

Fig I-29 Evaluation Results RH(in penthouse)

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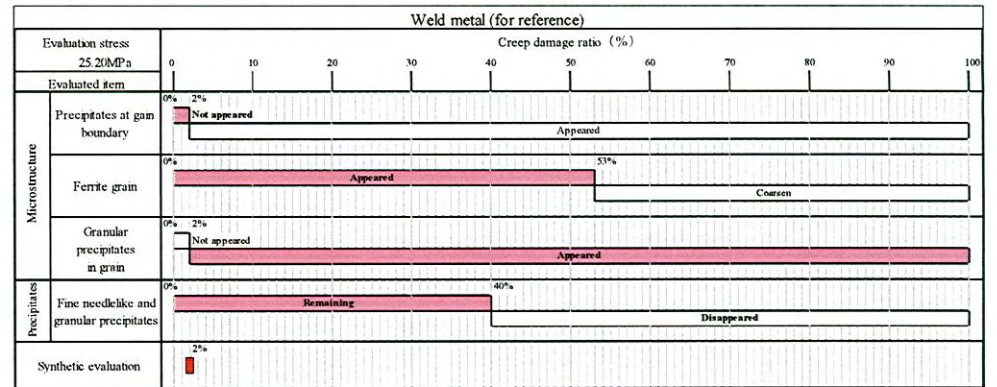
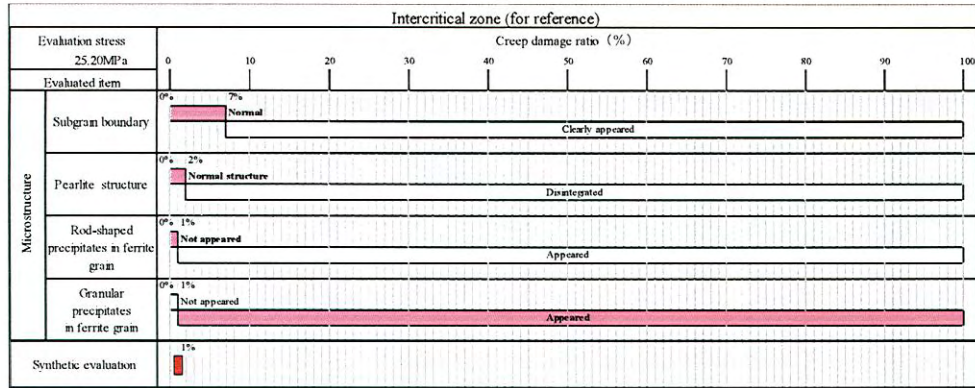
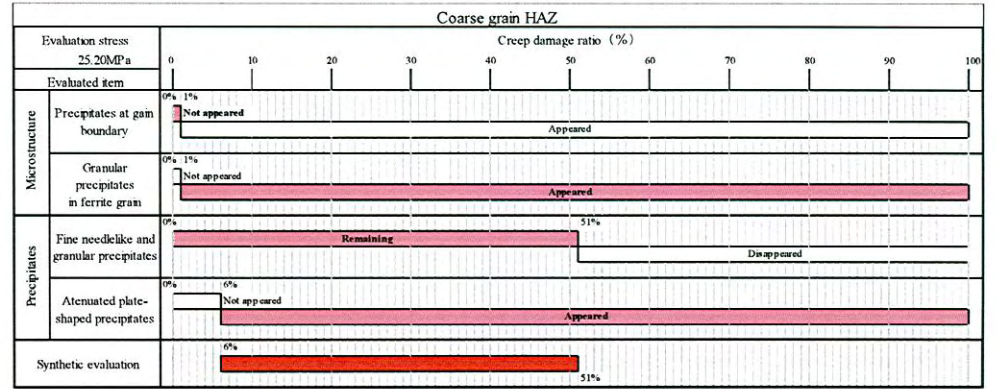
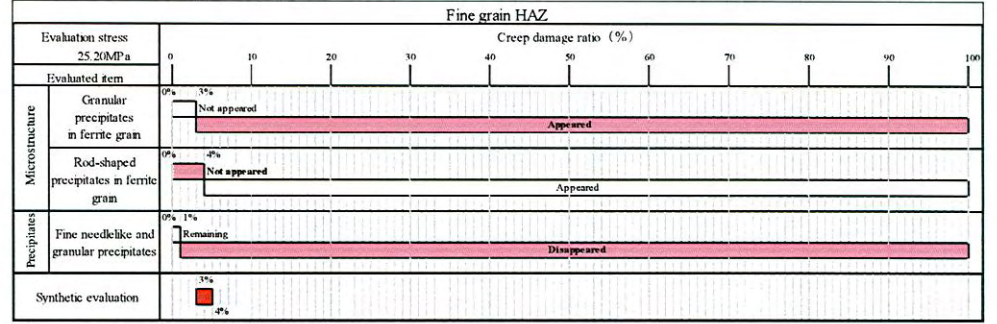
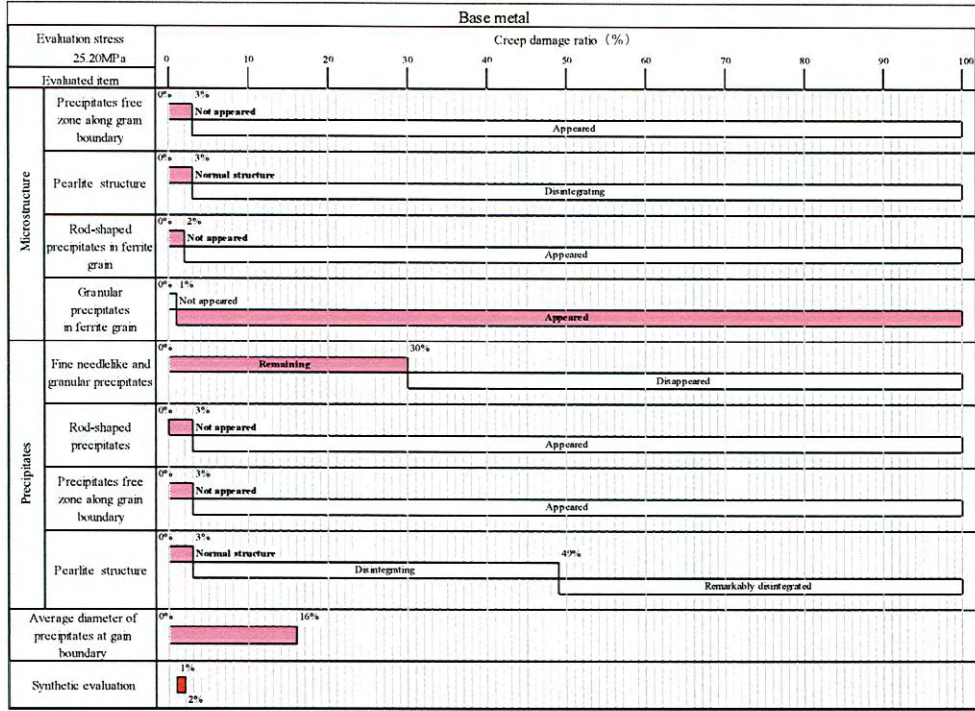


