

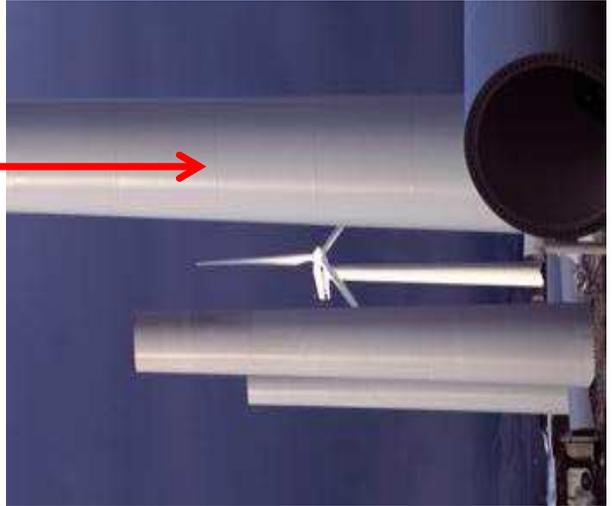
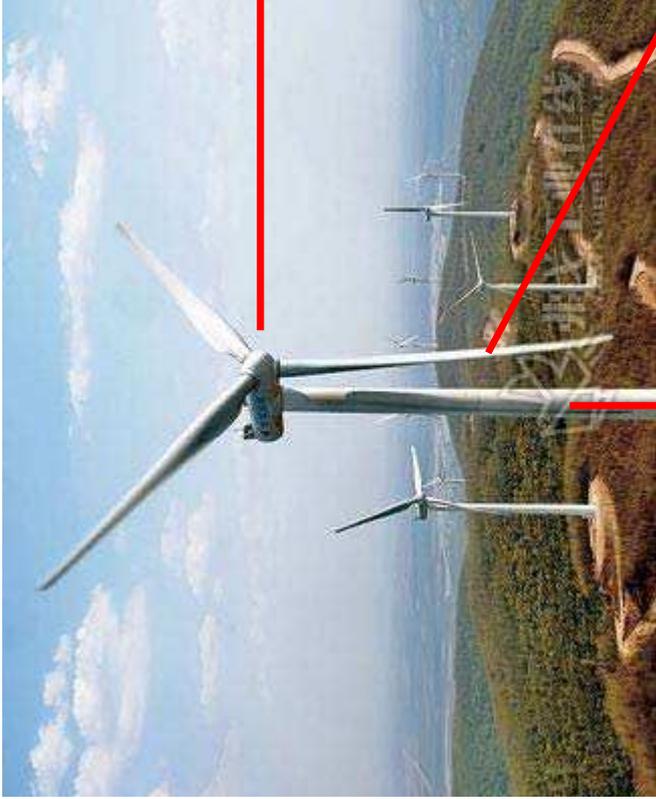
OLYMPUS



Your Vision, Our Future

Contrôles ultrasons et courants de Foucault dans le secteur éolien

François Vicat



Contrôle soudure

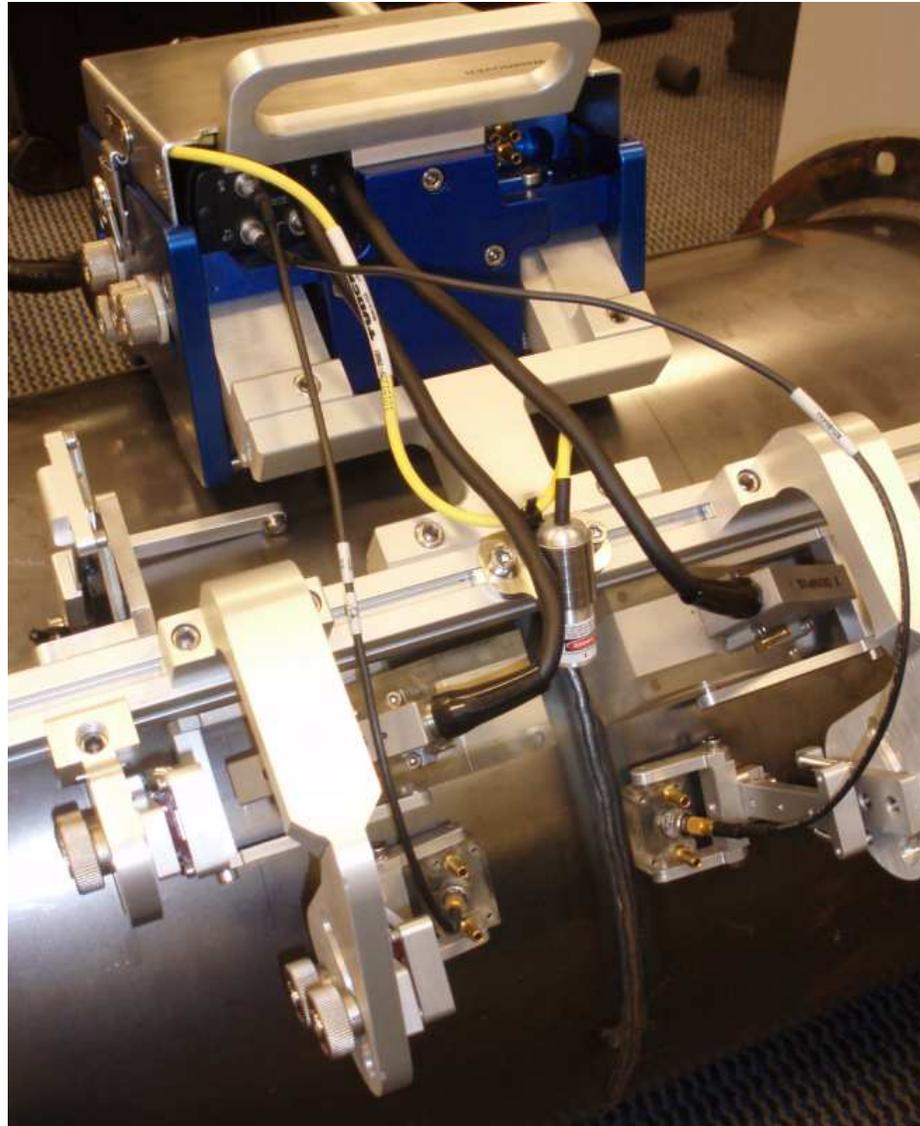


Diamètre mini 100mm en
circonférentiel
Diamètre minimum 760mm
en longitudinal



Contrôle soudure

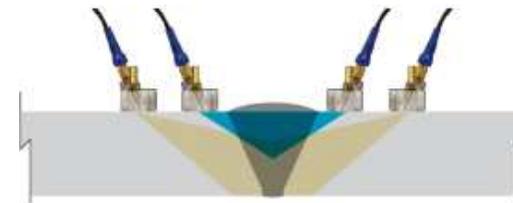
Jusqu'à 6 palpeurs.



