

Dossier CMP Arles : 783

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Client / Customer : AIR LIQUIDE AGS GmbH

Engineered System N° :


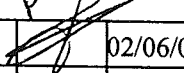

# 1 RESERVOIR DE STOCKAGE LOX 1800 MT

## 1 X 1800 MT LOX STORAGE TANK

### ITEM B 62001

## PLAN DE GENIE CIVIL

### CIVIL ENGINEERING

3		02/06/05	HONNONS		02/06/05	HULIN		02/06/05	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				VERIFICATEUR				APPROBATEUR			
DRAWN UP BY				CHECKED BY				APPROVED BY			

Projet : **K70101 ASU KOSICE**  
ProjectClassement CMP Arles : **783-01**  
CMP Arles document N°

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**Client / Customer : AIR LIQUIDE AGS GmbH****Plan N° : 783-01****INDICE DE REVISION: 0/A/B/ / / / /**

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							
2	List of current revisions / subject of modifications	1	2	3							
3	Data	1									
4	Elevation view	1	2								
5	Anchor orientations	1	2	3							
6	Sleeve in concrete	1	2								
7	Straps for inner vessel	1	2								
8	Outer casing anchoring	1	2								
9	Notes	1									
10	Part list / packing list	1	2								
11	Part list / packing list	1									
12	Part list / packing list	1									
13	Part list / packing list	1									

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

INDICE DE L'EDITION	OBJET DE LA MODIFICATION
<i>Edition N°</i>	<i>Subject of the modification</i>
1	First issue
2	Added slab height, draw-off location and embedded length for anchorings
3	Final issue

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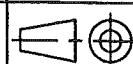
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Rev 0

