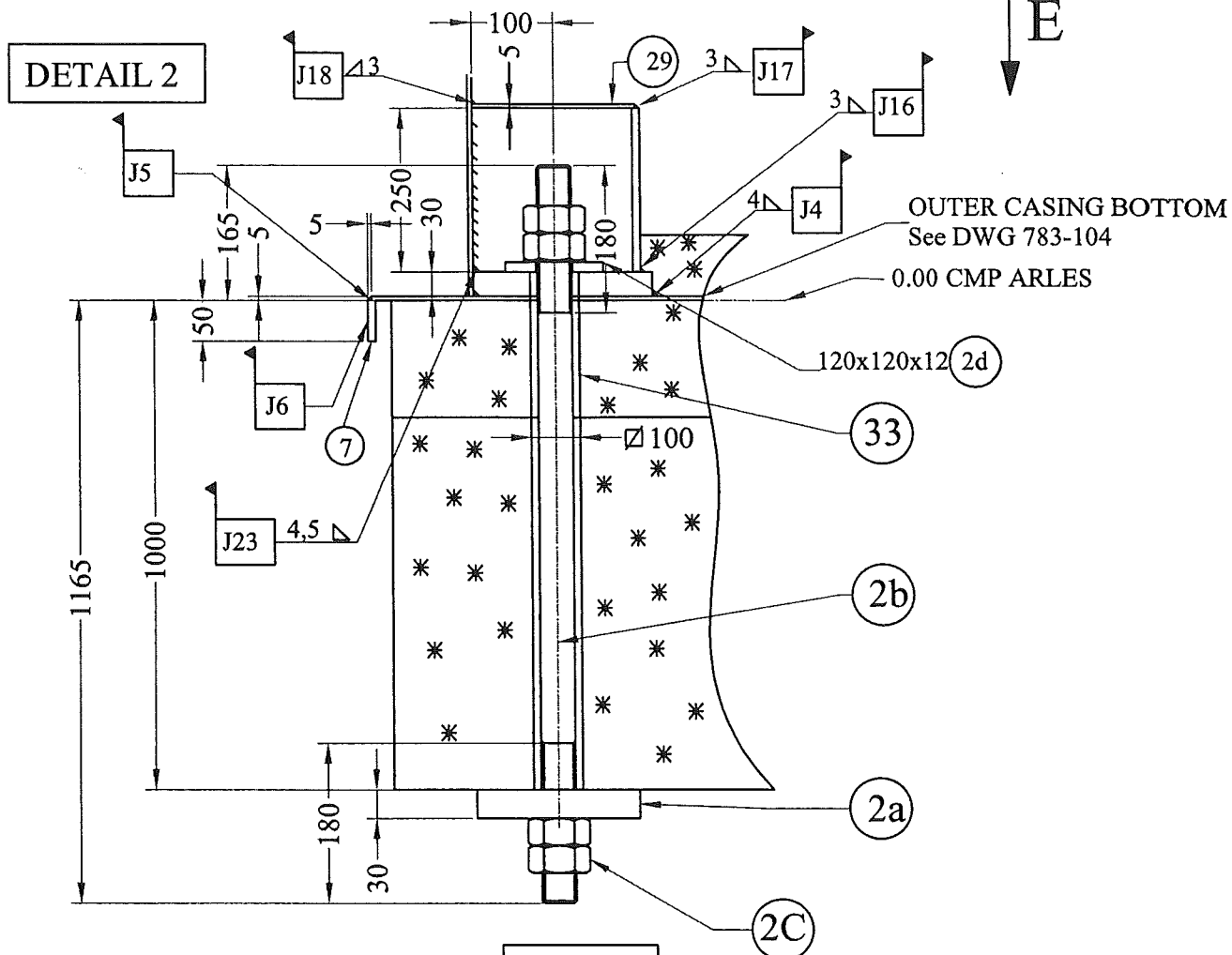
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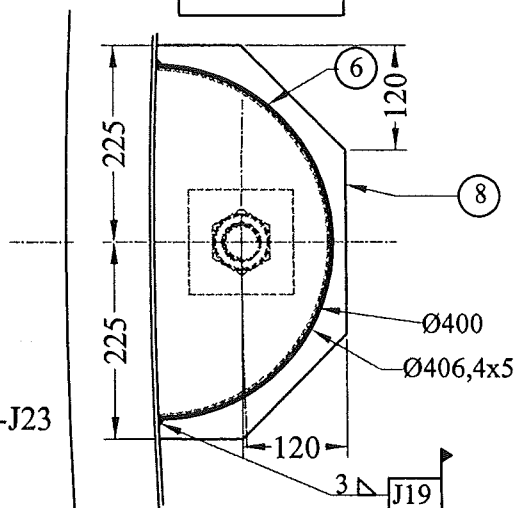
Plan N° : 783-101