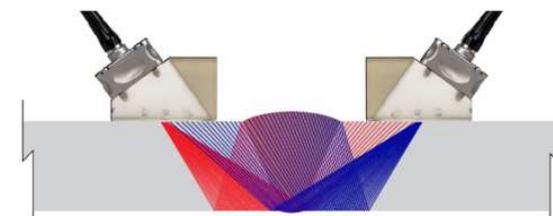
Inspection de soudure



UT Conventionnels

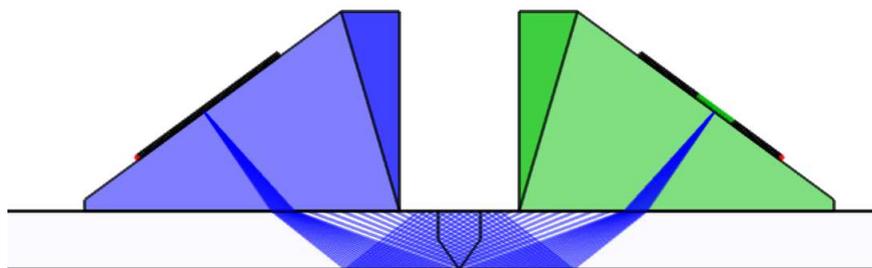


TOFD

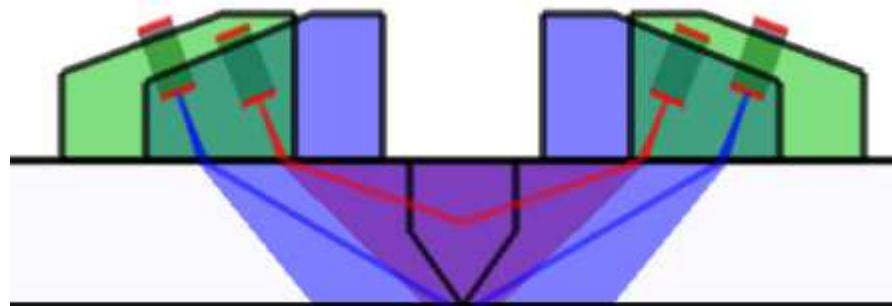


Phased Array

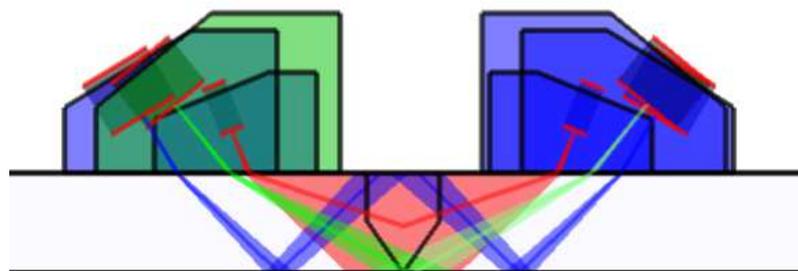
Exemples de techniques de contrôle



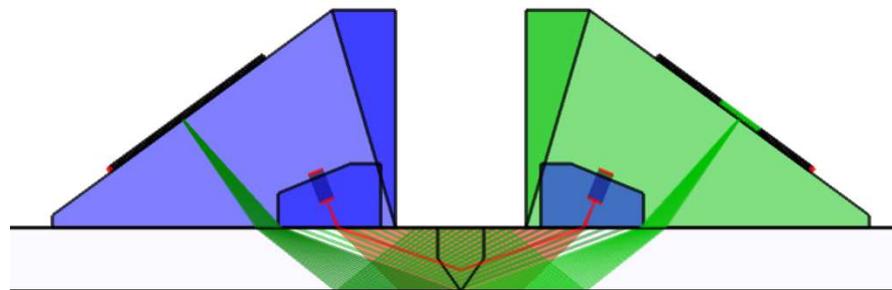
Phased Array



Multi-zone TOFD

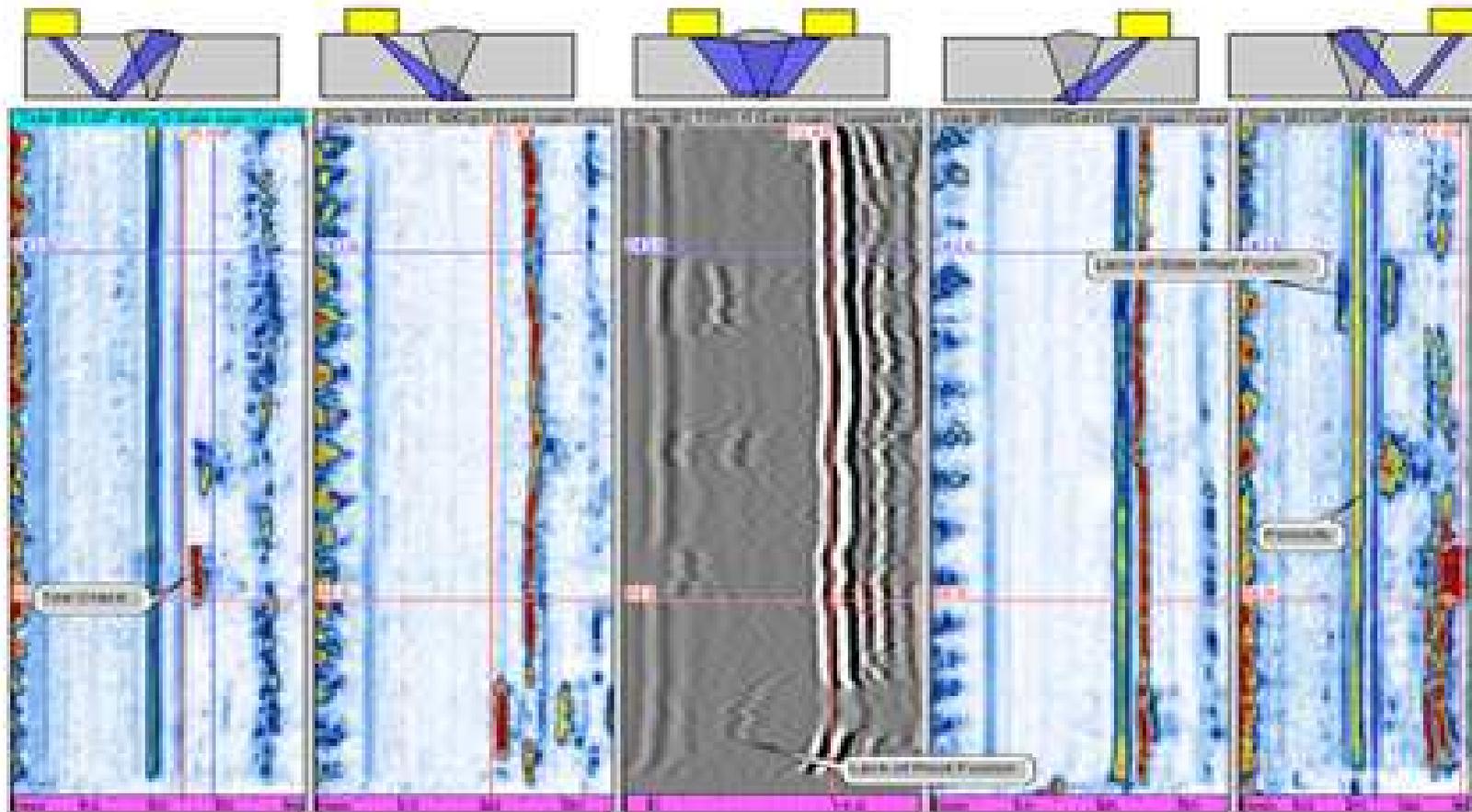


Pulse Echo et TOFD

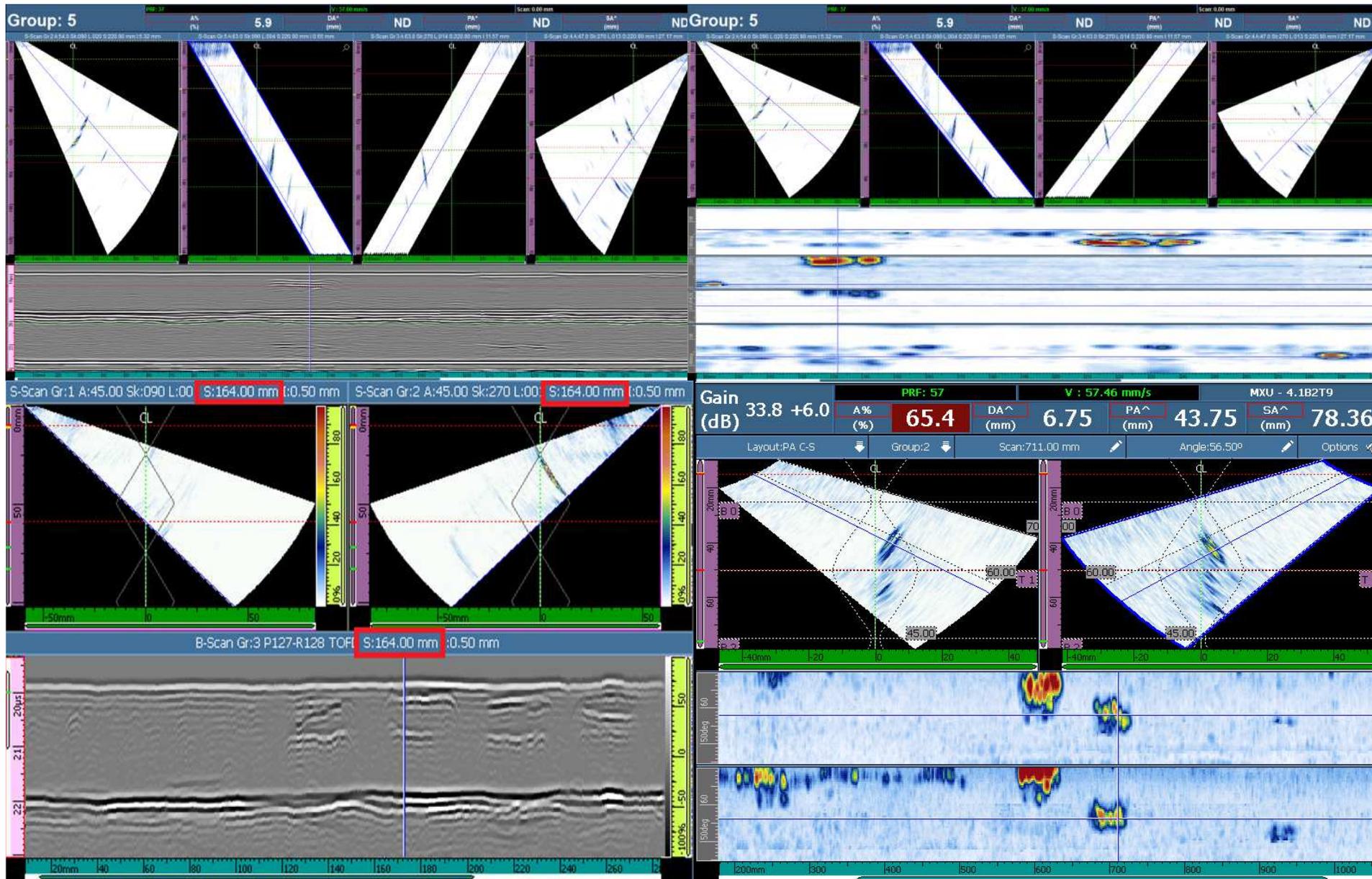


Phased Array et TOFD

Exemple de configuration



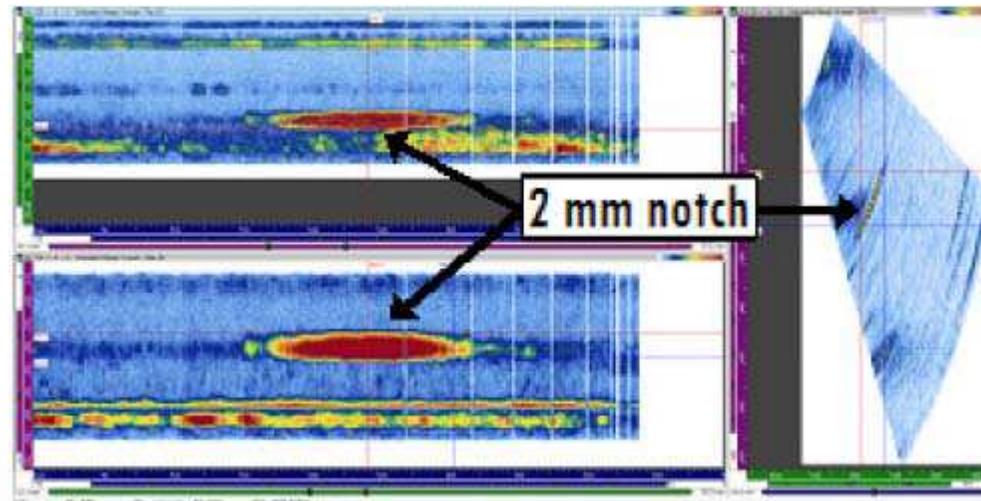
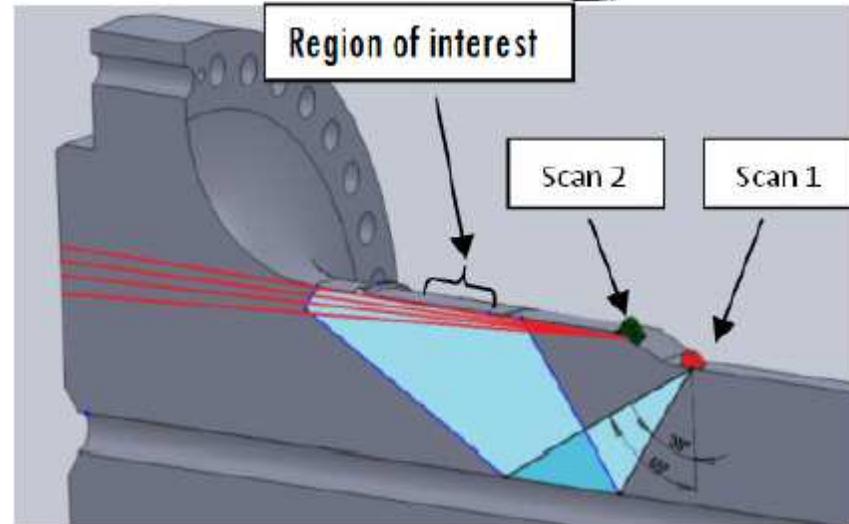
Contrôle multi-groupes de la soudure