Plan N° : 783-01

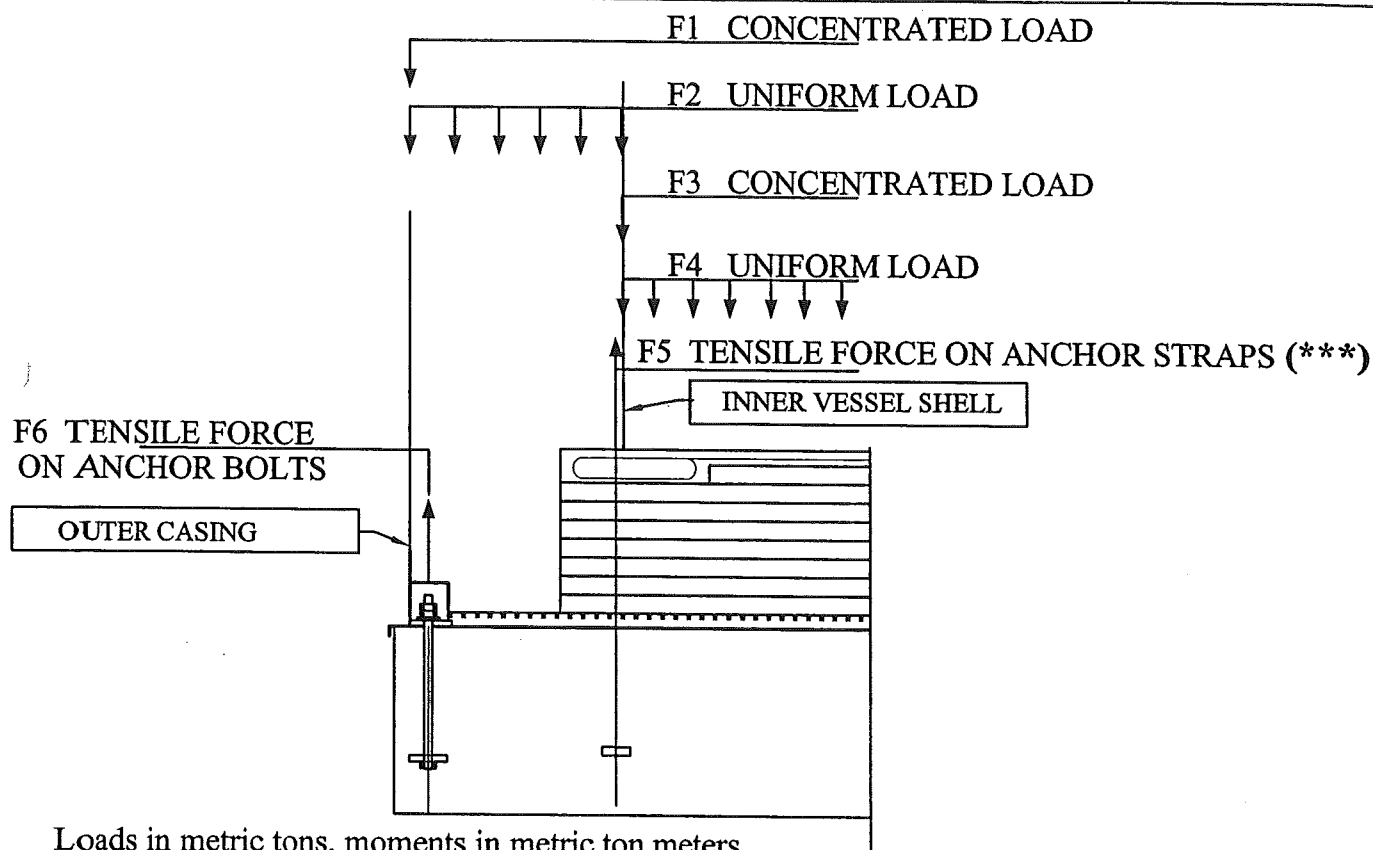
CIVIL ENGINEERING

DATA FOR CIVIL ENGINEERING



Echelle/Scale

/



Loads in metric tons, moments in metric ton meters

A/ FULL OF LIQUID WITHOUT GAS PRESURE

F1=53 F2=46.5 F3=50.1 F4=1915.7 F5=0

B/ FULL OF LIQUID WITH GAS PRESURE

F1=53 F2=46.5 F3=0 F4=2168.7 F5=5.1x40=204

C/ HYDROPNEUMATIC TEST

F1=53 F2=6.6 F3=0 F4=2008.7 F5=6.9x40=276

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

F1=25

E/ LOADS DUE TO WIND (see note 5)

SHEAR FORCE: 27 MOMENT(at 0.00CMP):244.1 F6=4.2x16=67.2

F/ LOADS DUE TO EARTHQUAKE (see note 5)

SHEAR FORCE: 233 MOMENT(at 0.00CMP):1539.9

F5=9.8x40=392 F6=2x16=32

(\*\*\*) 10% of straps (with a mini of 4 straps, every 90°)

shall be individually tested at the force of 16.6 Tons , at time of slab acceptance.

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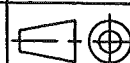
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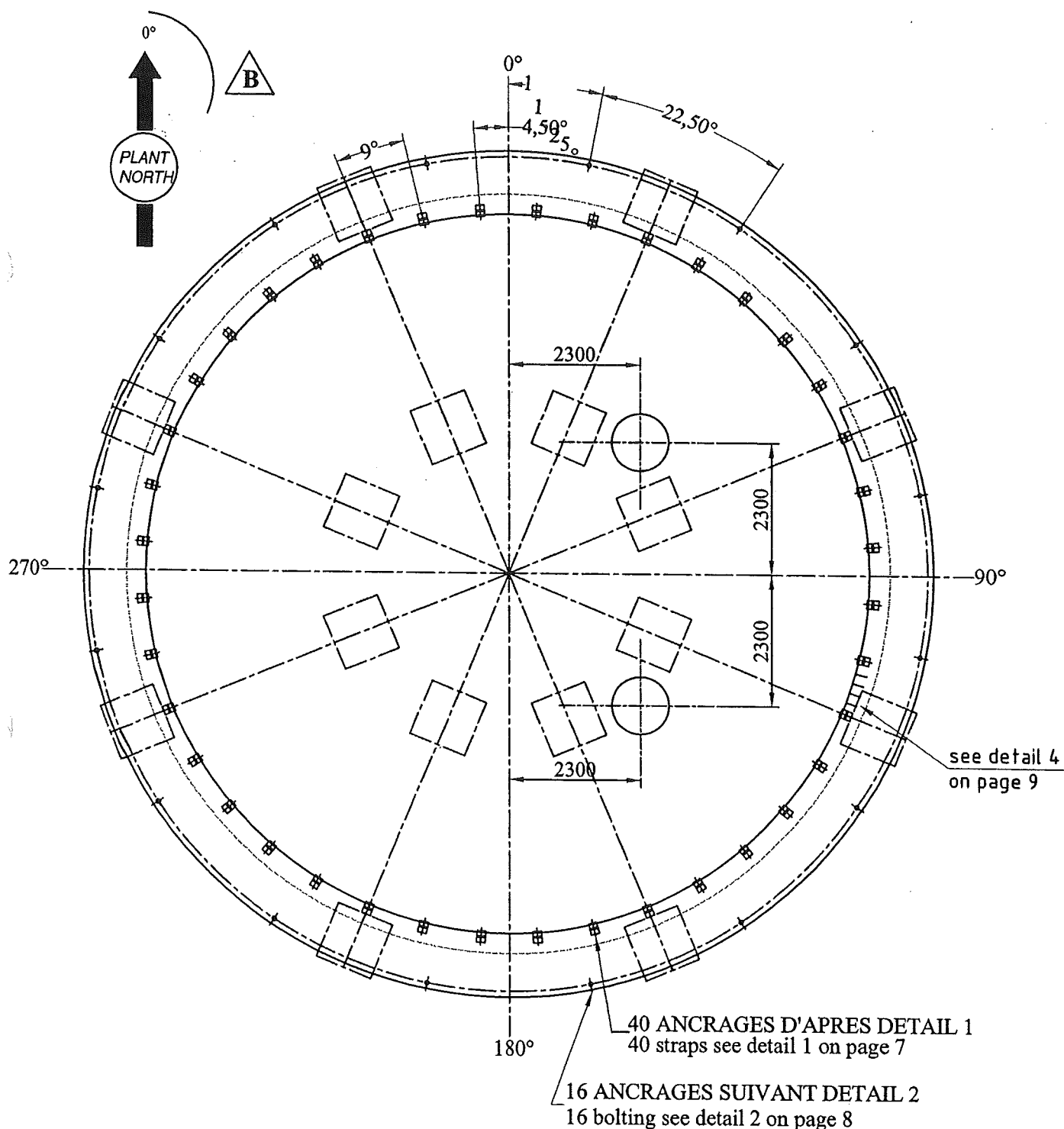
CIVIL ENGINEERING ANCHOR ORIENTATIONS  
(PLAN VIEW)

