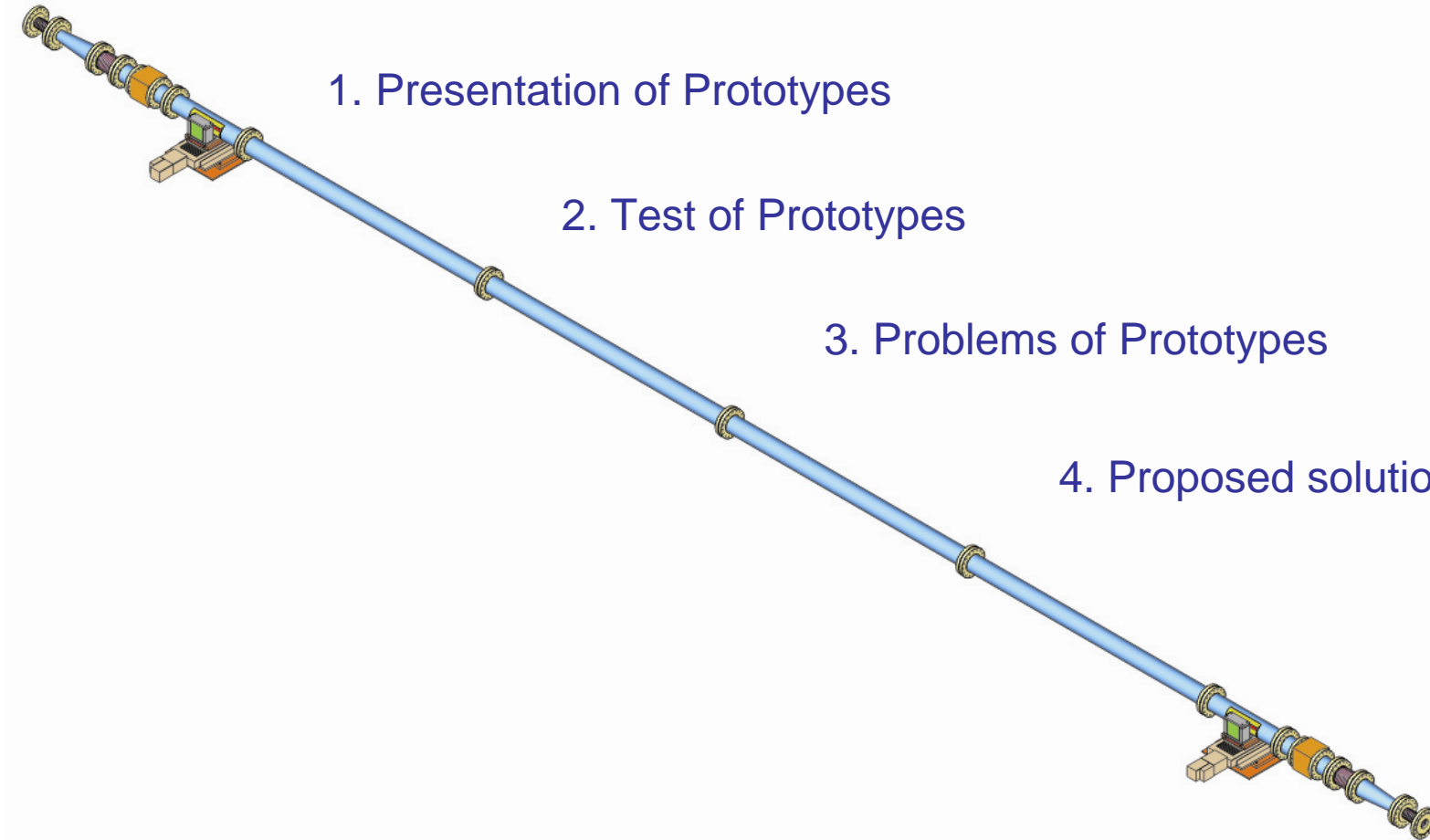


Hambourg Pipe : PROTOTYPES



1. Presentation of Prototypes

2. Test of Prototypes

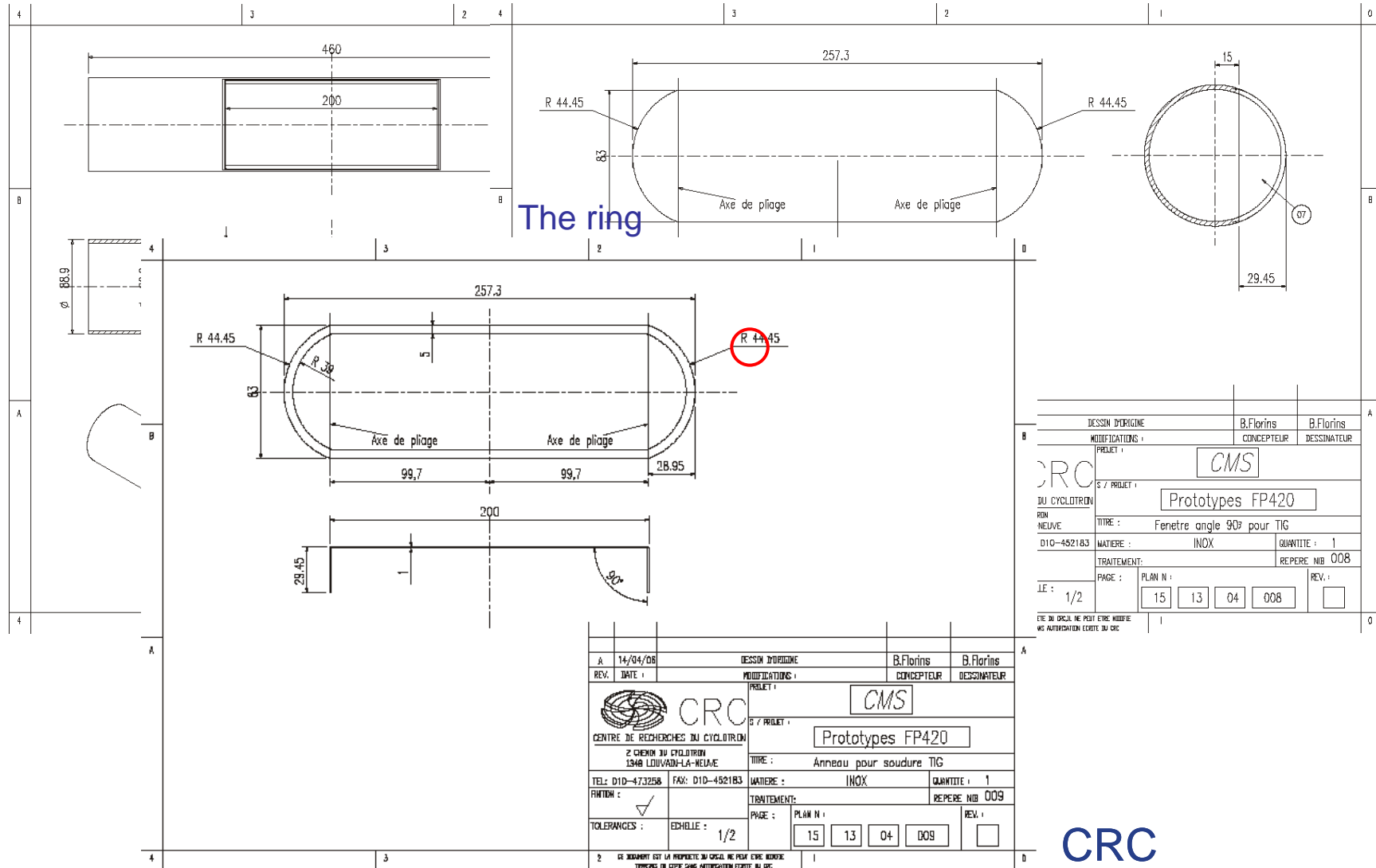
3. Problems of Prototypes

4. Proposed solutions



Hambourg Pipe : PROTOTYPES

1. Presentation of prototypes



DESSIN D'ORIGINE	B.Florins	B.Florins
MODIFICATIONS :	CONCEPTEUR	DESSINATEUR
PROJET :	CMS	
S / PROJET :	Prototypes FP420	
TITRE :	Fenetre angle 90° pour TIG	
MATIERE :	INOX	QUANTITE : 1
TRAITEMENT :	REPERE NIB 008	
PAGE :	PLAN N :	REV. :
1/2	15 13 04 008	