Contrôle soudure



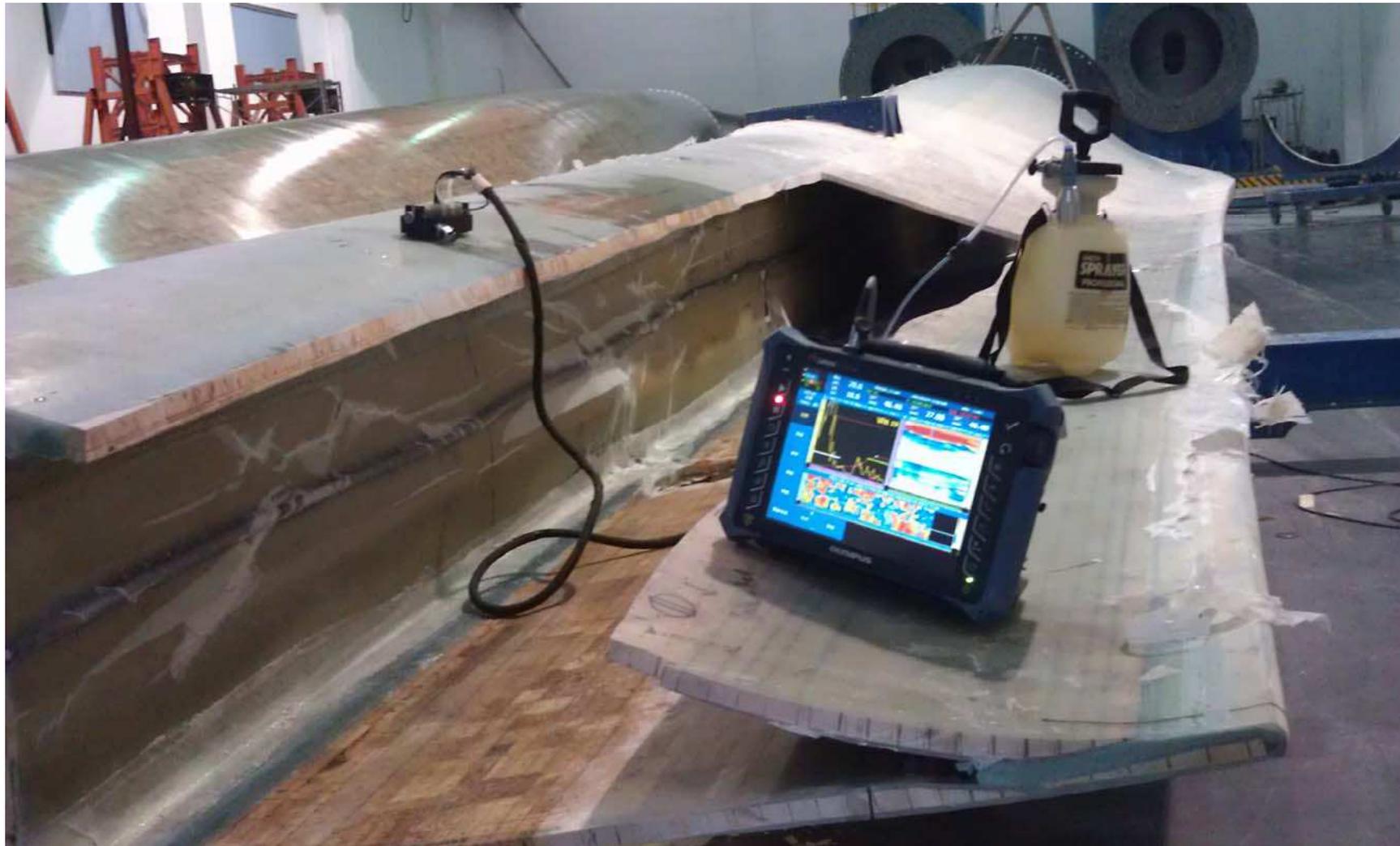
Contrôle d'arbre



Contrôle de pale



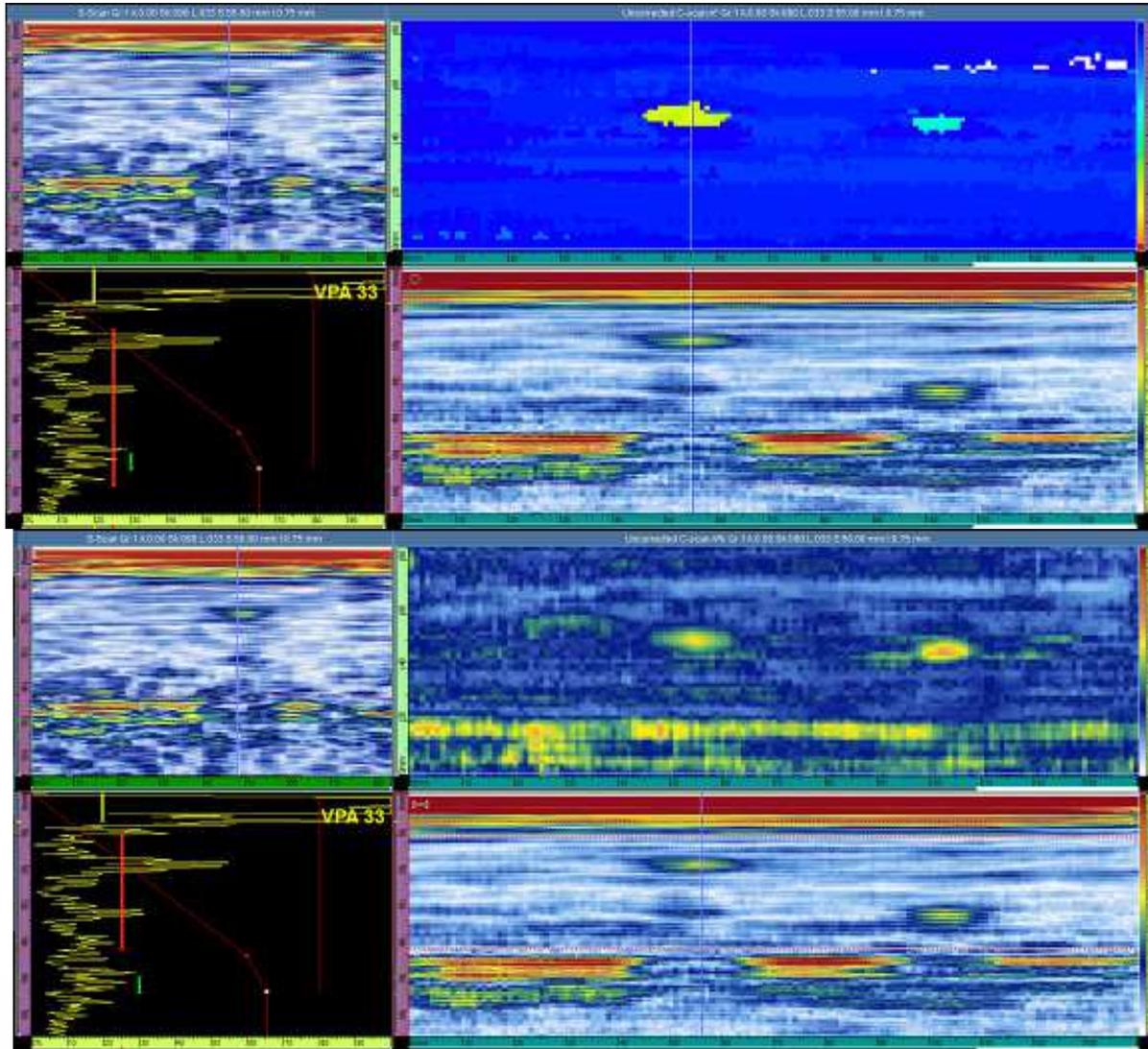
Contrôle de pale



Contrôle de pale



Contrôle pale

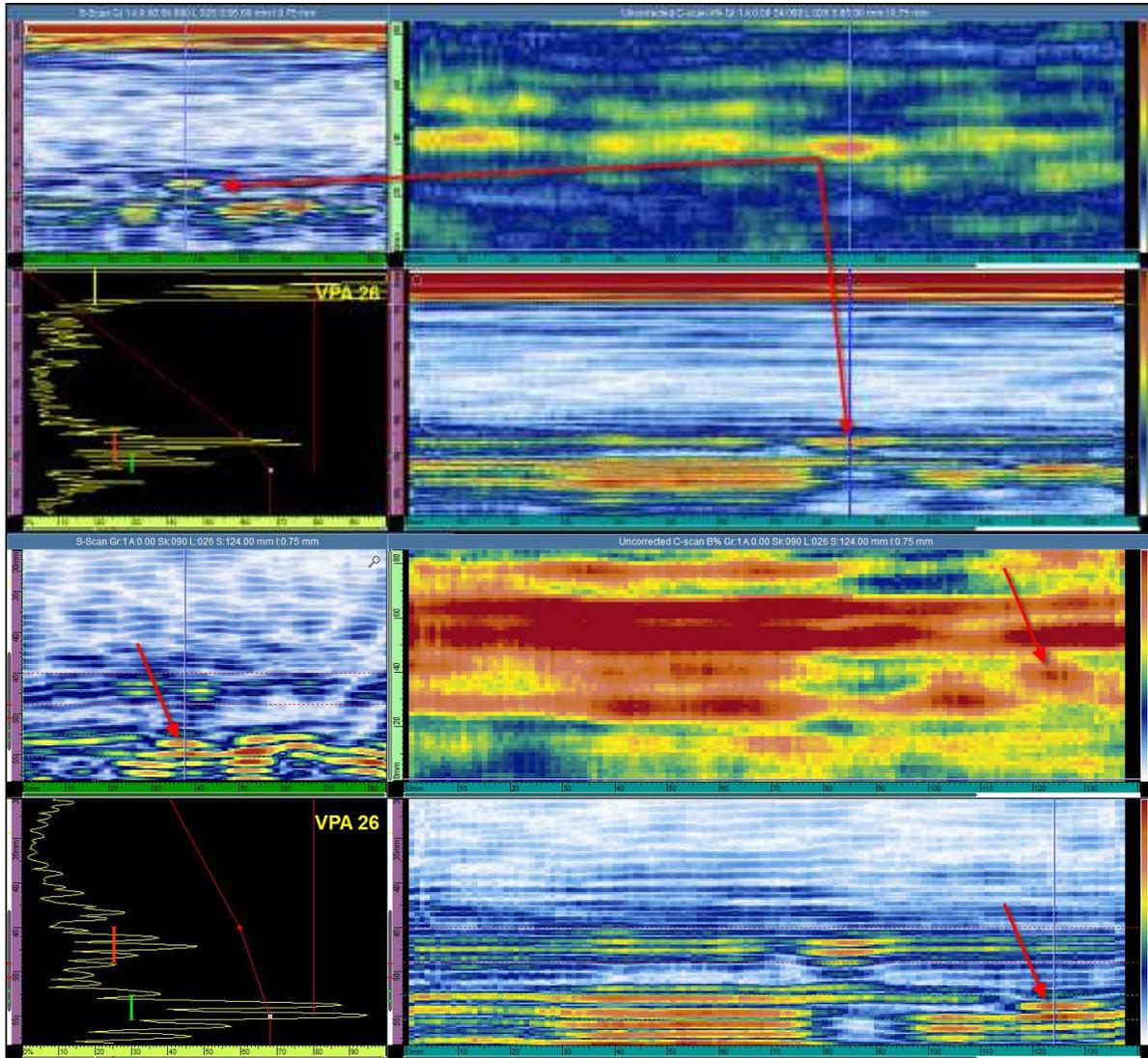


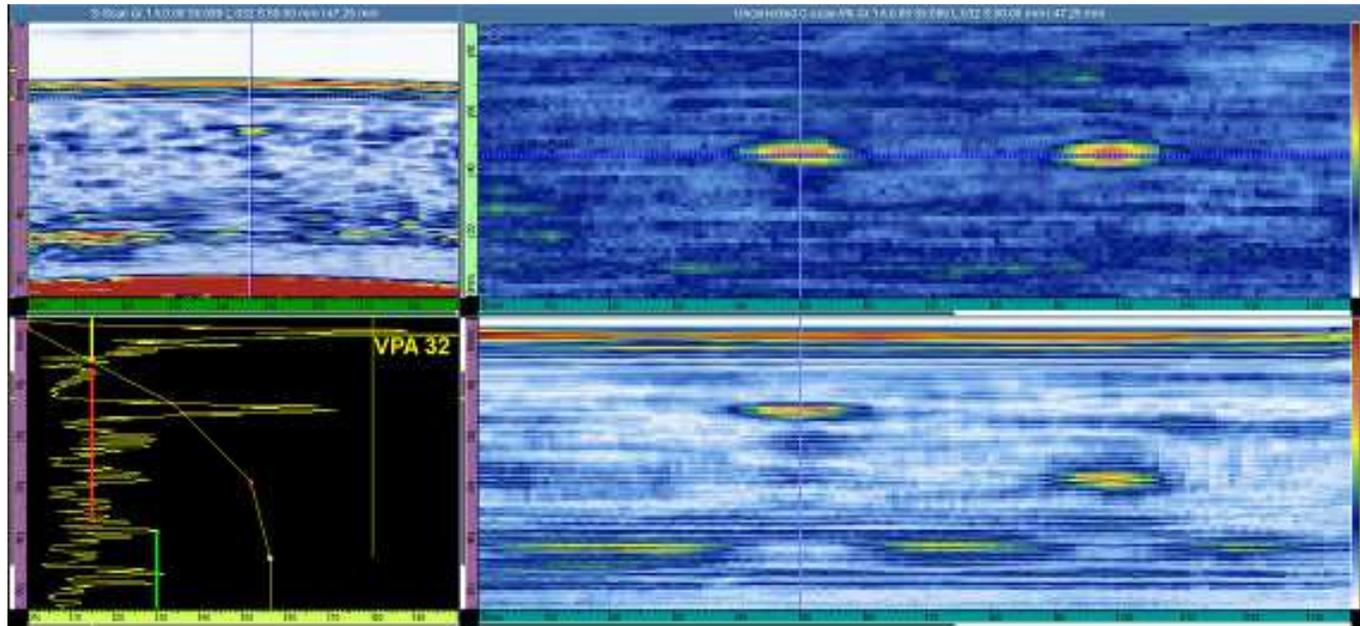
Palpeur 1MHz avec lame
d'eau
TFP 12,5mm a 1/3 et 2/3
épaisseur cale stratifiée



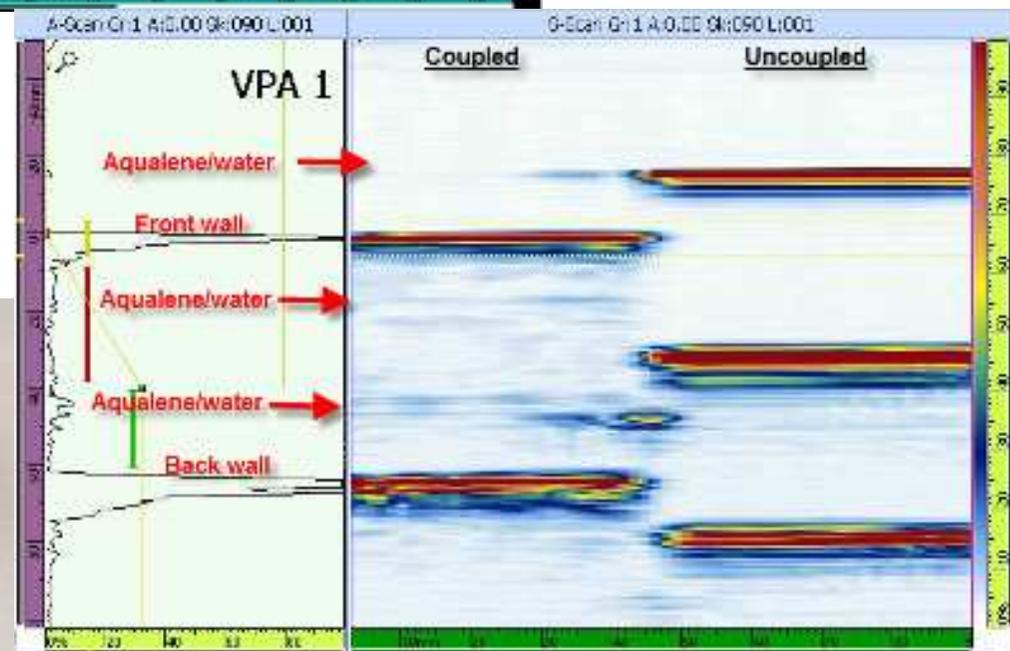
Contrôle pale

Palpeur 1MHz avec lame d'eau
TFP 12,5mm a l'interface entre stratifié et raidisseur. Avant et après la couche de colle