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Rev B



Echelle/Scale  
1/100



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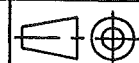
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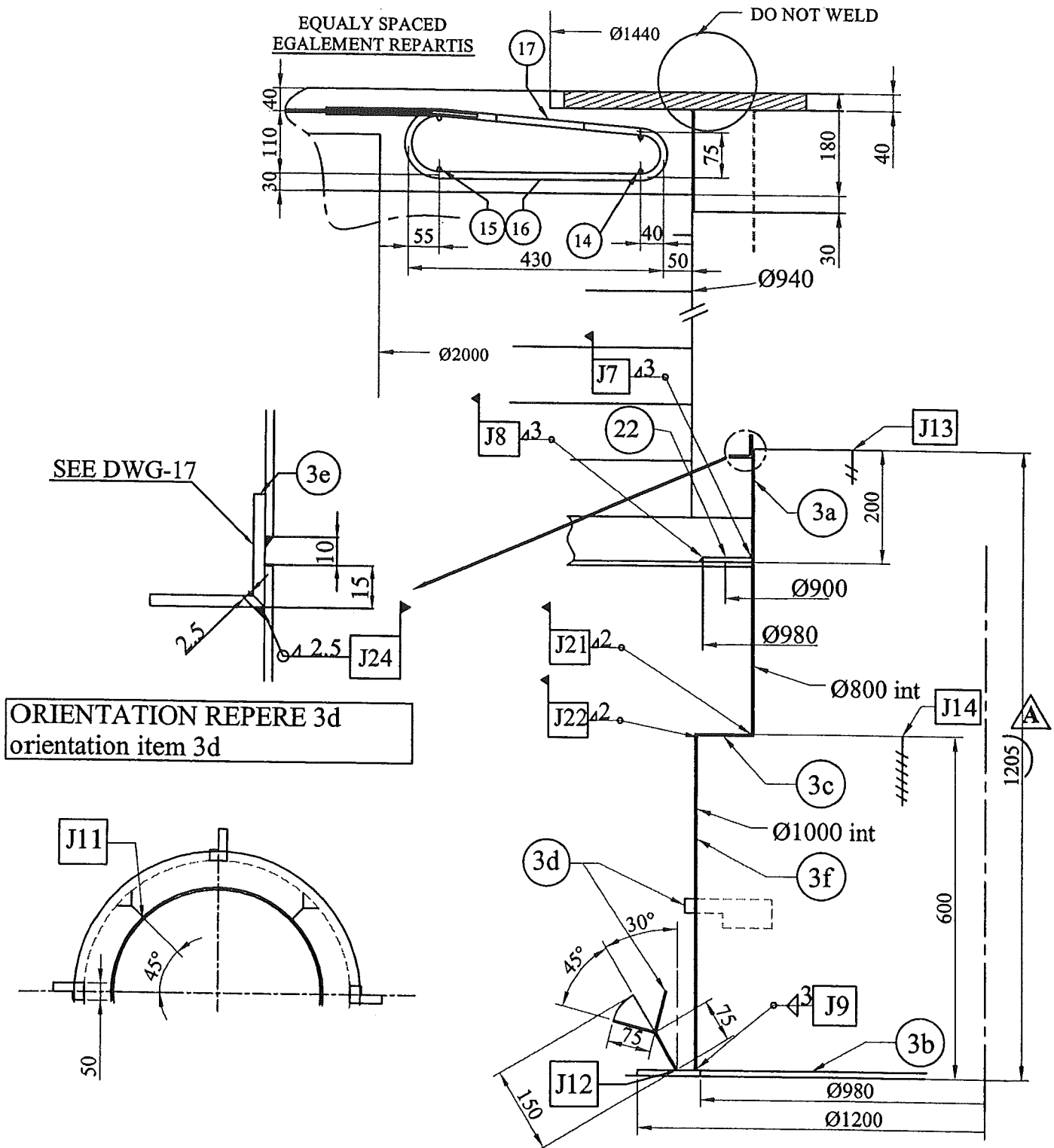
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CIVIL ENGINEERING