REV. DATE :	DESSIN D'ORIGINE	B.Florins	B.Florins
14/04/06	CONCEPTEUR	DESSINATEUR	
MODIFICATIONS :		PROJET :	
		CMS	
S / PROJET :		Prototypes FP420	
TITRE :		Anneau pour soudure TIG	
MATIERE :		INOX	QUANTITE : 1
TRAITEMENT :		REPERE NIB 008	
PAGE :		PLAN N :	REV. :
		15 13 04 008	

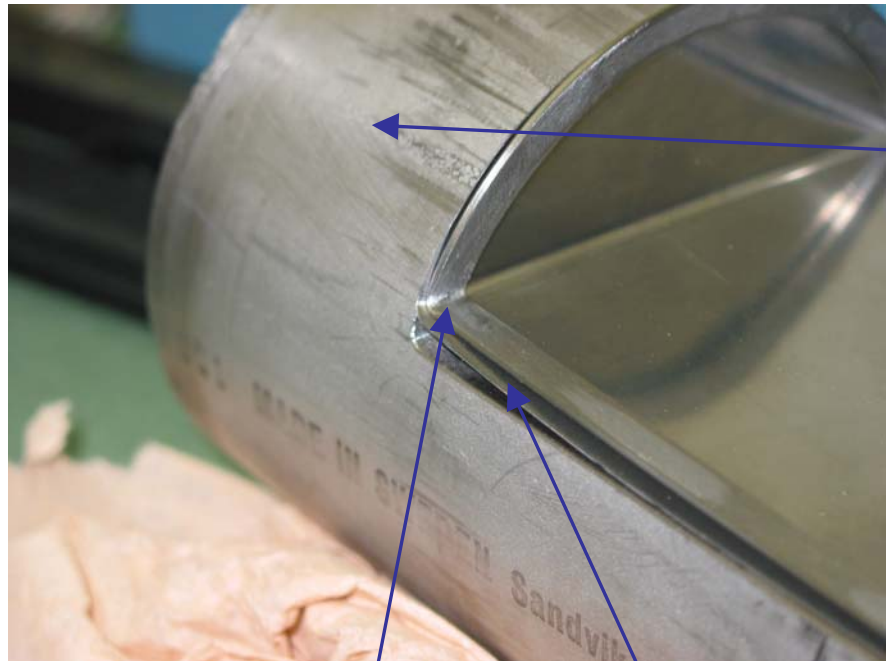
CRC
Louvain-la-Neuve

2 CE DOCUMENT EST LA PROPRIETE DU CRC. NE PEUT ETRE REPRODUIT NI COMMUNIQUE SANS AUTORISATION ECRITE DU CRC.