CIVIL ENGINEERING OUTER CASING ANCHORING

Echelle/Scale  
1



E VIEW



Welded joints J4 to J6-J16 to J19-J23  
see WPS on page10  
for partlists see pages 11 to 14

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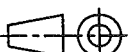
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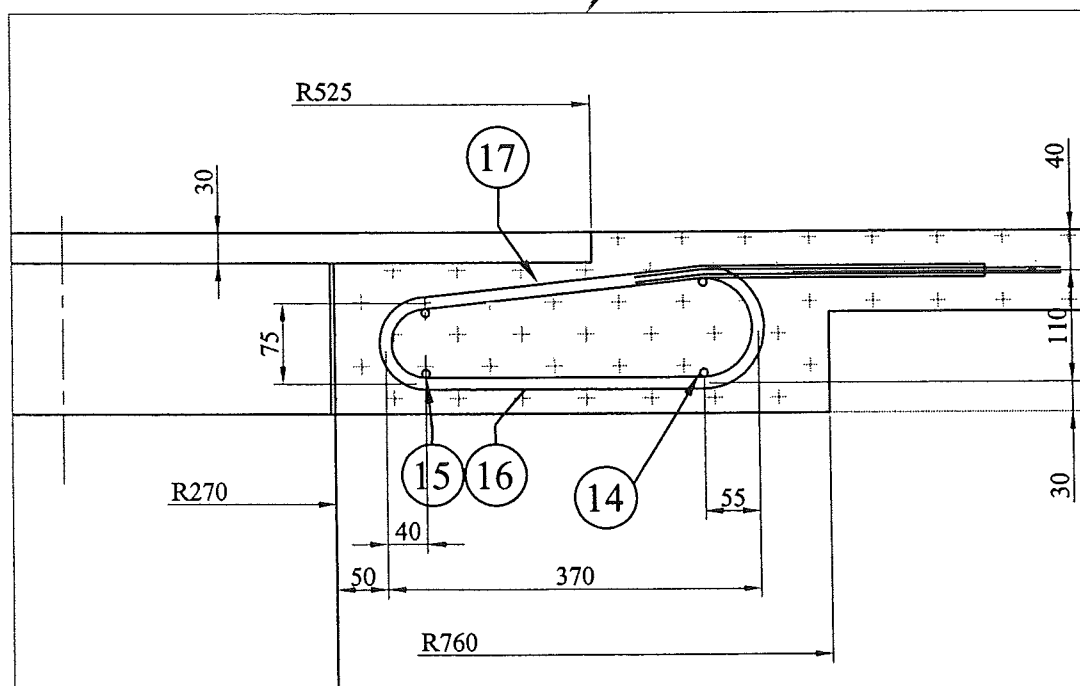
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Rev 0