Fig I-30 Evaluation Results RH(in furnace)

Platen SH

RH(in penthouse)

RH(in furnace)

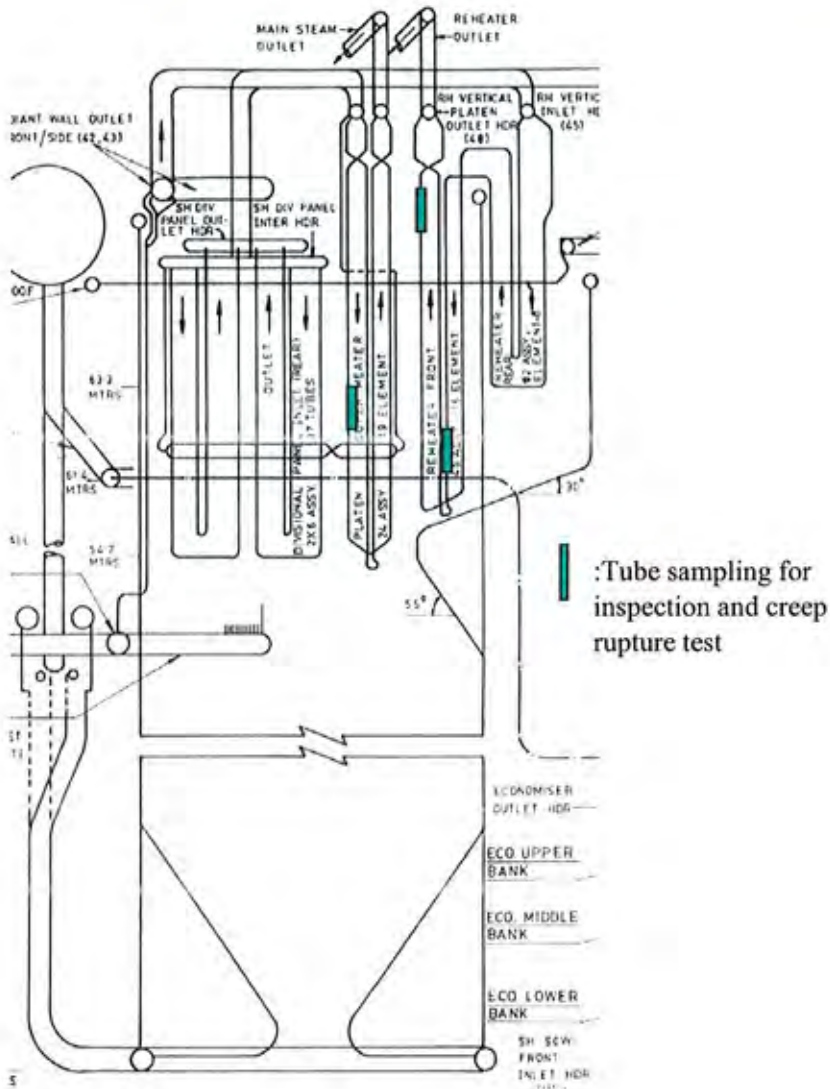
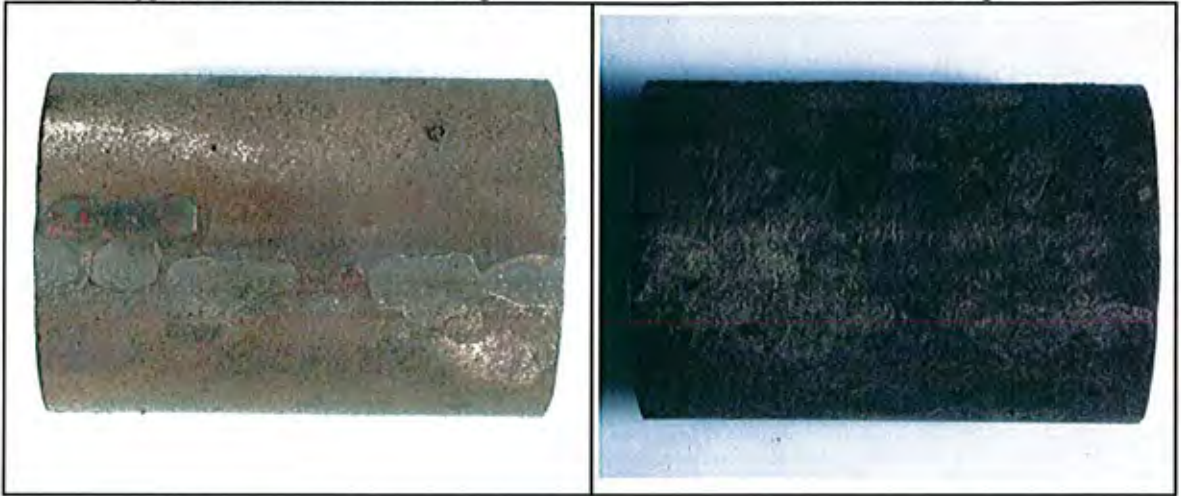