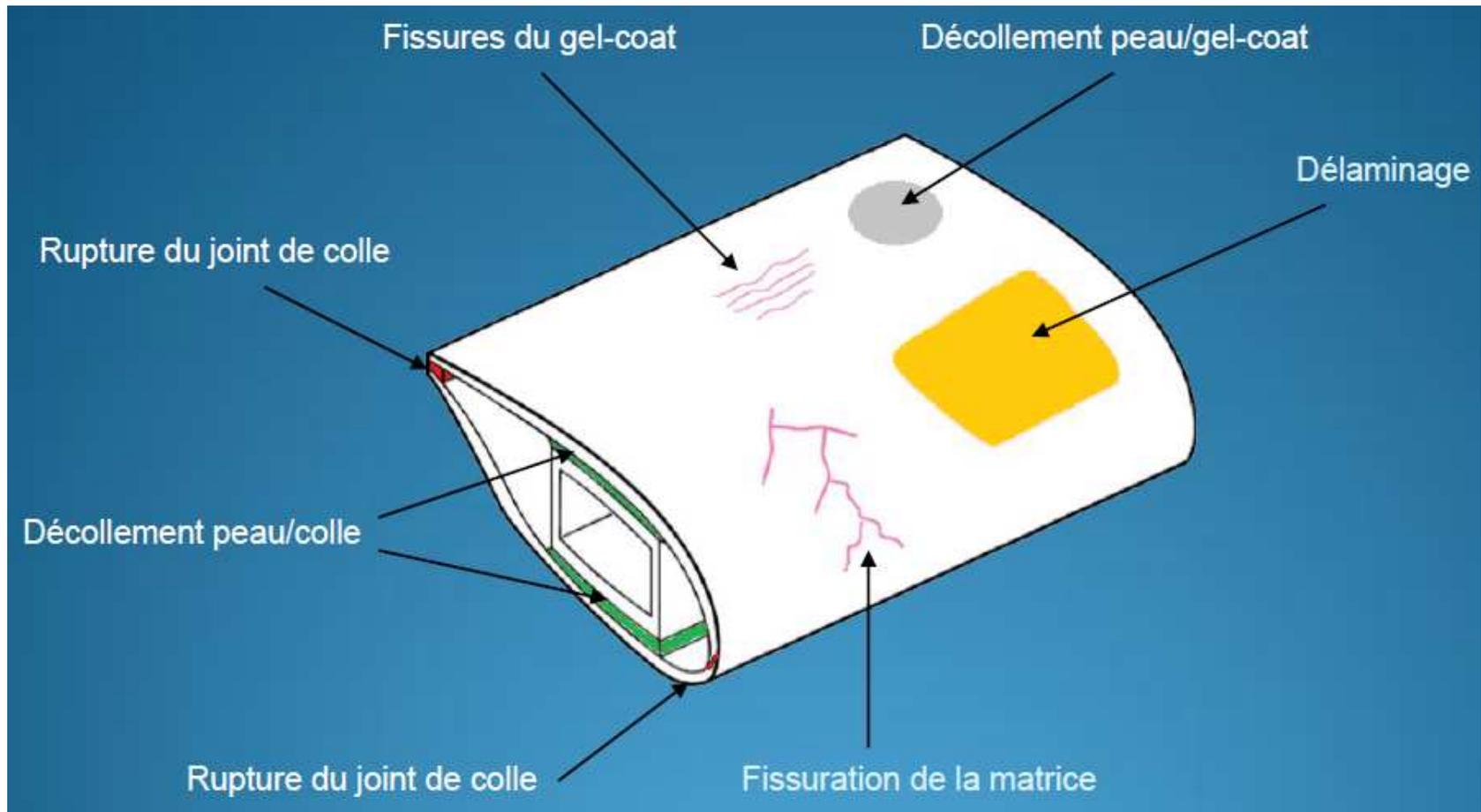




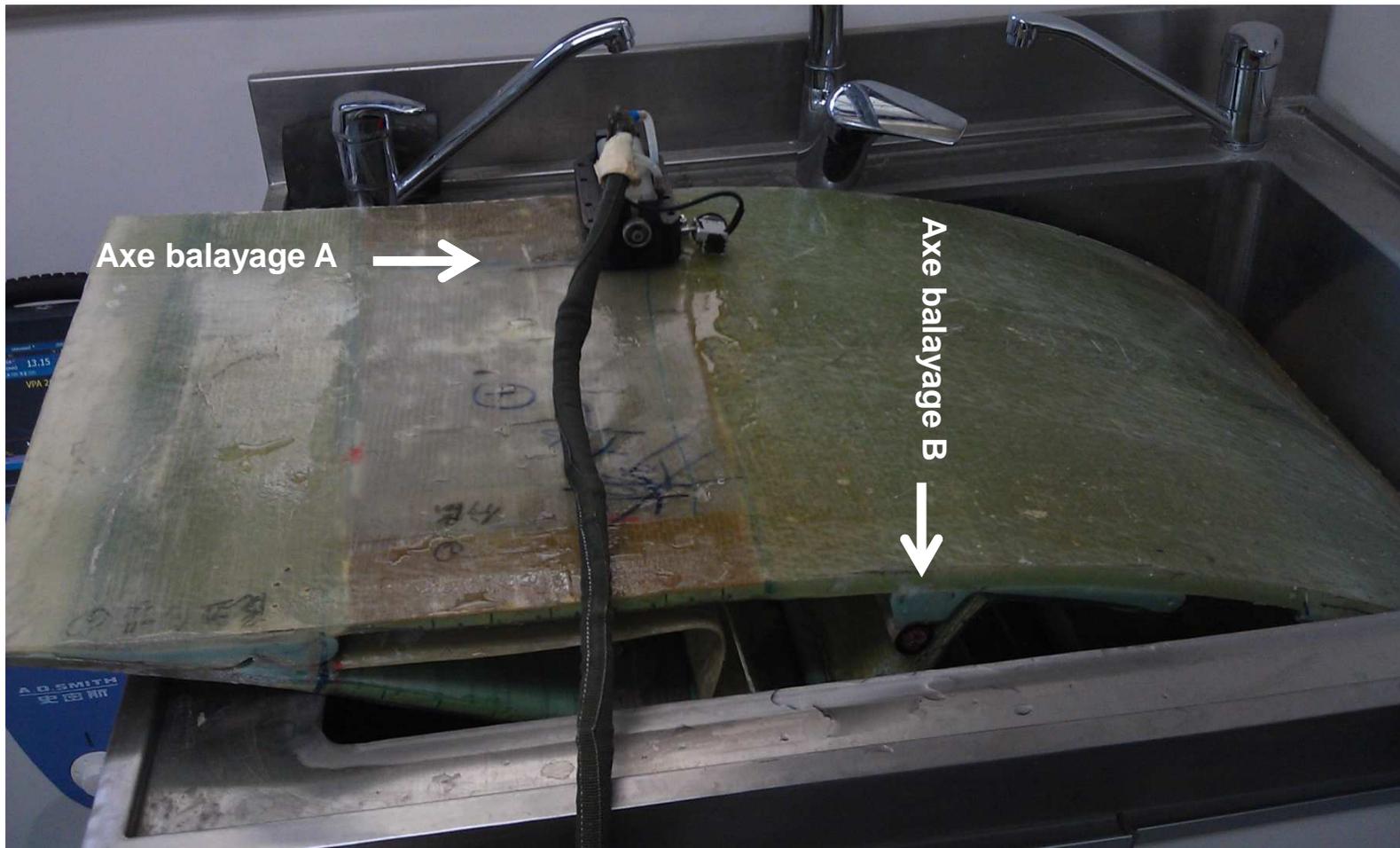
Palpeur 1MHz avec
relai aqualène
TFP 12,5mm a 1/3 et
2/3 épaisseur cale
stratifiée

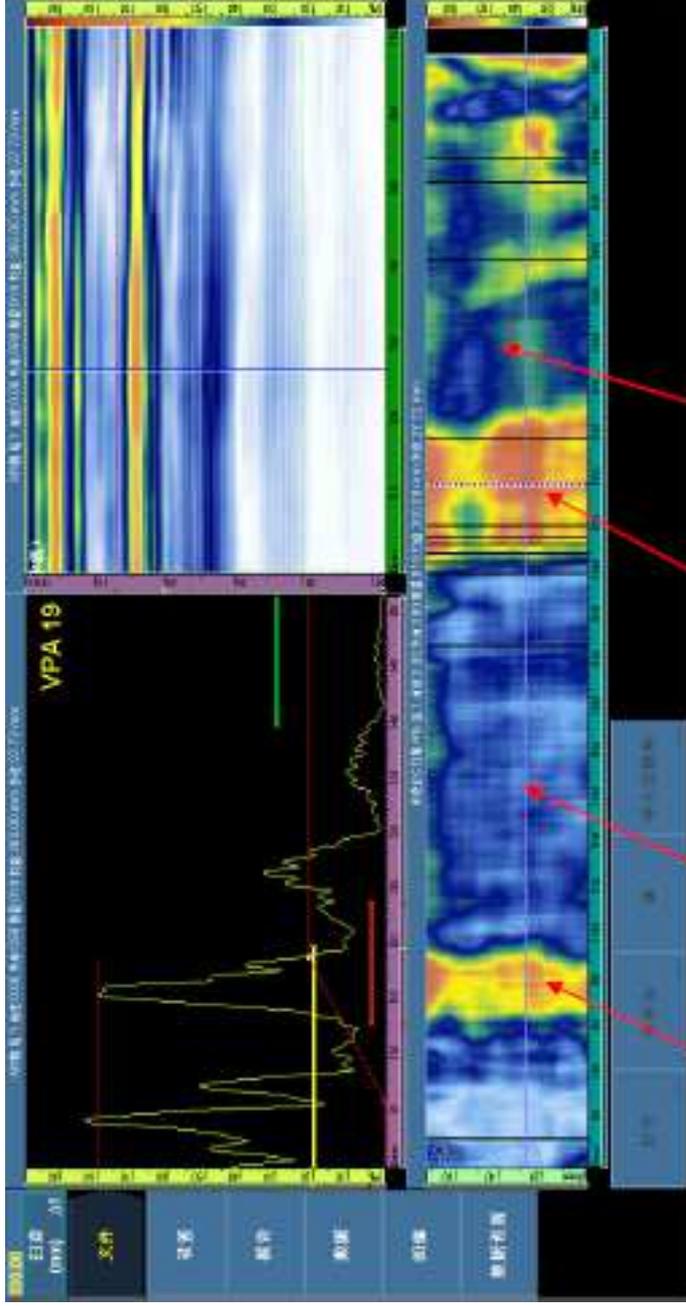


Contrôle de pale



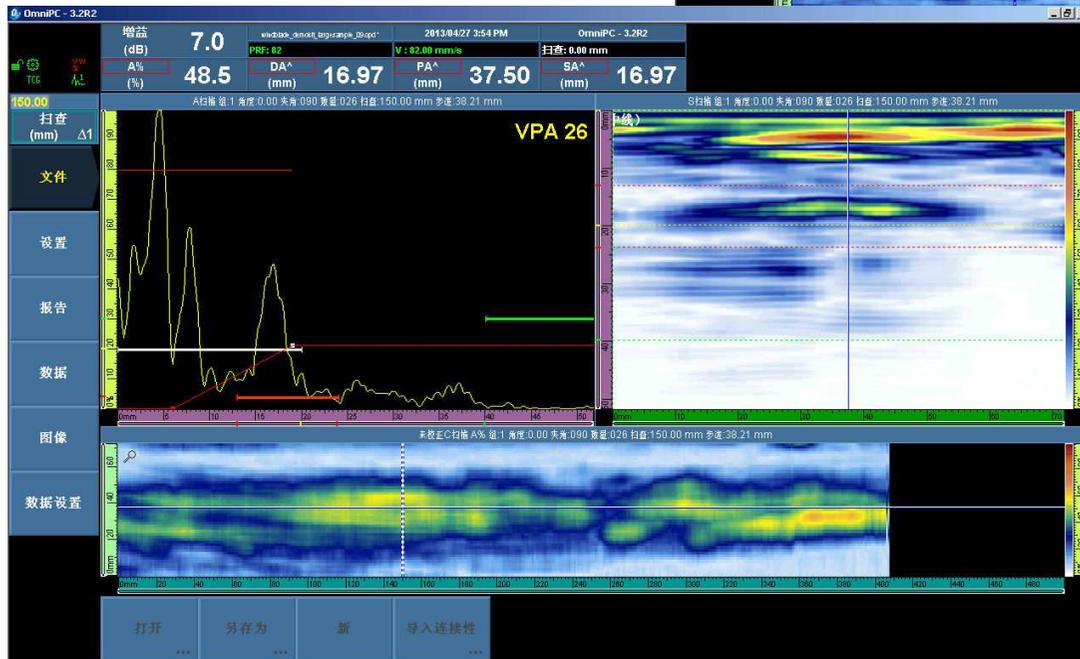
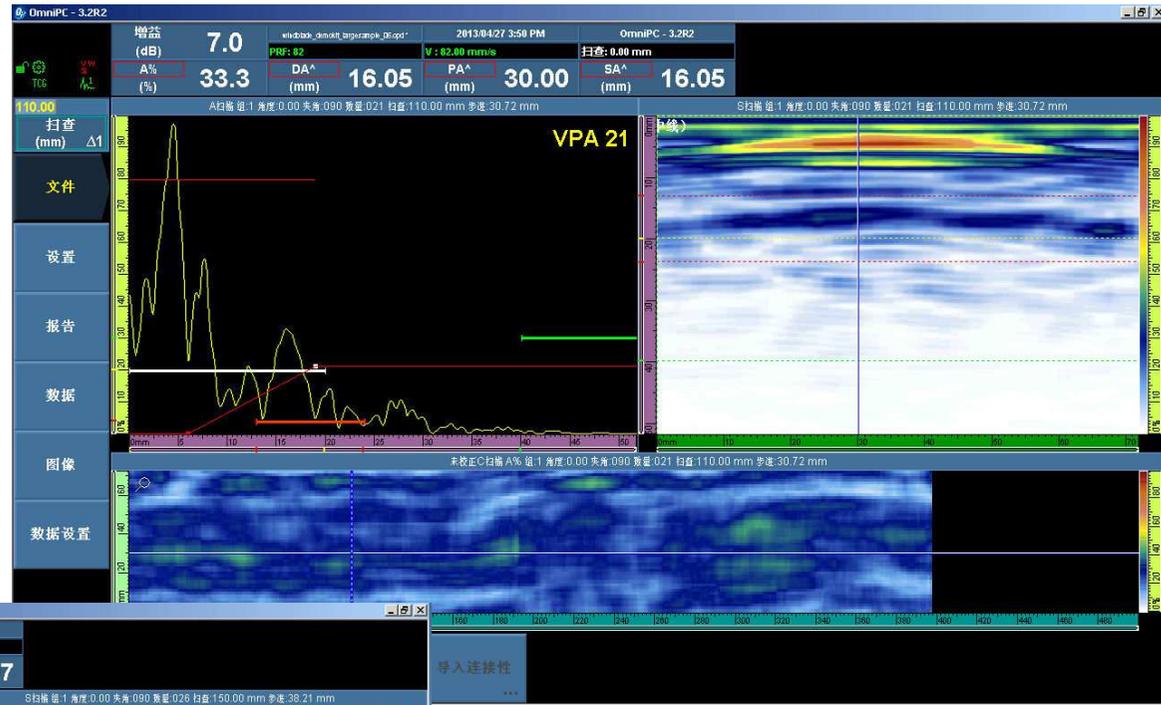
Contrôle d'un échantillon réel