Hambourg Pipe : PROTOTYPES

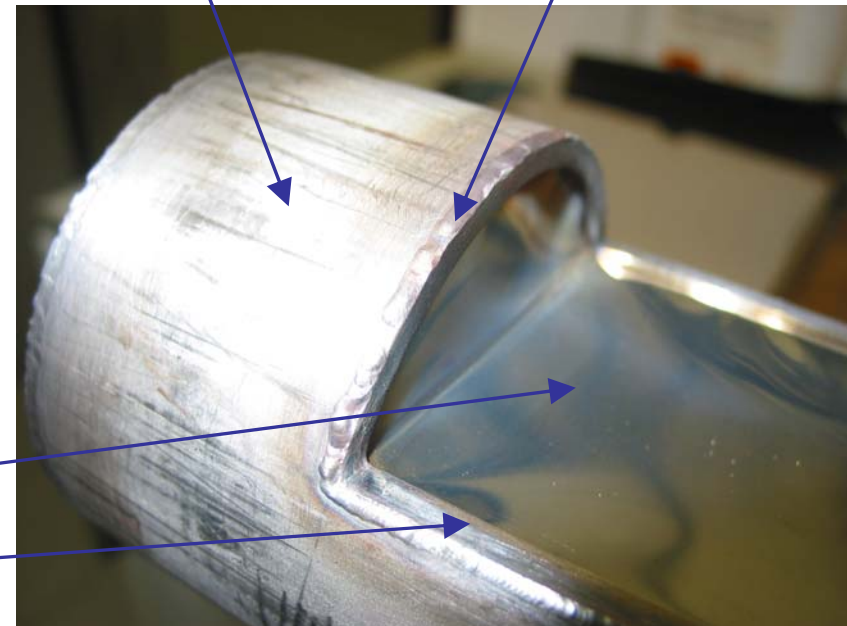
1. Presentation of prototypes

Before Welding



After Welding

Small deformations



Tube

Welding TIG

Window

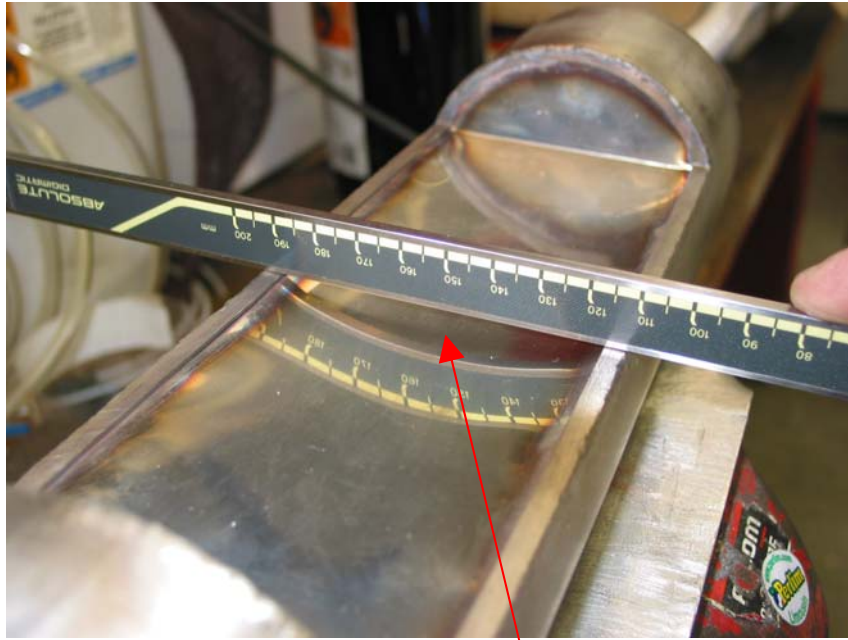
Ring for welding

CRC

Louvain-la-Neuve

Hambourg Pipe : PROTOTYPES

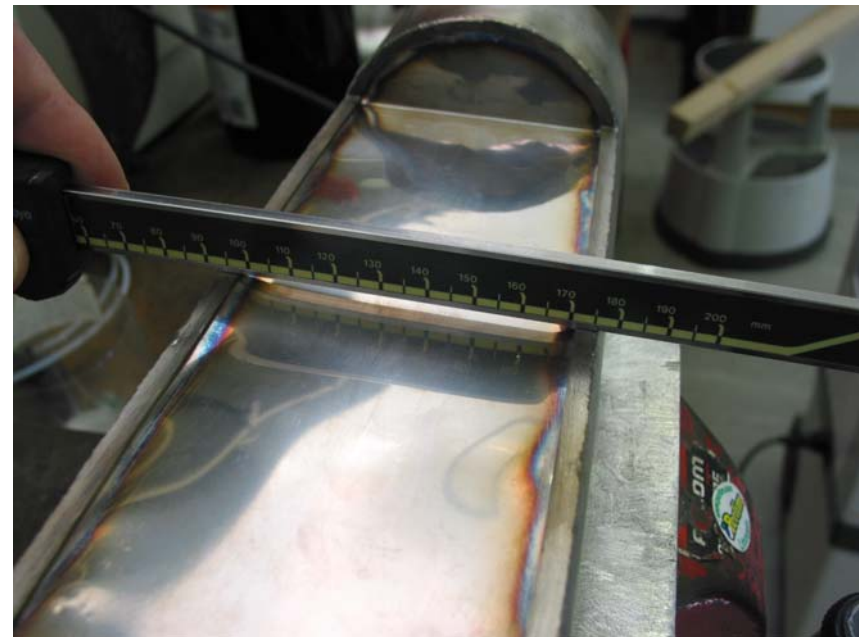
2. Test of prototypes : DEFORMATION



With vacuum:

Deformation of 5mm

Without vacuum:



Hambourg Pipe : PROTOTYPES

2. Test of prototypes : PRESSURE



Pressure of 3 bars water



Pressure of 15 bars water

Small Leak at 7 bars →



Hambourg Pipe : PROTOTYPES

3. Problems of prototypes

1. Irregular surface
2. High deformation
3. Reliability of welding
4. Need a ring for welding

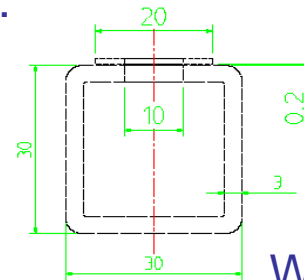
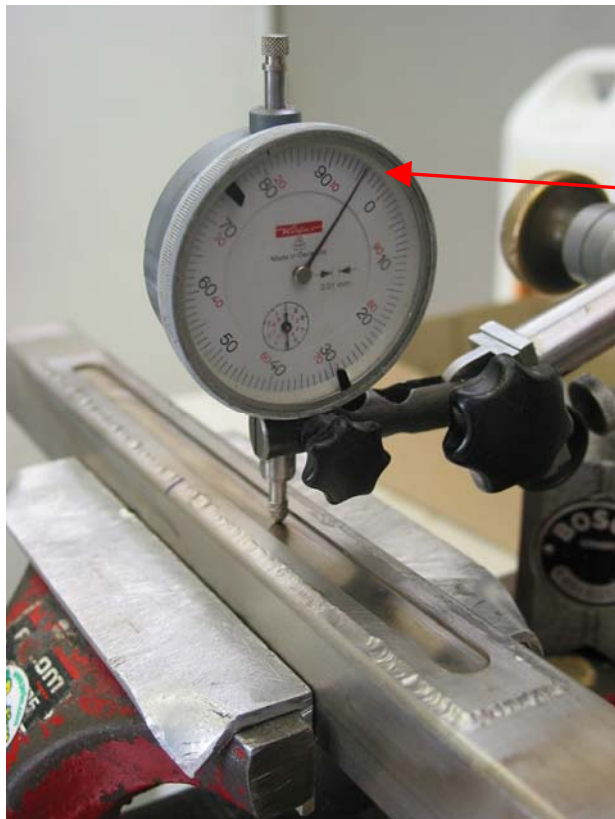


Hambourg Pipe : PROTOTYPES

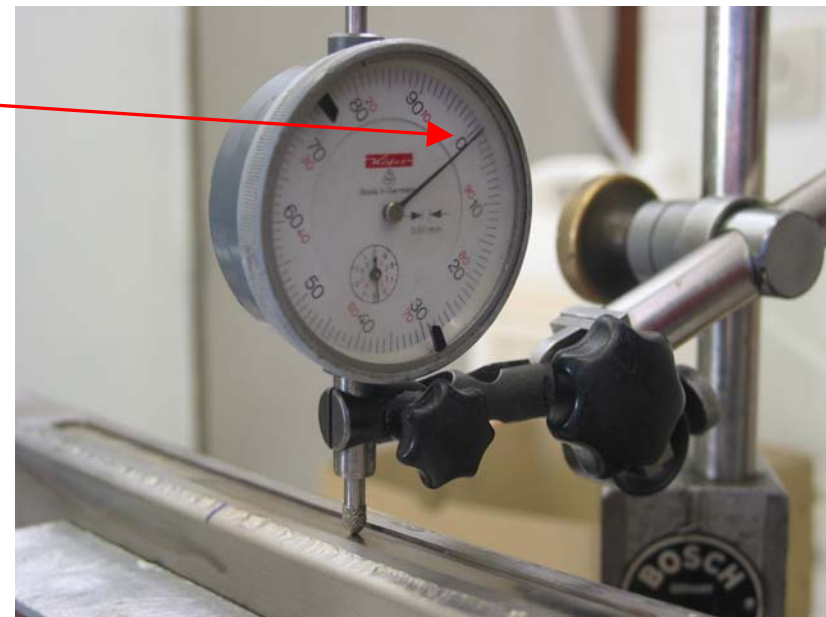
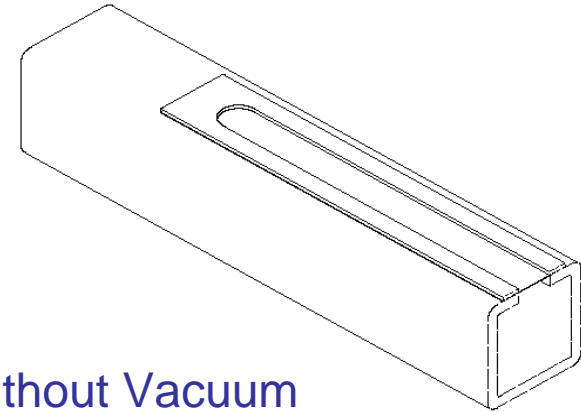
4. SOLUTIONS