Photo I -11 Tube sampling location

Platen
SH

Appearance before acid cleaning

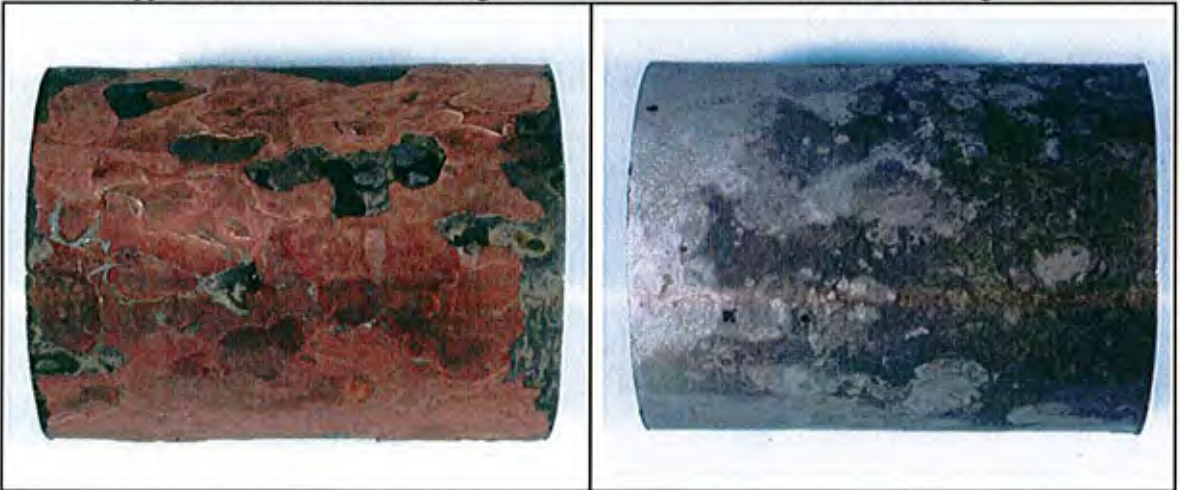
After acid cleaning



RH
(in penthouse)

Appearance before acid cleaning

After acid cleaning



RH
(in furnace)