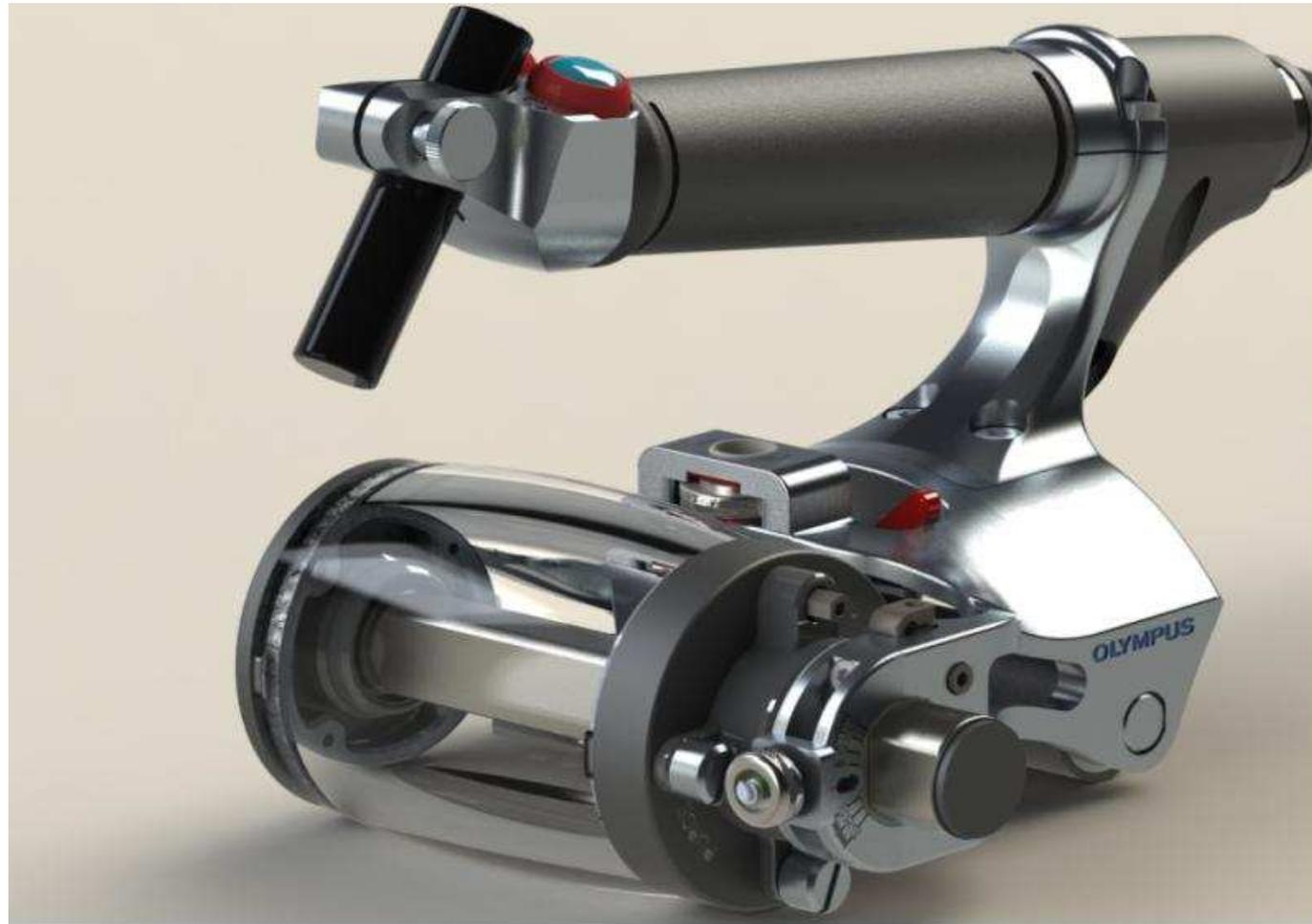
Balayage suivant axe B

Zone 1 = bonne adhérence



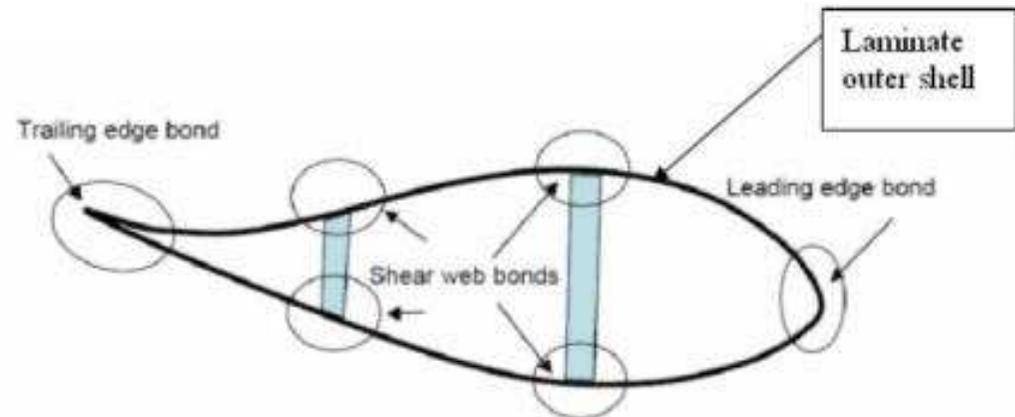
Zone 2 = mauvaise adhérence a certain endroits

RollerFORM

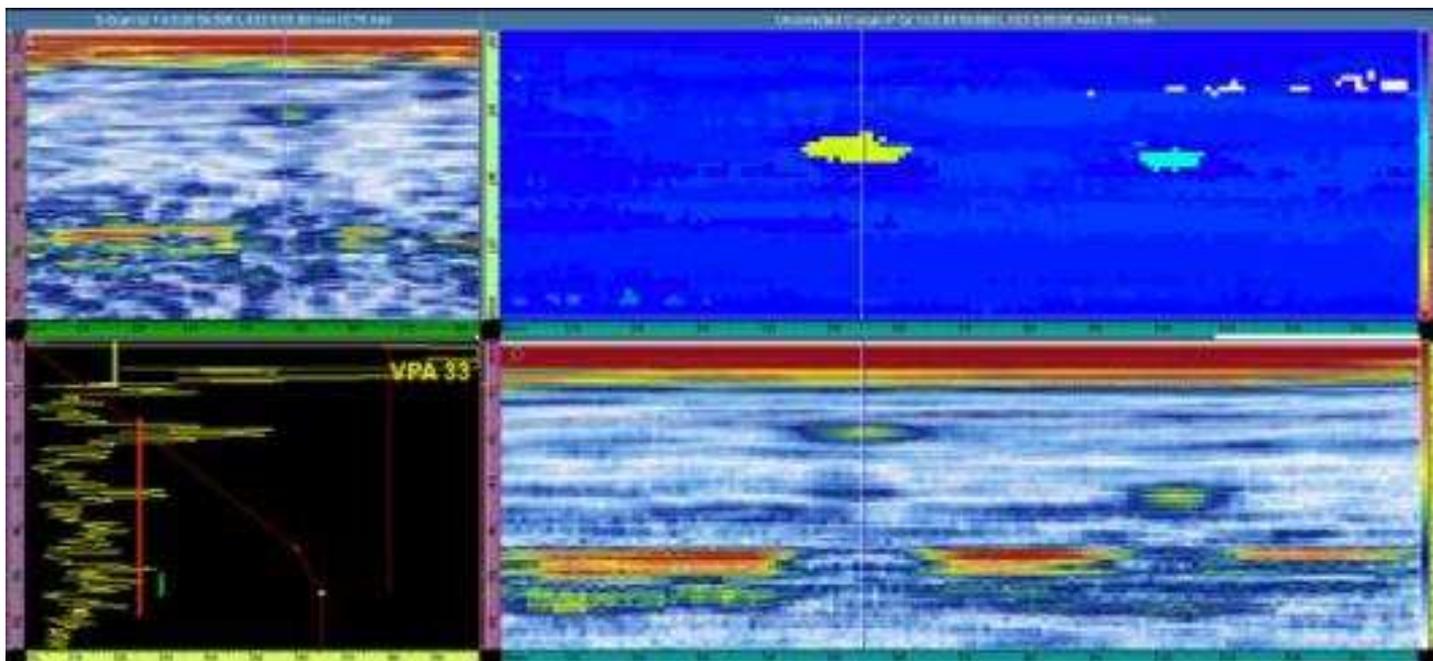


RollerFORM

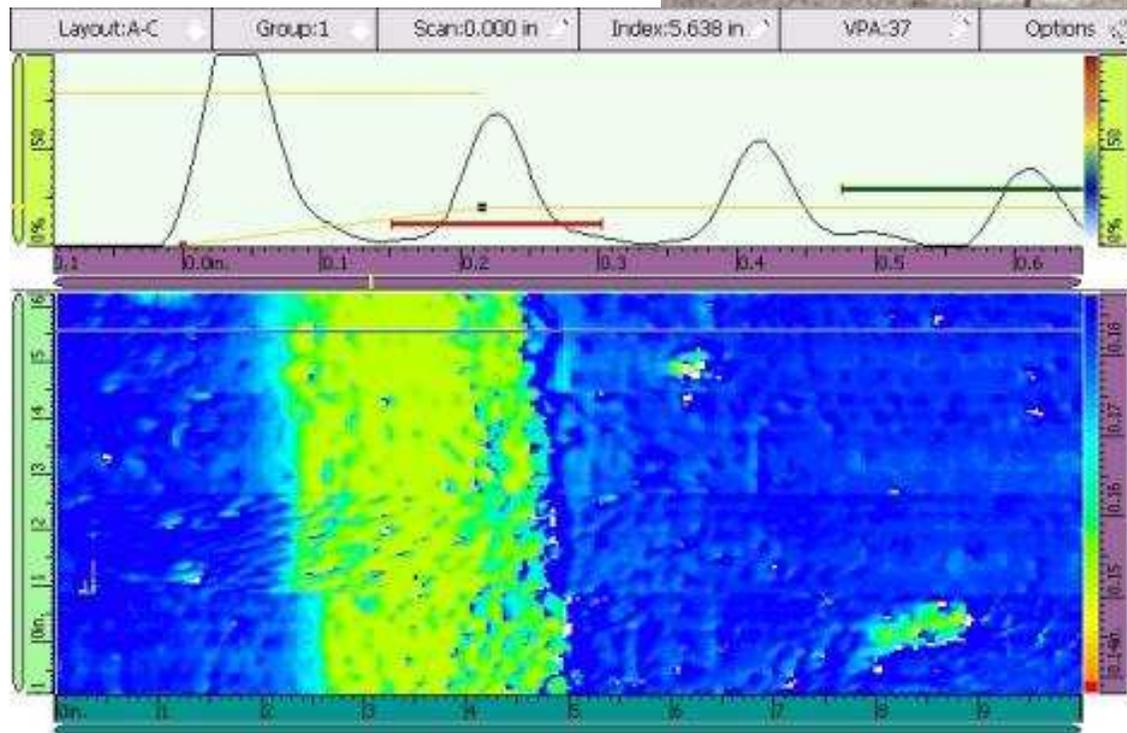
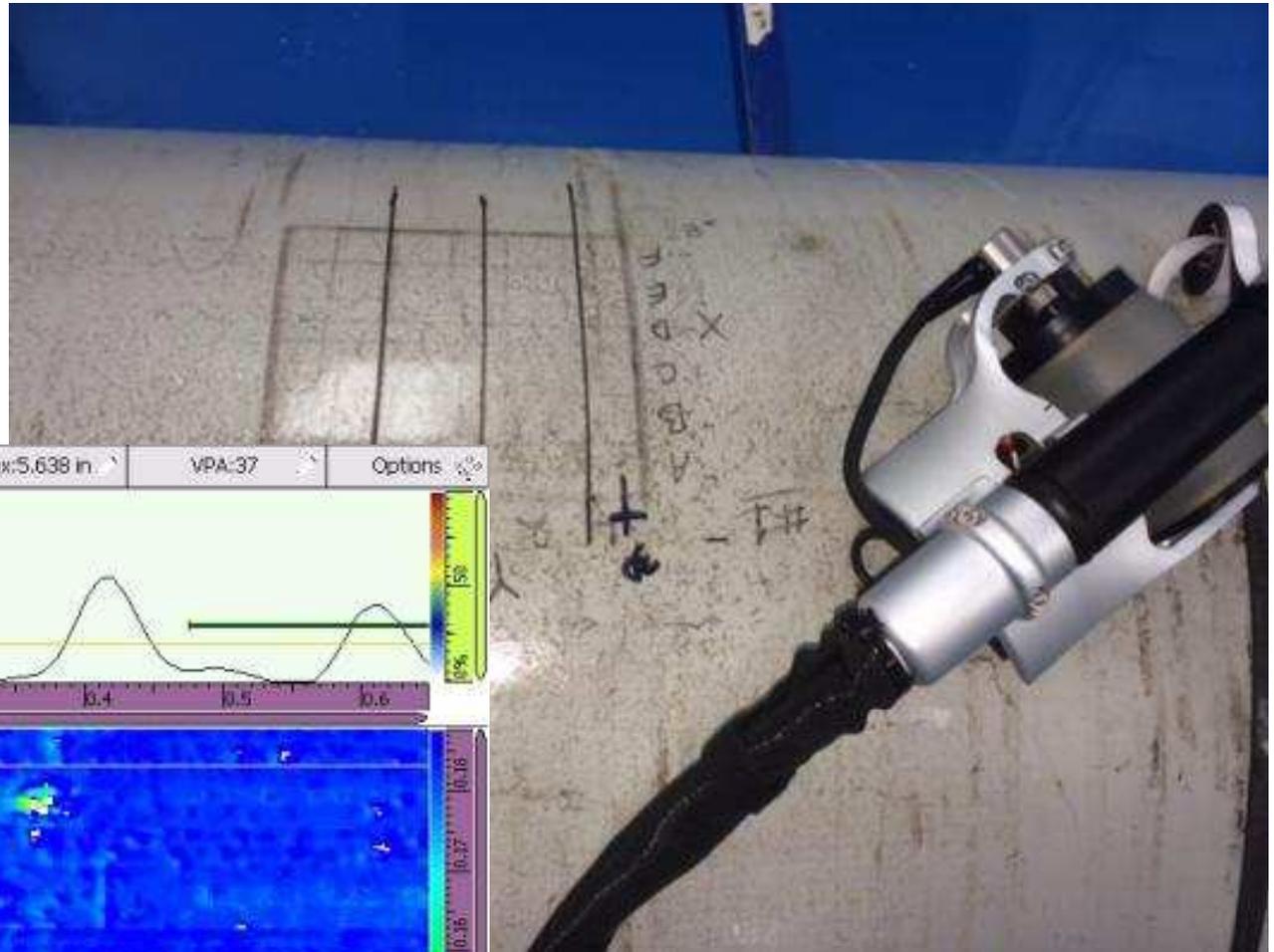
- Inspection des pales d'éolienne