Reduce the height of the window:

With Vacuum



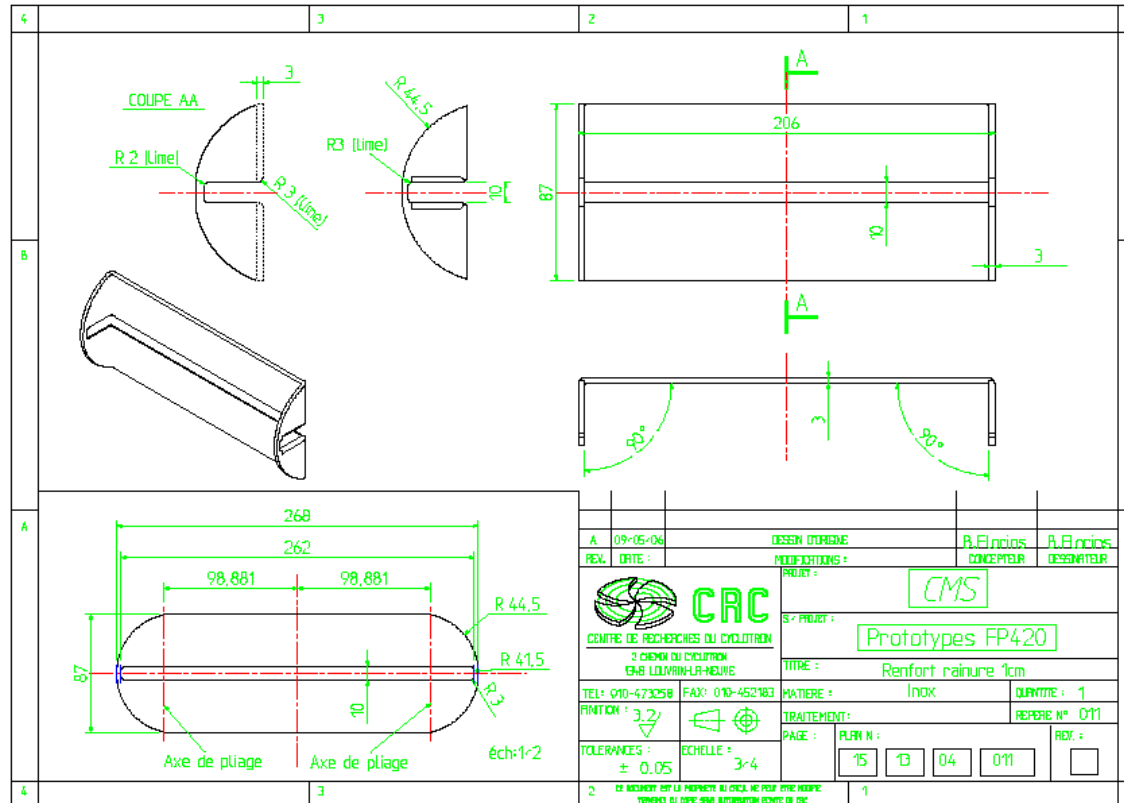
Without Vacuum



Deformation of 0,05 mm

Hambourg Pipe : PROTOTYPES

4. SOLUTIONS