Appearance before acid cleaning

After acid cleaning

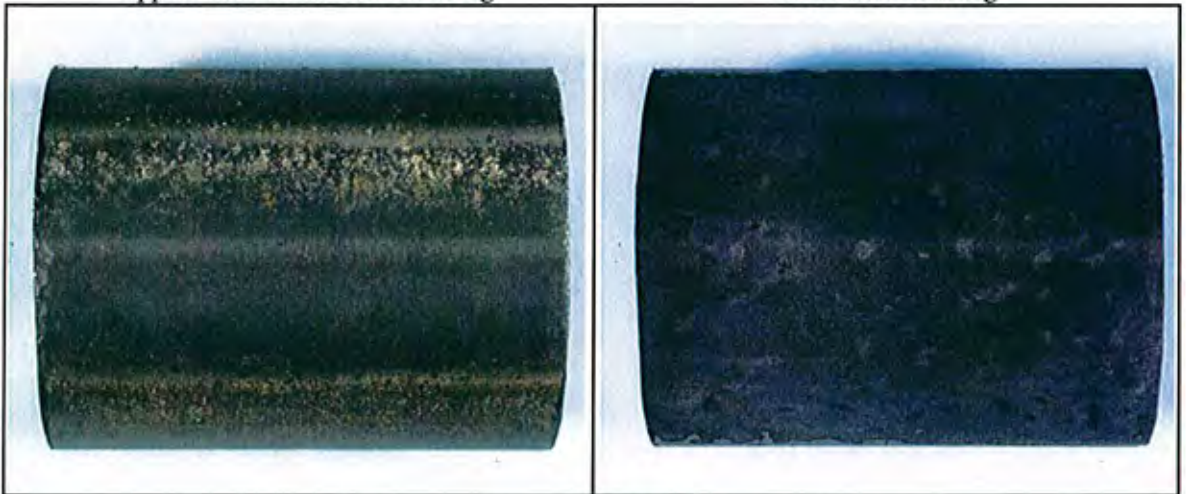
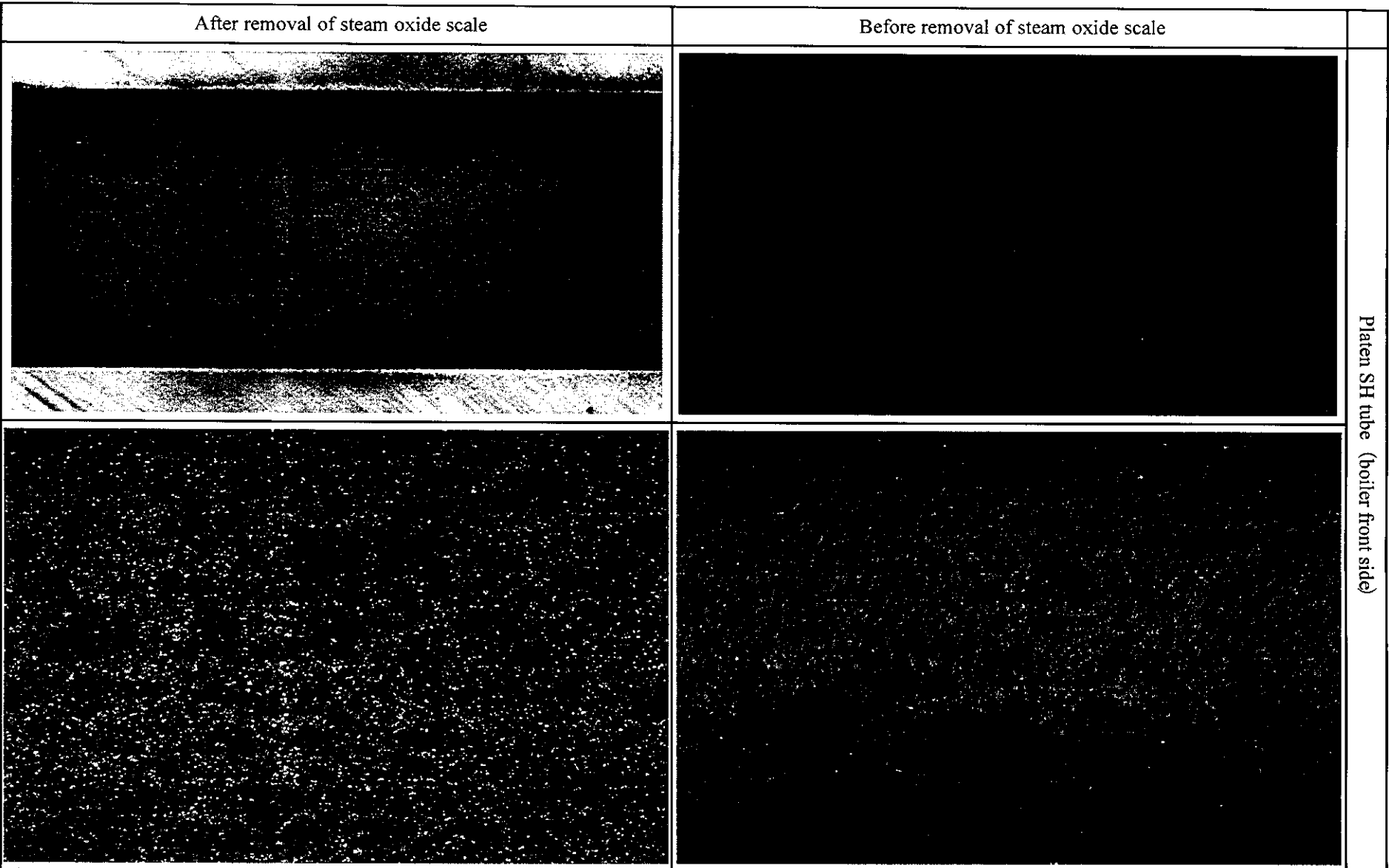


Photo I -12 Tube appearance from outside (boiler front side)

Platen SH tube (boiler front side)