DETAIL 3



Echelle/Scale  
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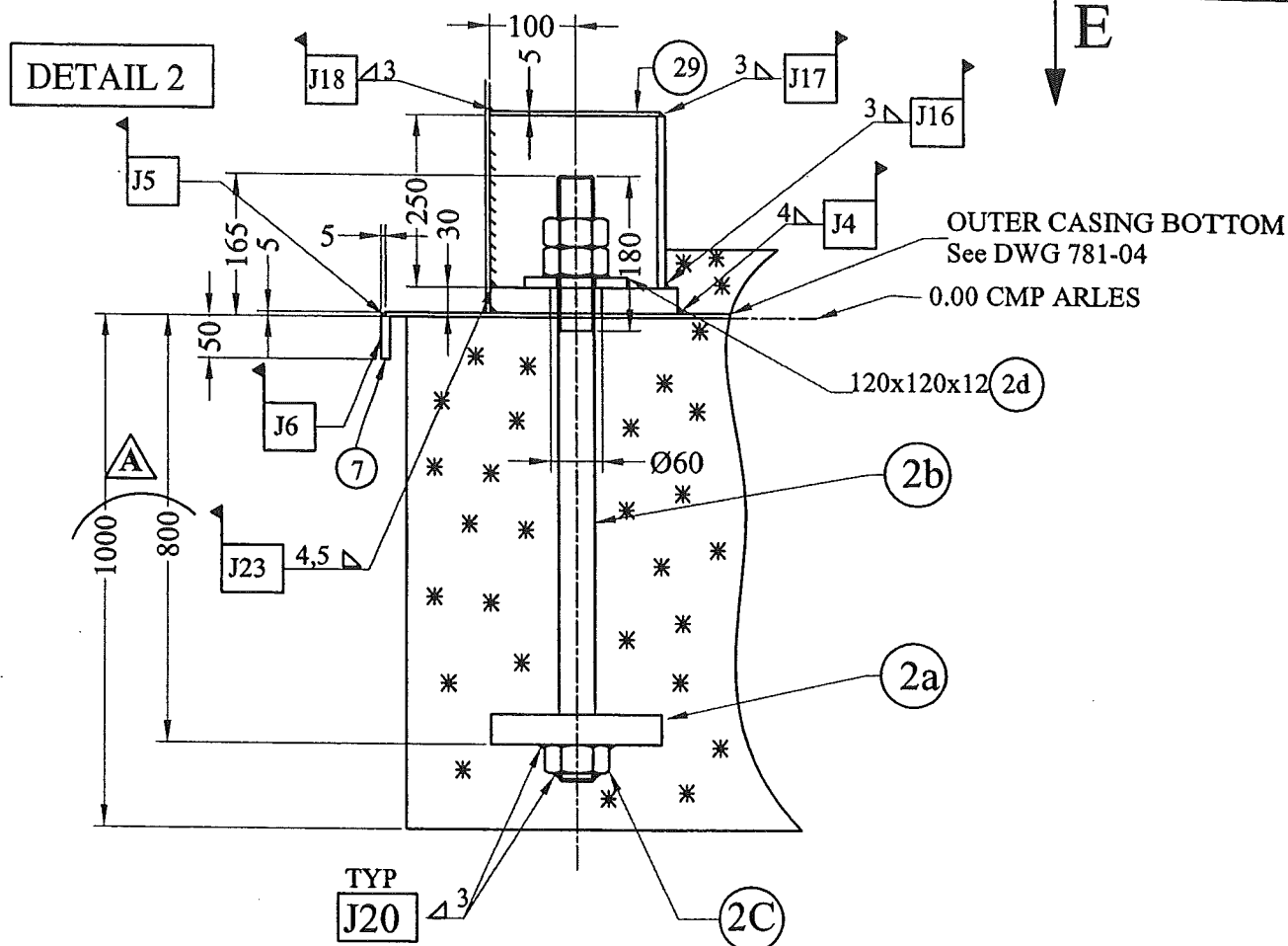
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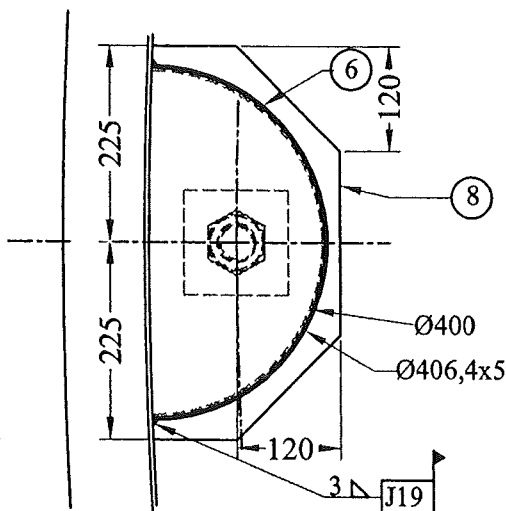
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CIVIL ENGINEERING OUTER CASING ANCHORING