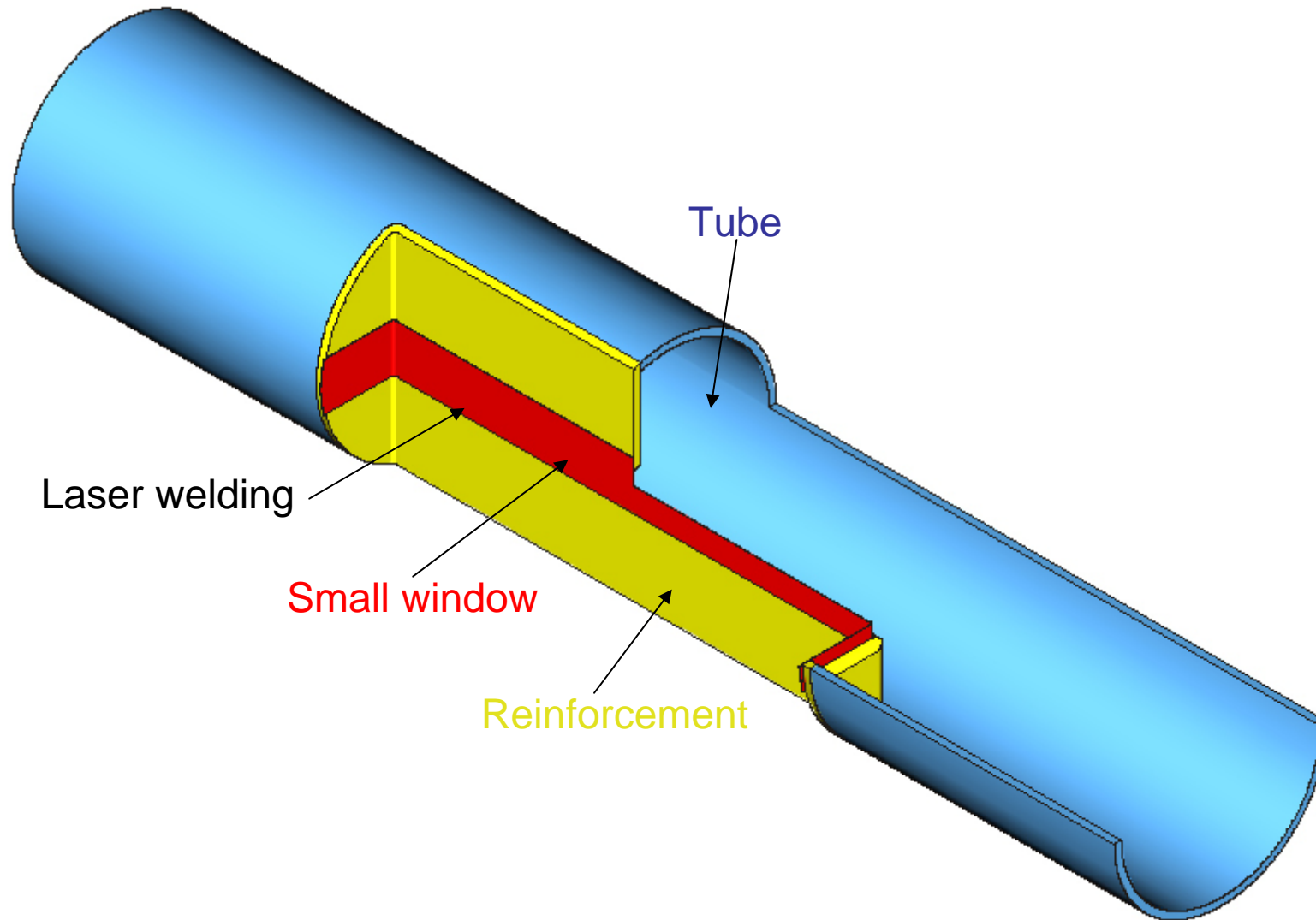


Reduce the height of the window

By using a reinforcement

Using LASER WELDING to avoid local deformations

Hambourg Pipe : PROTOTYPES



Hambourg Pipe : PROTOTYPES

THANKS