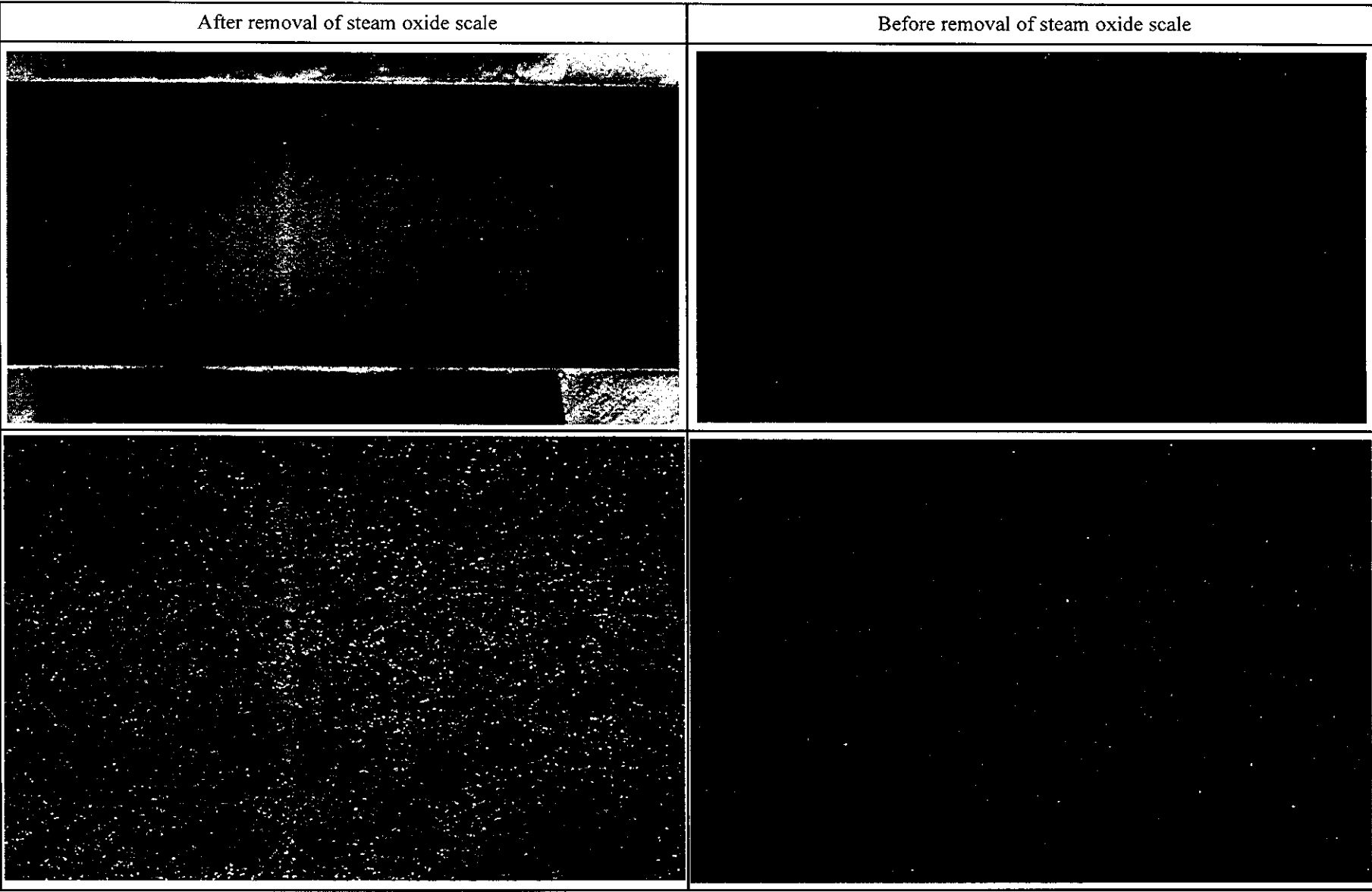
5mm

1mm

Photo I - 13 Tube appearance from inside before and after removal of steam oxide scale.
(Platen SH tube-boiler front side)

600

Platen SH tube (boiler rear side)