Typical cross-section of a wind turbine blade



RollerFORM pour corrosion

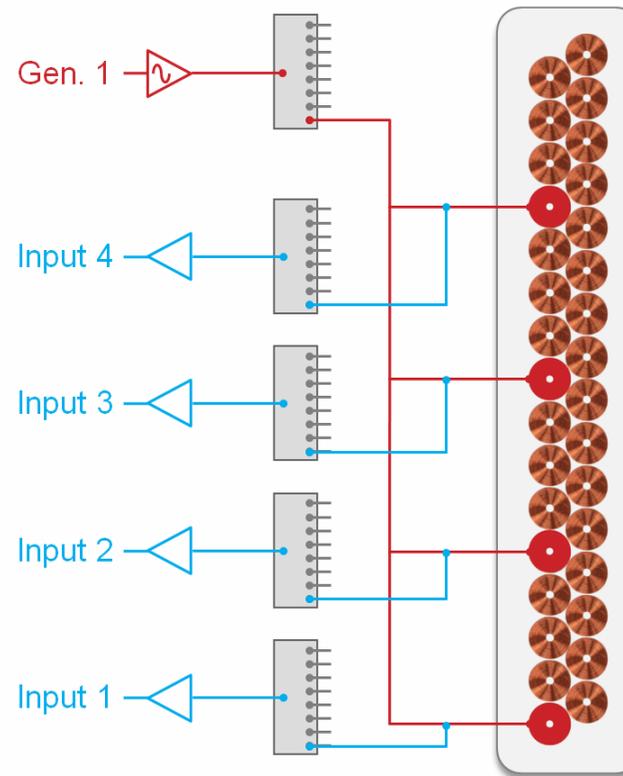


Courants de Foucault Multi-éléments



OMNI-P-ECA4-32

- 4 canaux
- 32 canaux multiplexés



Sonde flexible multi-éléments

Flex probe FBB-051-500-032
Fréquence 50KHz à 4MHz

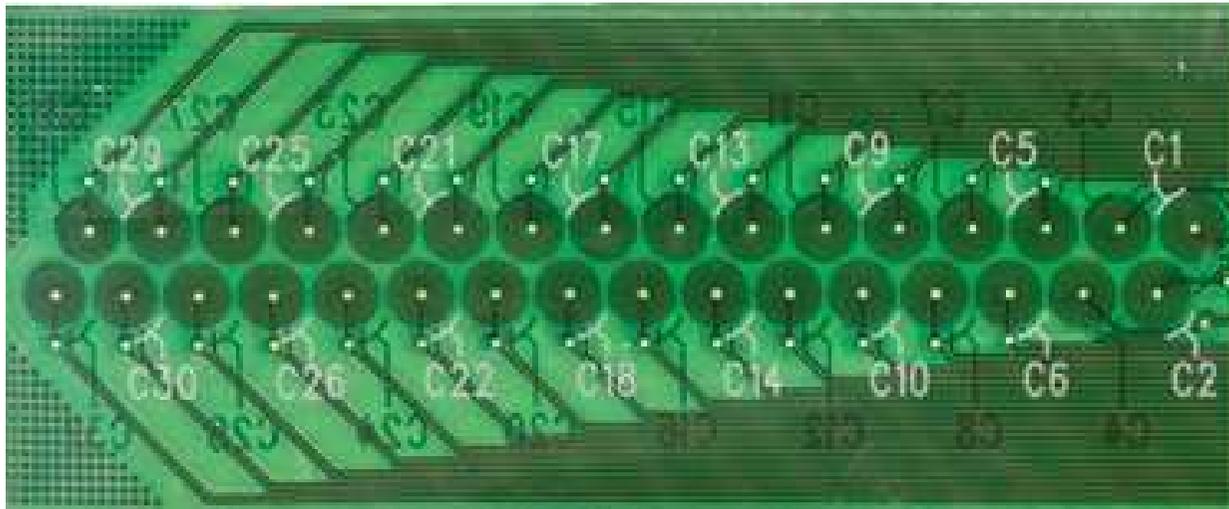
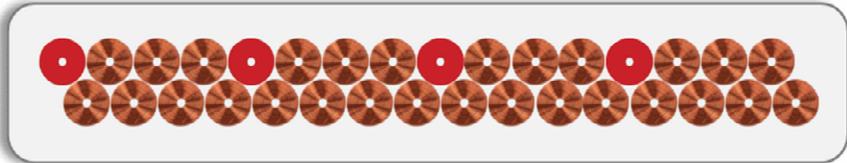


Sonde flexible multi-éléments

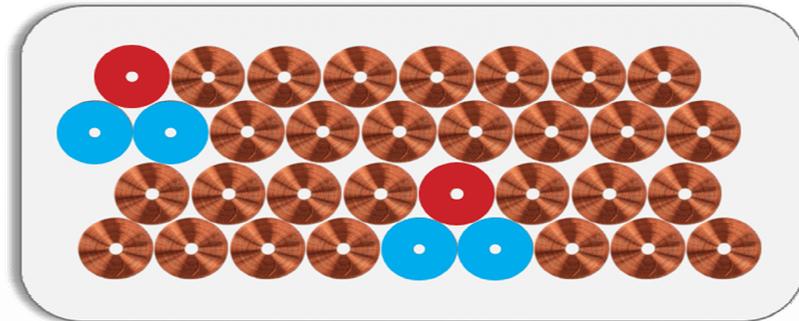
➤ Deux modes

Absolu

Besoin d'un encodeur



Reflexion



Courants de Foucault Multi-éléments

Two scans are required to cover each profile (see Figure 4). Make sure the probe is making a good contact with the rail's radius before and during every scan. There should always be three carbides in contact with the rail on each side of the probe.

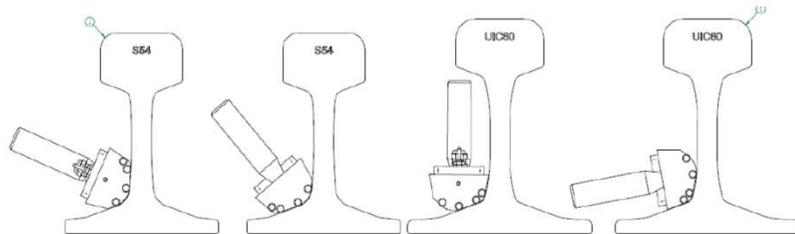
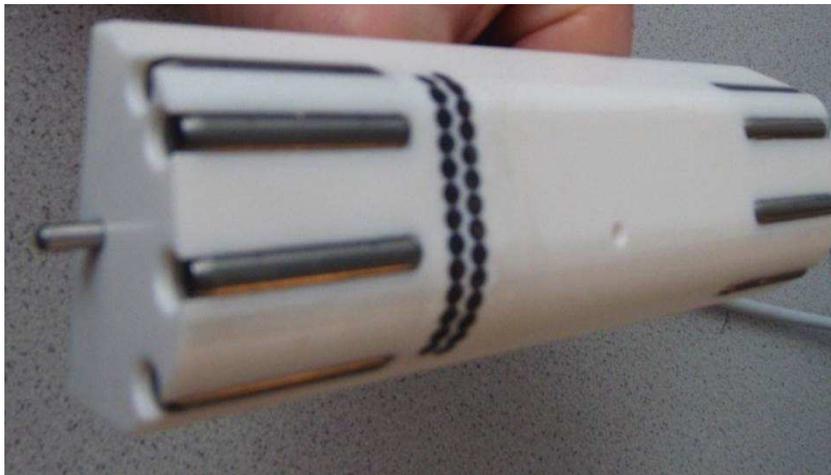
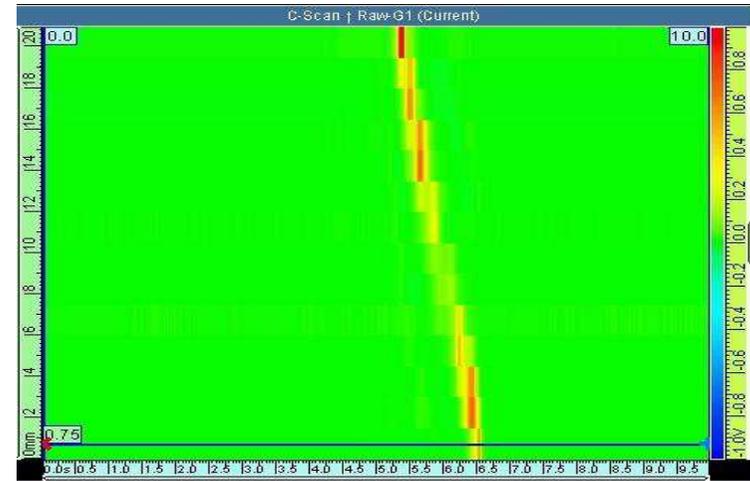
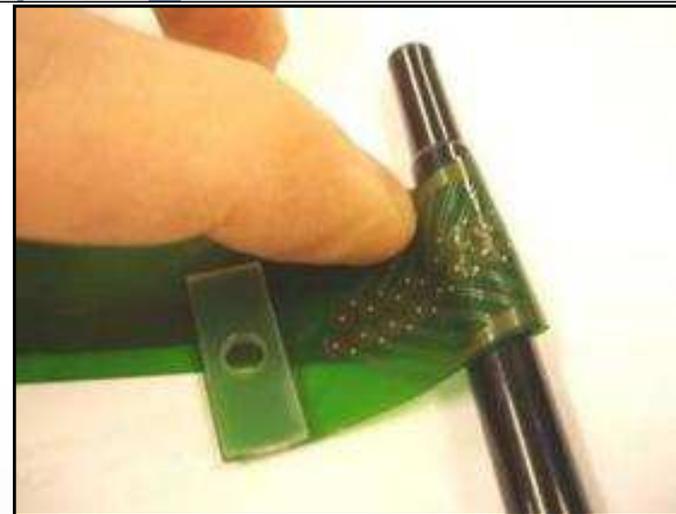
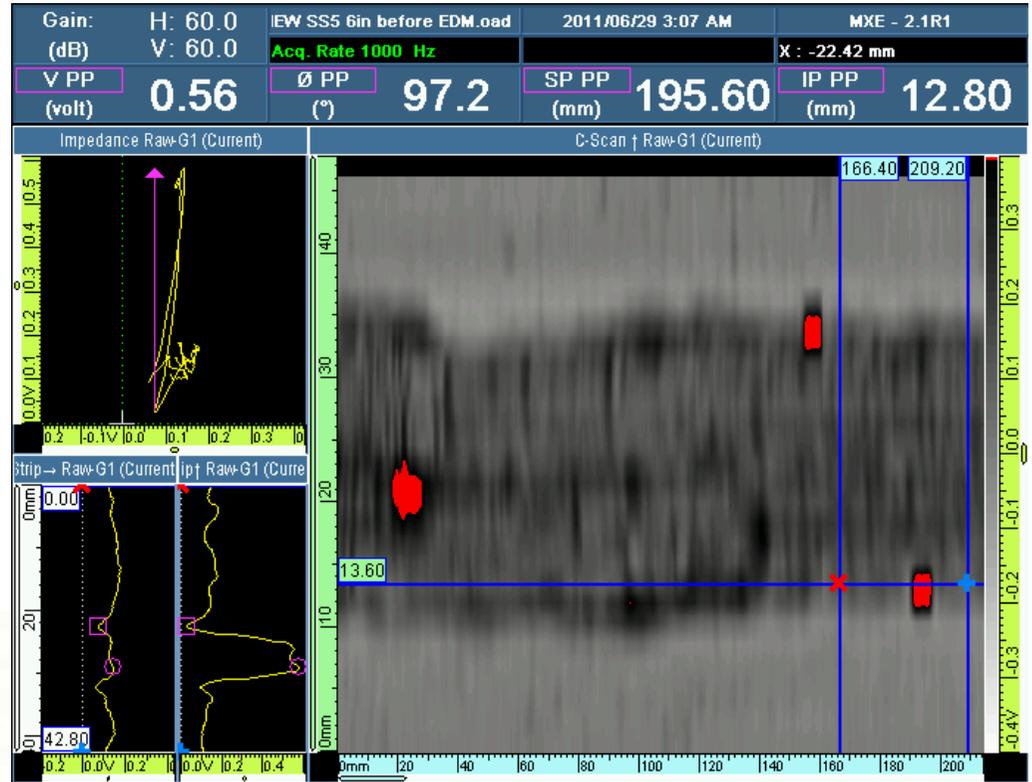
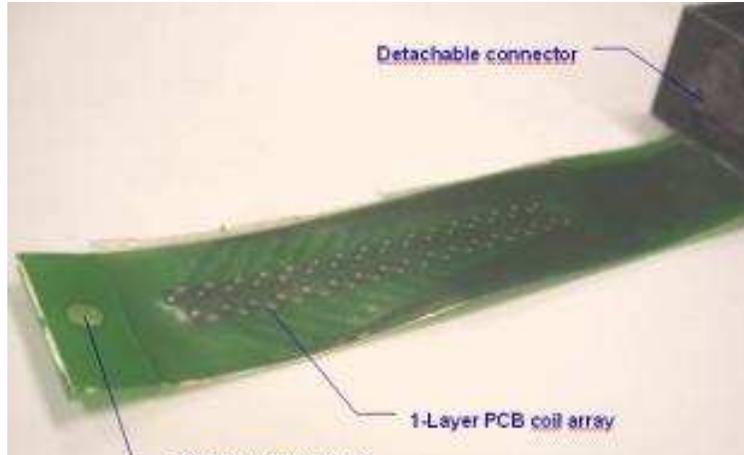