**Plan N° : 783-101****SECTION G-G** Echelle/Scale  
/G-G

Ø1050

see DWG-117



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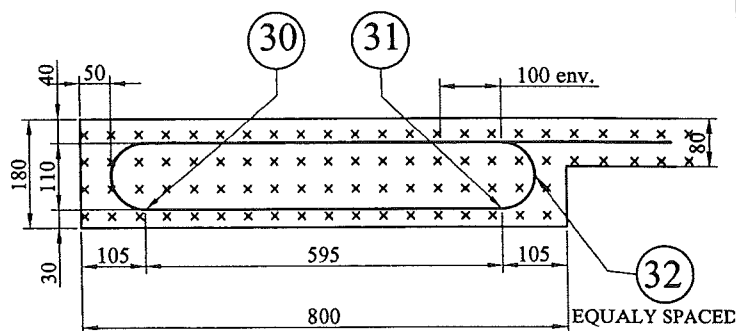
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Rev C

**Plan N° : 783-101****CIVIL ENGINEERING**Echelle/Scale  
/

Welded joints identification	Welding procedure specification (4)
J1	1201/1205
J2	1205
J3	3203
J4	2203
J5	2203
J6	2113
J15	0135
J16 to J18	2203
J19	2203
J23	2203/2201
(4) see list on CRYO-CS1	

1) TYPICAL FILLET WELD

2)  = SITE WELDING**DETAIL 4****NOTES:**

1- TOUTES LES COTES SONT EN MM - All sizes are in mm

2- LES COTES MARQUEES \*, SONT A CONFIRMER PAR L'ENTREPRISE DU GENIE CIVIL

The dimensions noted \*, must be confirmed by civil engineering.

3- COTES A DETERMINER PAR L'ENTREPRISE DU GENIE CIVIL

The dimension has to be determined by civil engineering

4- LA TOLERANCE DE PLANEITE ENTRE LE R=6300 ET LE R=4375 AU NIVEAU 0.00 CMP EST DE +/- 4MM

Flatness tolerance of the concrete support slab at level 0.00 CMP of the area between R=6300 and R=4375 is +/- 4mm

5- CHARGES A AJOUTER AU CAS DE CHARGES A.B.C.

Loads to be added to A.B. and C loading cases

6- LES TOLERANCES SUR LA POSITION DES ANCRAGES REP. 1 SONT: -5MM/+10MM SUR RAYON ET +/-5MM SUR CIRCONFERENCE

The tolerance for the inner straps (item 1) locations are: -5mm/+10mm on the radius and +/-5mm on the circumference

7- LA TOLERANCE SUR LE DEPASSEMENT DES ANCRAGES PAR RAPPORT AU BETON EST: -5MM/+10MM

The tolerance on height for the top of straps item 1 above concrete is: -5mm/+10mm

8- LES TOLERANCES SUR LA POSITION DES ANCRAGES DE LA D.E. SONT: +/-5MM SUR LE RAYON ET +/-5MM SUR LA CIRCONFERENCE

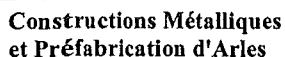
The outer bolt sleeve tolerances shall be +/-5mm on the radius and +/-5mm on the circumference

9- LA POSITION DES ANCRAGES REP 1 SITUES SUR LA TANGENTE AU R=4950 EST DE +/-5° (VOIR CROQUIS)

The position of the anchors on R=4950 is +/-5° (see F view on page 6)

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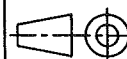
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Rev A

**Plan N° : 783-101**

## NOMENCLATURE/LISTE DE COLISAGE

PART LIST/PACKING LIST



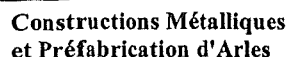
Echelle/Scale

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Rev B

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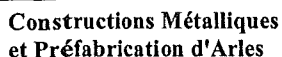
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REP	Q16	DESIGNATION	rev	NORME/NUANCE	EN10204	FOODSNET kg	CERTIF. N°
ITEM	Q1v	DESIGNATION	rev	NORM/MATERIAL	CERTIF.	NET WEIGHT	VISA EXP.

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