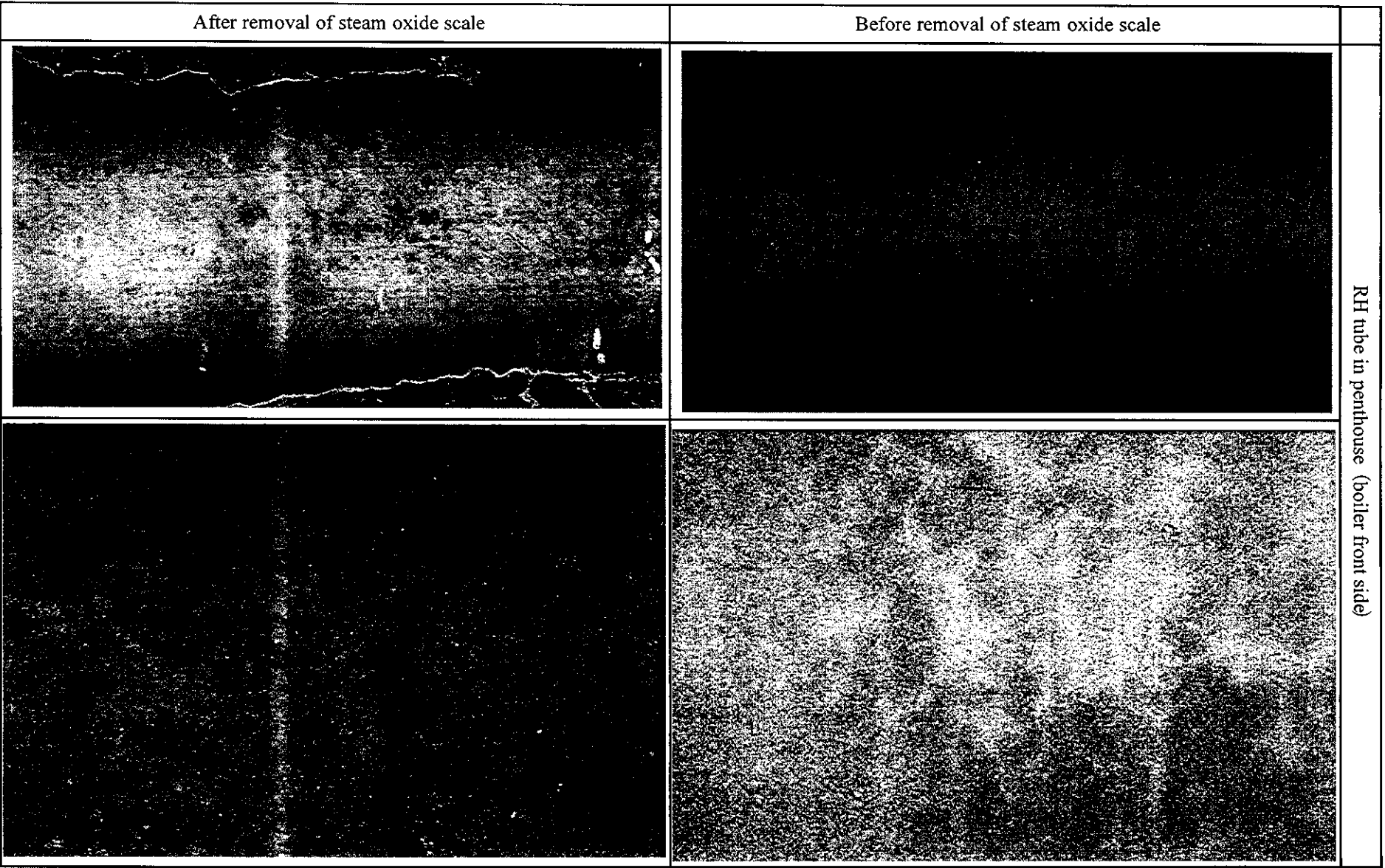


5mm

1mm

Photo I -14 Tube appearance from inside before and after removal of steam oxide scale
(Platen SH tube- boiler rear side)

RH tube in penthouse (boiler front side)