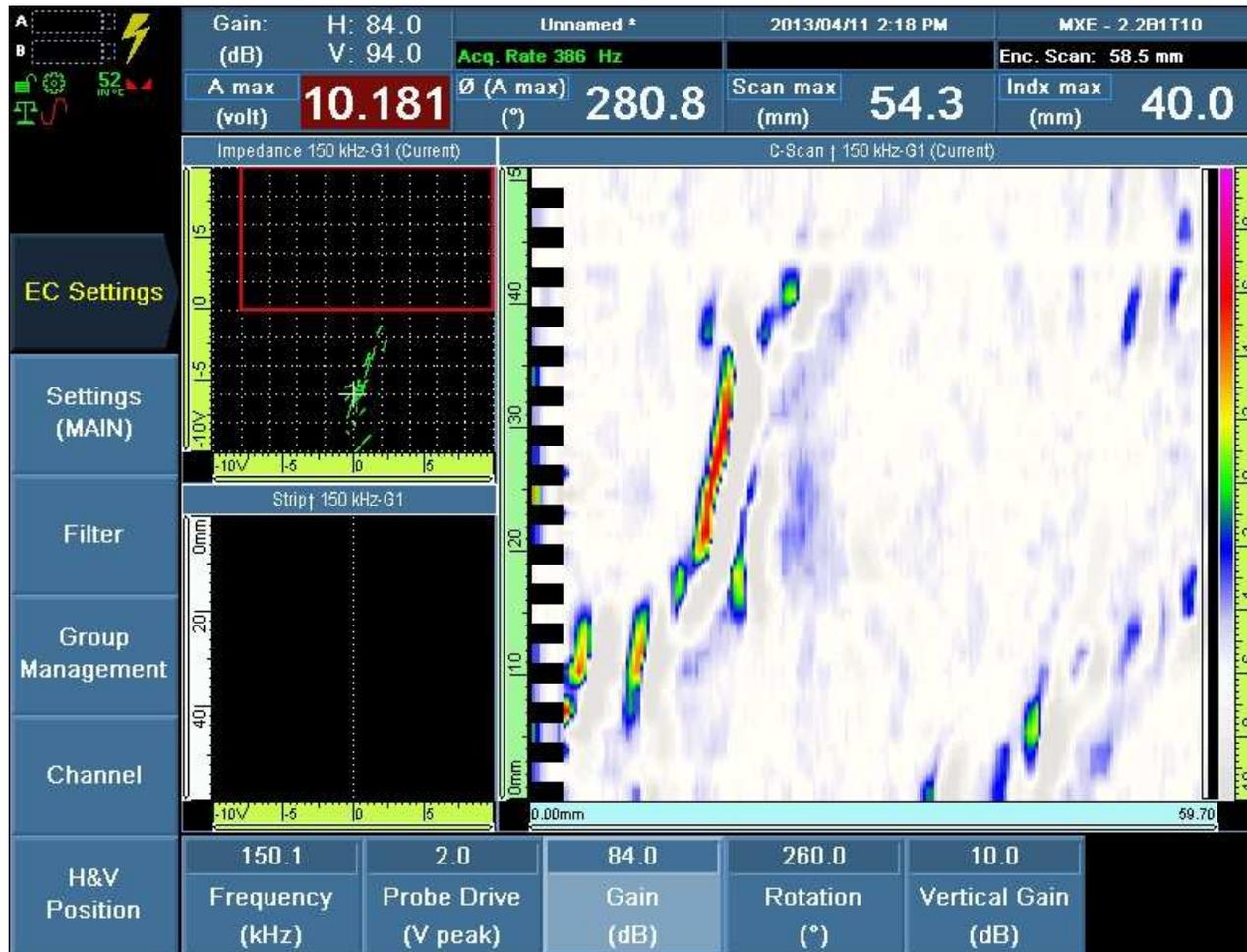
Figure 4 : The E400006 on S54 and UIC60 profiles



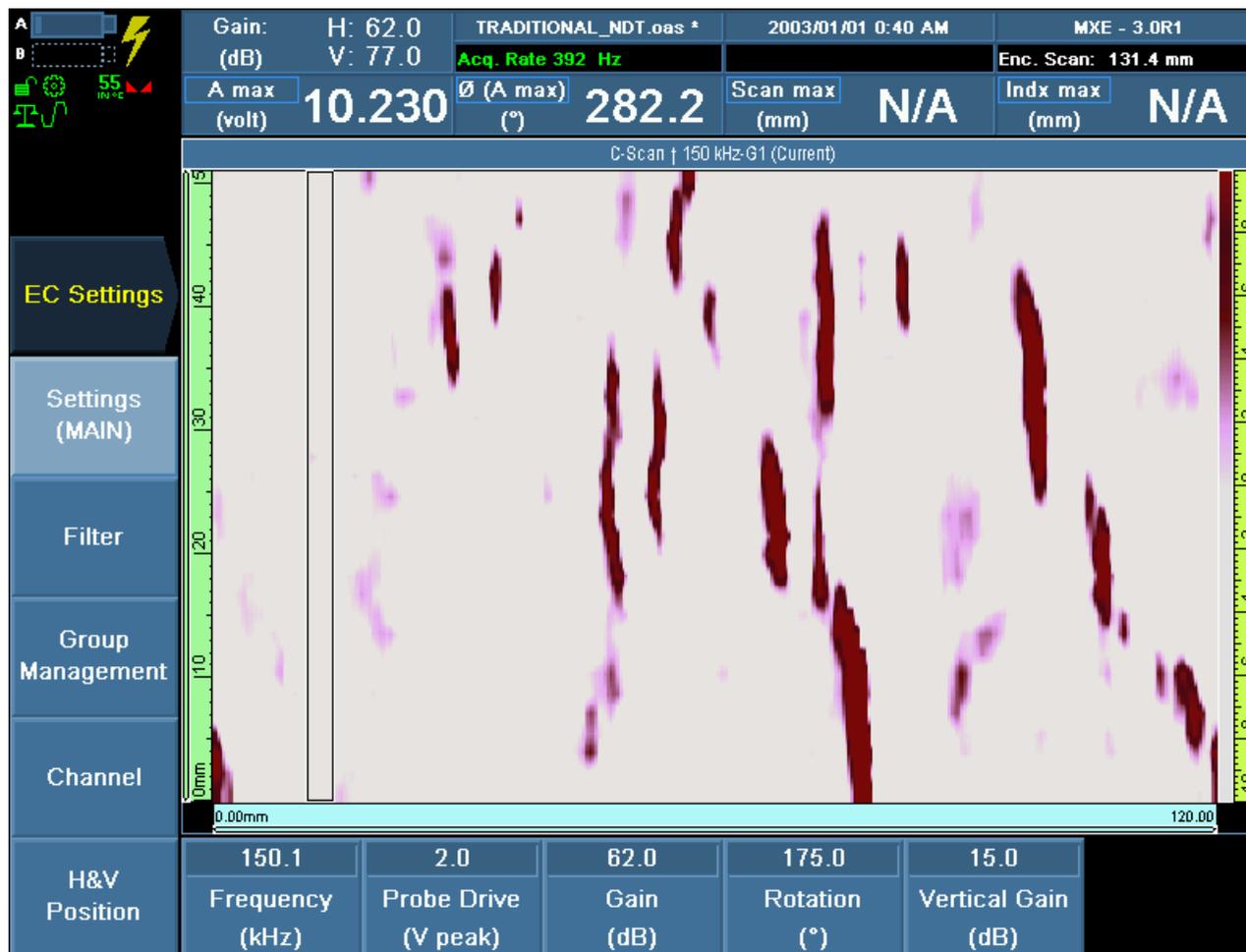
Sondes flexibles



Cartographie couleur



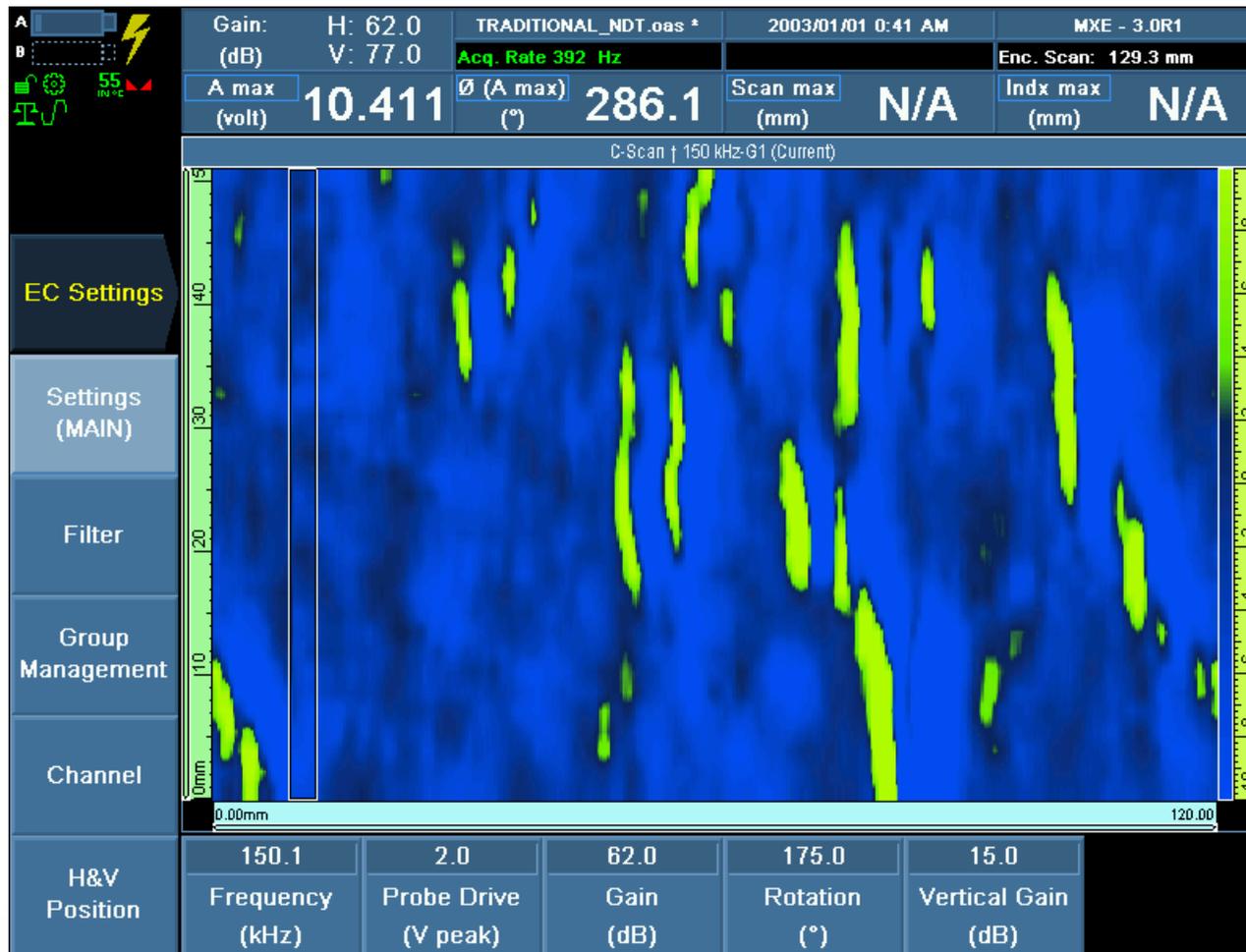
Palette ressuage



Go/No-Go, replacement for penetrant testing

Patent rights protection by, but not limited to the following, US D668,564; 13/967,690; CN201130084342.30

