

Experimental Set-up

Sample :

Two plates respectively of 10 mm and 6 mm of Steel are put together with a step-wedge from 1 to 12 mm. Altogether, the step-wedge is from
17 to 28 mm of Steel

IQI :

IQI EN 462-1 (10 FE EN) with wires of :
400-320-250-200-160-125-100 μ m
is added.

Geometry :

DeReO 1313 is an @Si – 127 μ m – 13 x 13 cm panel. It is positioned behind the step-wedge. GemX-200 is positioned at 40 cm in front of the system. SSD is 46 cm away given the focal spot is 6 cm inside the generator).



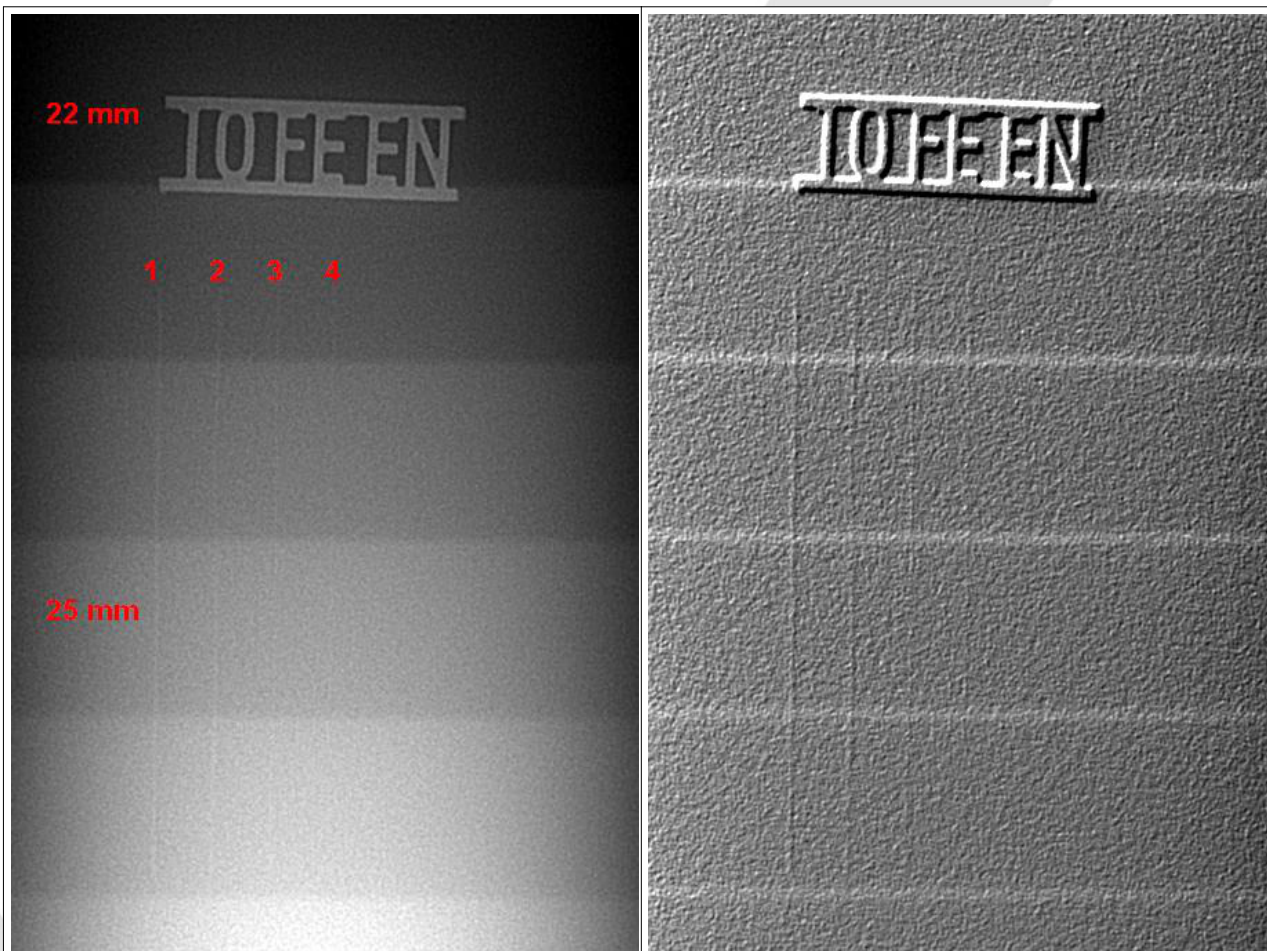
Flat panel

40 cm

GemX-200

Step-wedge

www.xris.eu



X-ray Image

Embossing

/ NB : pictures in this report are heavily compressed / Screen set-up may affects image quality /

On the X-ray Image :

- * 3rd wire of 250 µm can be seen behind 25 mm of Steel → contrast resolution of 0.25 / 25 = 1.0 %
- * 4th wire of 200 µm can be seen behind 24 mm of Steel → contrast resolution of 0.2 / 24 = 0.83 %

With embossing :

- * 4th wire of 200 µm can be seen behind 25 mm of Steel → contrast resolution of 0.25 / 25 = 0.8 %
- * 5th wire of 160 µm can be seen behind 24 mm of Steel → contrast resolution of 0.2 / 24 = 0.67 %