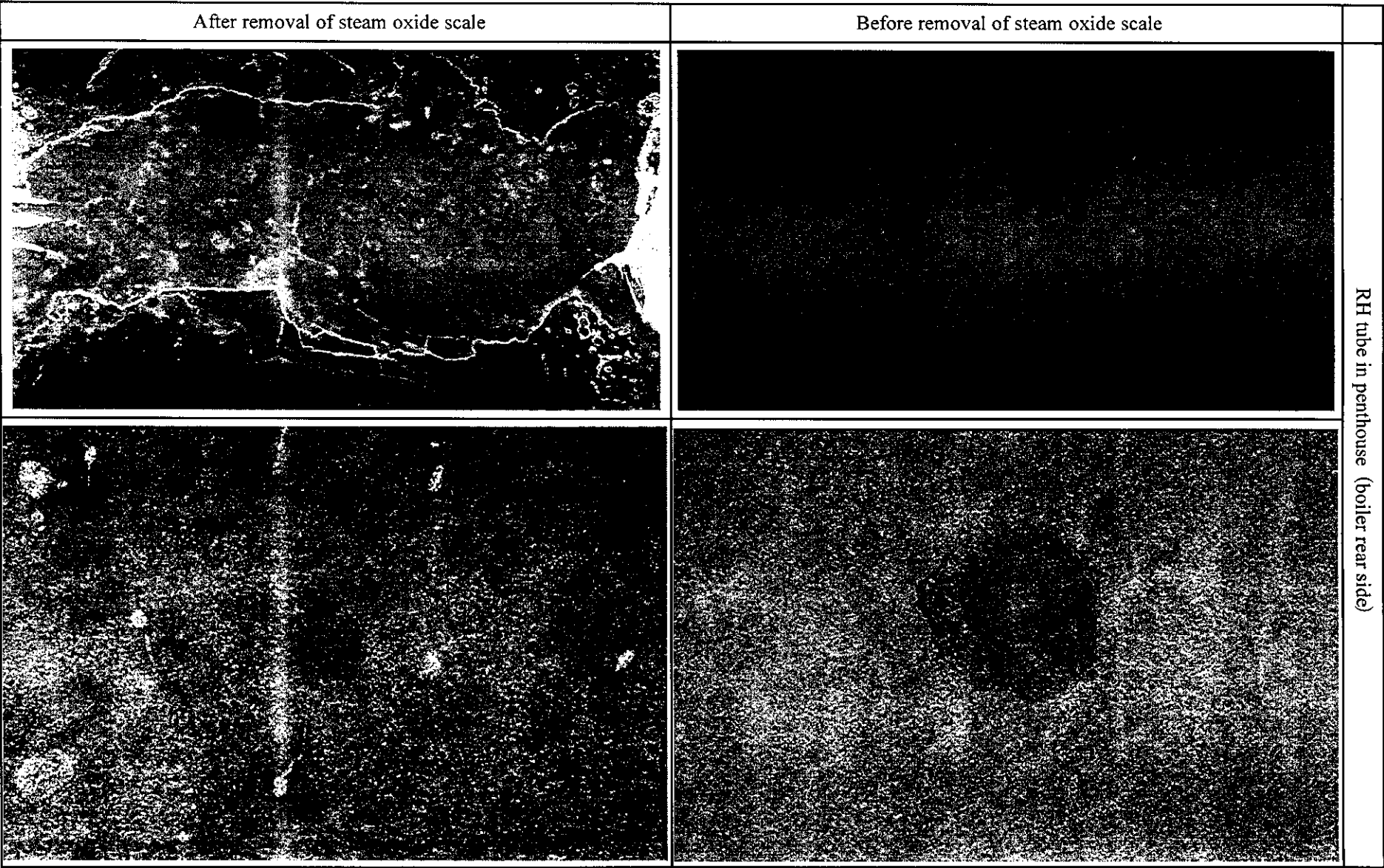
5mm

1mm

Photo I -15 Tube appearance from inside before and after removal of steam oxide scale (RH tube in penthouse (boiler front side))

527

RH tube in penthouse (boiler rear side)