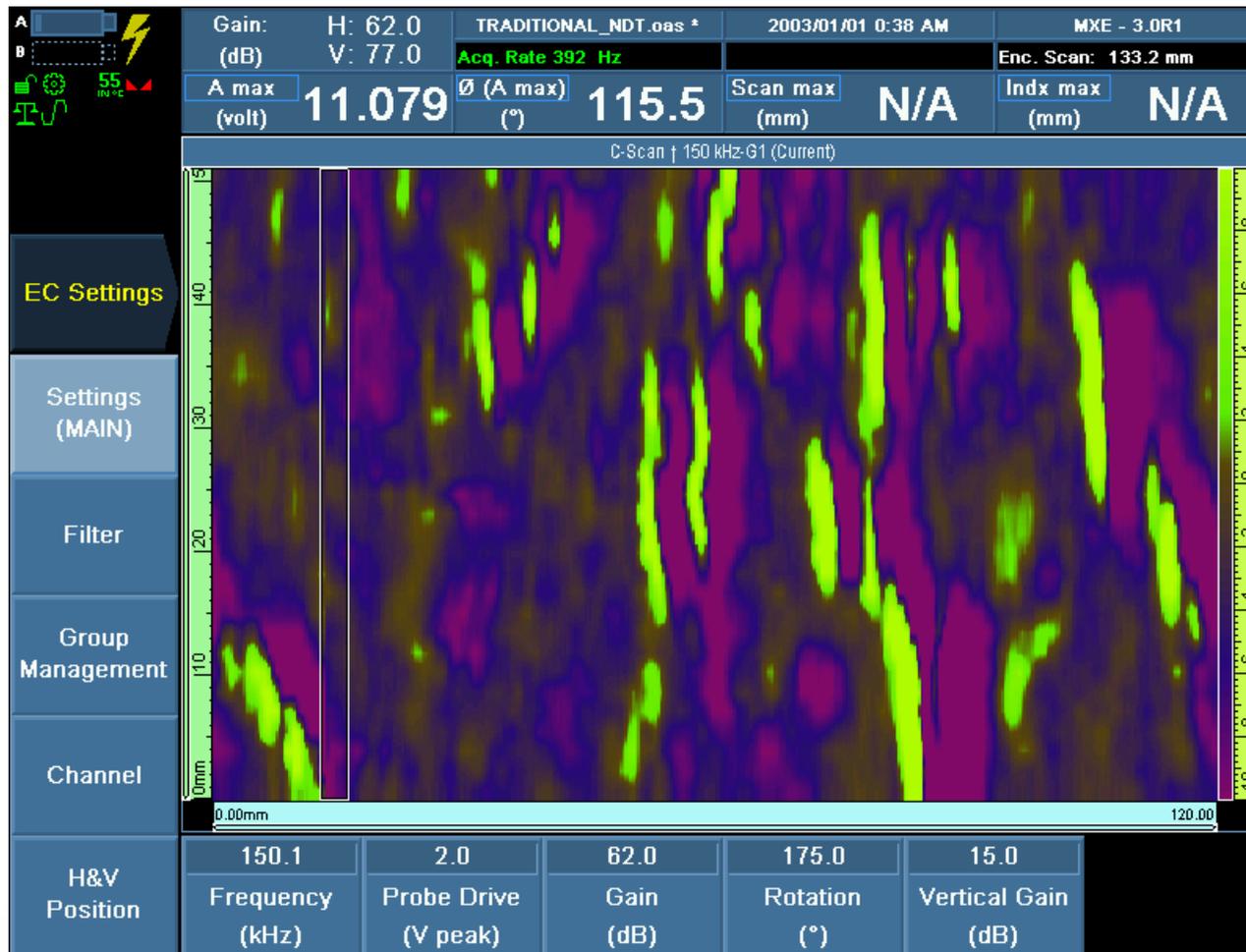
Palette ressuage FLUO.



Go/No-Go, replacement for penetrant testing (fluorescent)

Patent rights protection by, but not limited to the following, US D668,564; 13/967,690; CN201130084342.30

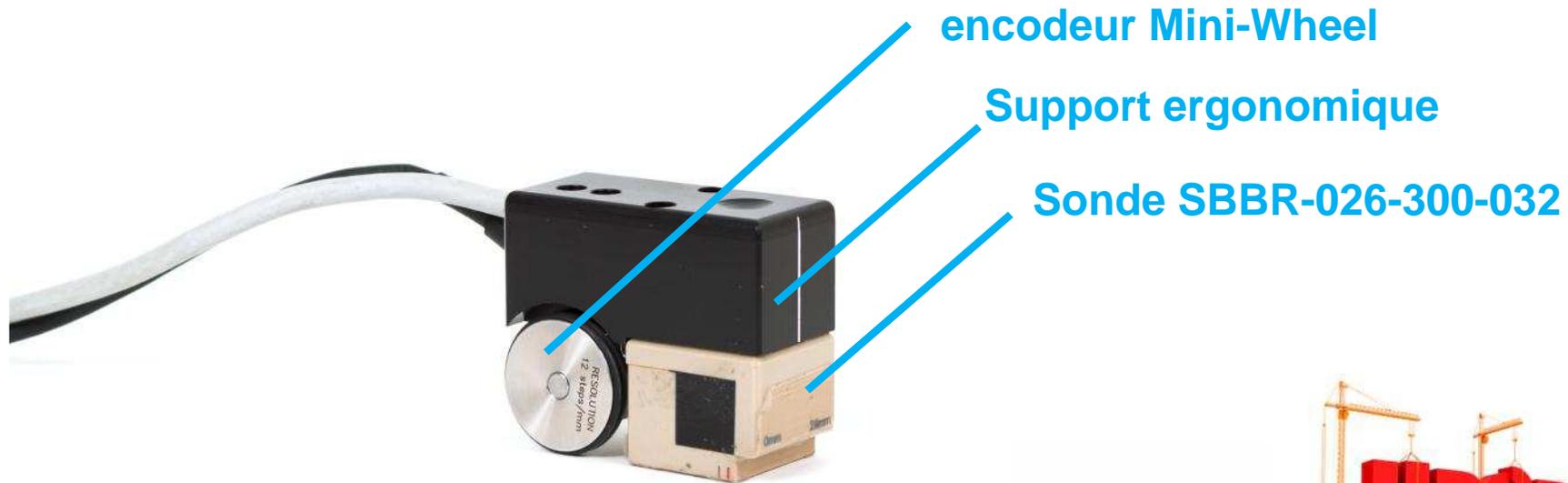
Palette magnétoscopie FLUO.



Go/No-Go, replacement for magnetic particle (fluorescent)

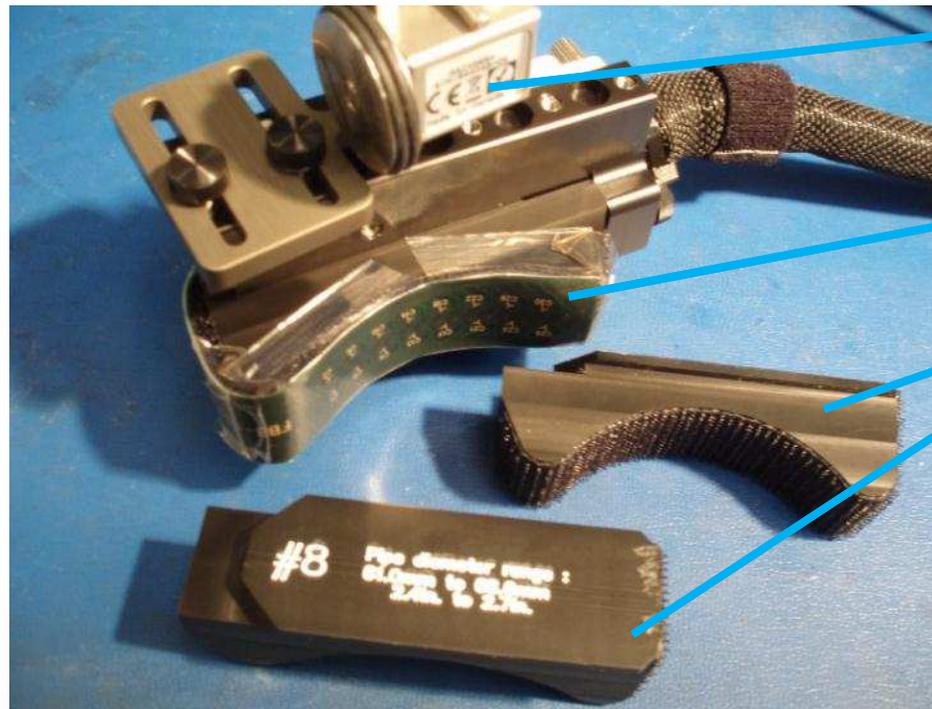
Patent rights protection by, but not limited to the following, US D668,564; 13/967,690; CN201130084342.30

Défauts de surface (ECA)



Kit défauts de surface

- Sonde flexible FlexArray
- Semelles interchangeableables
- Kit de 15 diametres de 32mm à plat

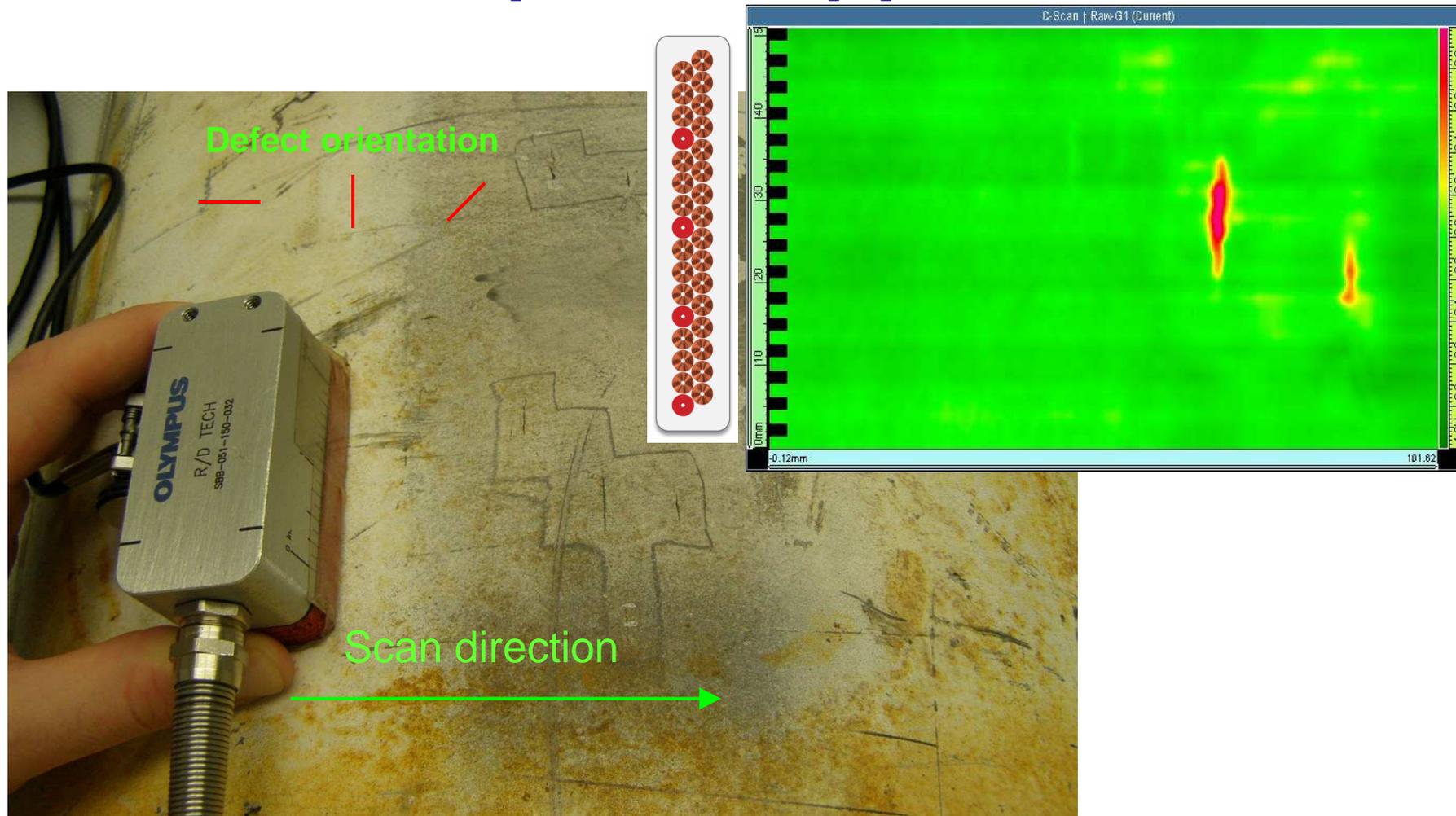


Encodeur Mini-Wheel

Sonde FlexArray

Semelles
interchangeables

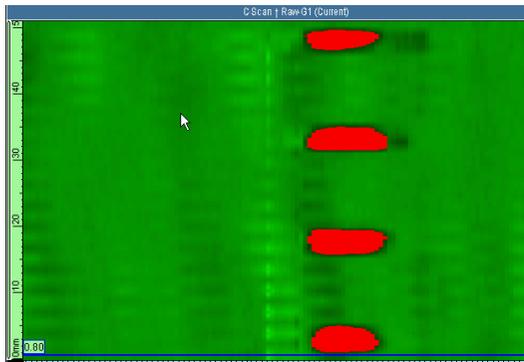
ECA – Inspection de pipes



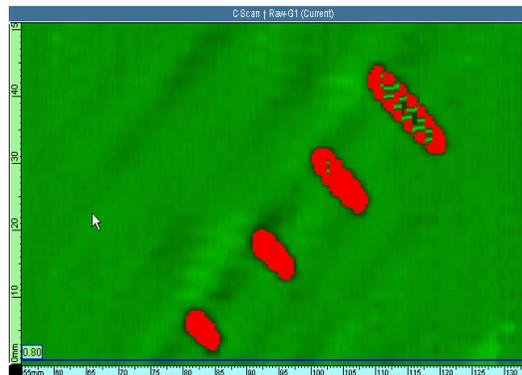
ECA – Pipe inspection

Result on standard

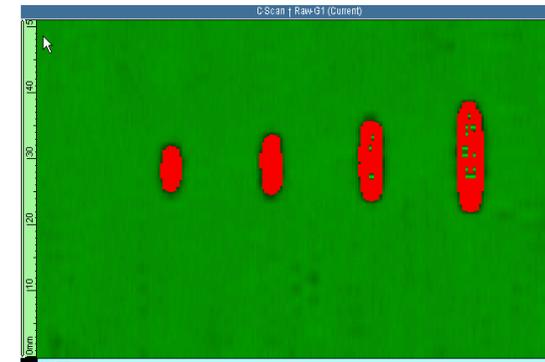
Horizontal



45 degree



vertical



Good area