Echelle/Scale



E VIEW



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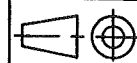
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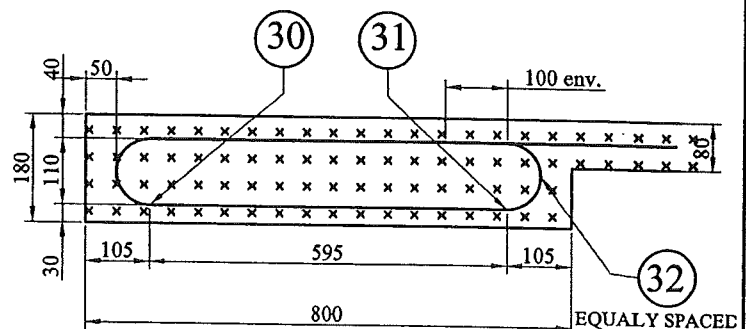
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**Plan N° : 783-01****CIVIL ENGINEERING**Echelle/Scale  
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Welded joints identification	Welding procedure specification (4)
J1	0201
J2	1205
J3	3203
J4	2203
J5	2203
J6	2113
J7	1205
J8	3203
J9	1201/1205
J11-J12	1201/1205
J13-J14	1108
J15	0135
J16 to J18	2203
J19	2203
J20	2203/2201
J21	1201/1205
J22	1201/1205
J23	2203/2201
J24	1201/1205
(4) see list on CRYO-CS1	

1) TYPICAL FILLET WELD

2)  = SITE WELDING**DETAIL 4**

ES:

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=7475 ET LE R=5775 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=7475 and R=5775 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

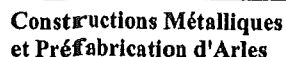
The outer bolt sleeve tolerances shall be +/-5mm on the radius and +/-5mm on the circumference

9- LA POSITION DES ANCRAGES REP 1 SITUES SUR LA TANGENTE AU R=6350 EST DE +/-5° (VOIR CROQUIS)

The position of the anchors on R=6350 is +/-5° (see sketch)

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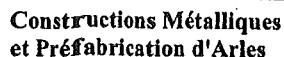
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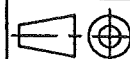
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Rev 0

**Engineered System N° :**

## NOMENCLATURE/LISTE DE COLISAGE

PART LIST/PACKING LIST



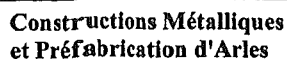
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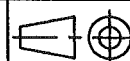
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## NOMENCLATURE/LISTE DE COLISAGE

PART LIST/PACKING LIST



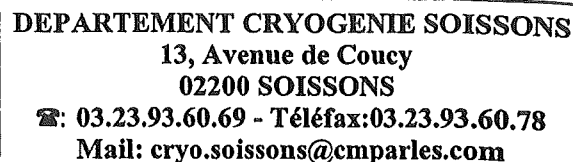
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