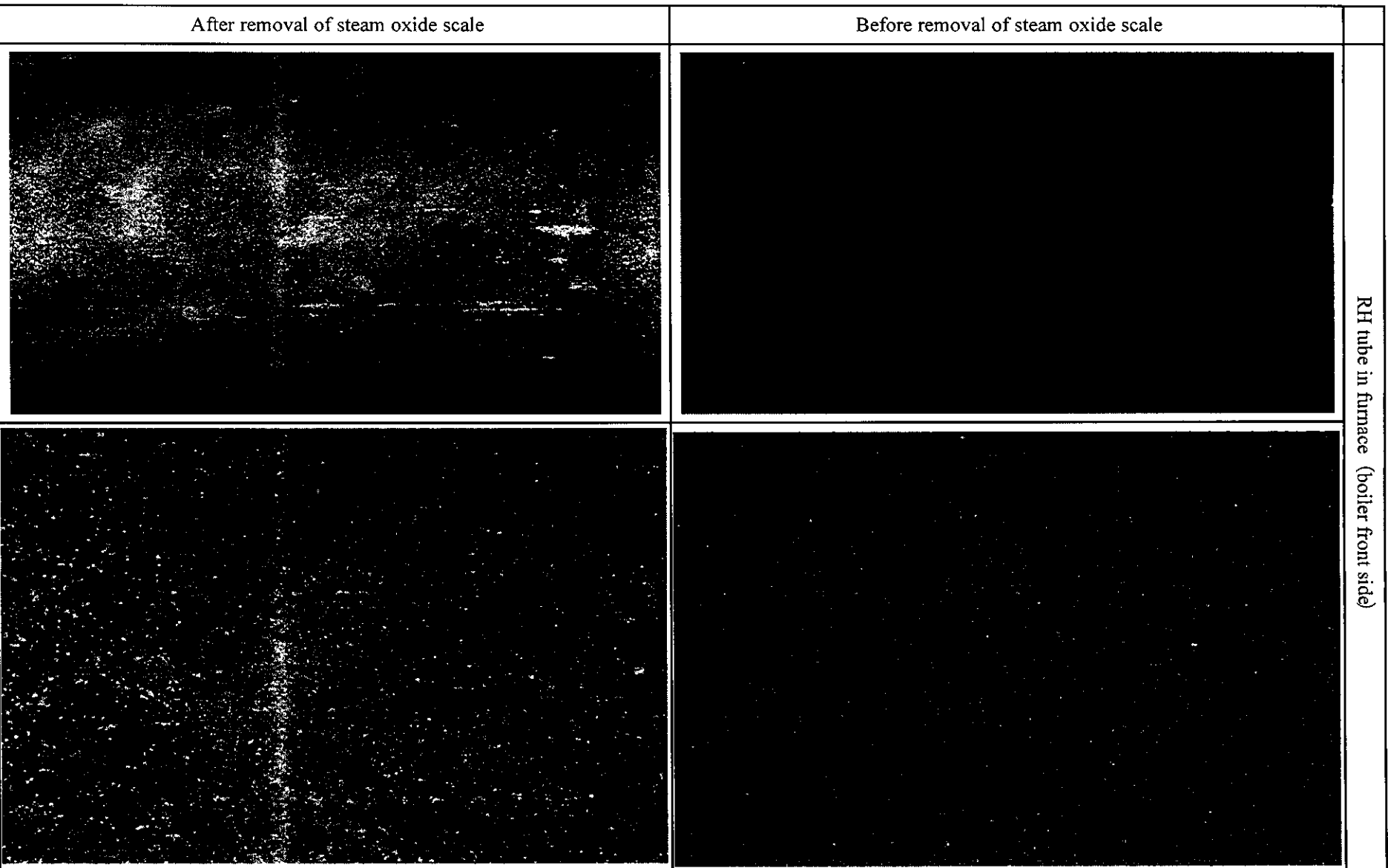


5mm

1mm

Photo I -16 Tube appearance from inside before and after removal of steam oxide scale (RH tube in penthouse (boiler rear side))

RH tube in furnace (boiler front side)

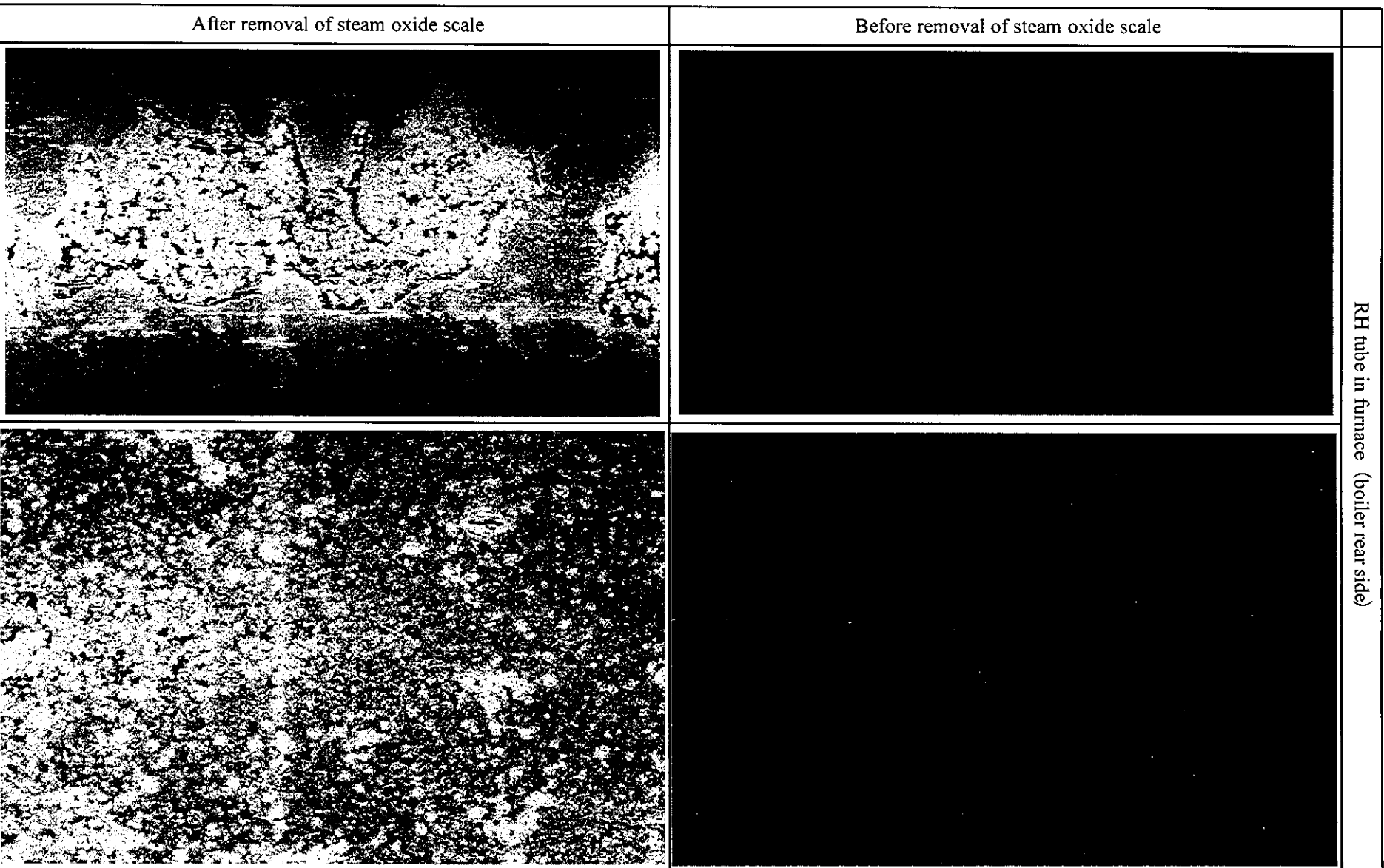


5mm

1mm

Photo I -17 Tube appearance from inside before and after removal of steam oxide scale
(RH tube in furnace (boiler front side))

RH tube in furnace (boiler rear side)



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Photo I - 18 Tube appearance from inside before and after removal of steam oxide scale (RH tube in furnace (boiler rear side))

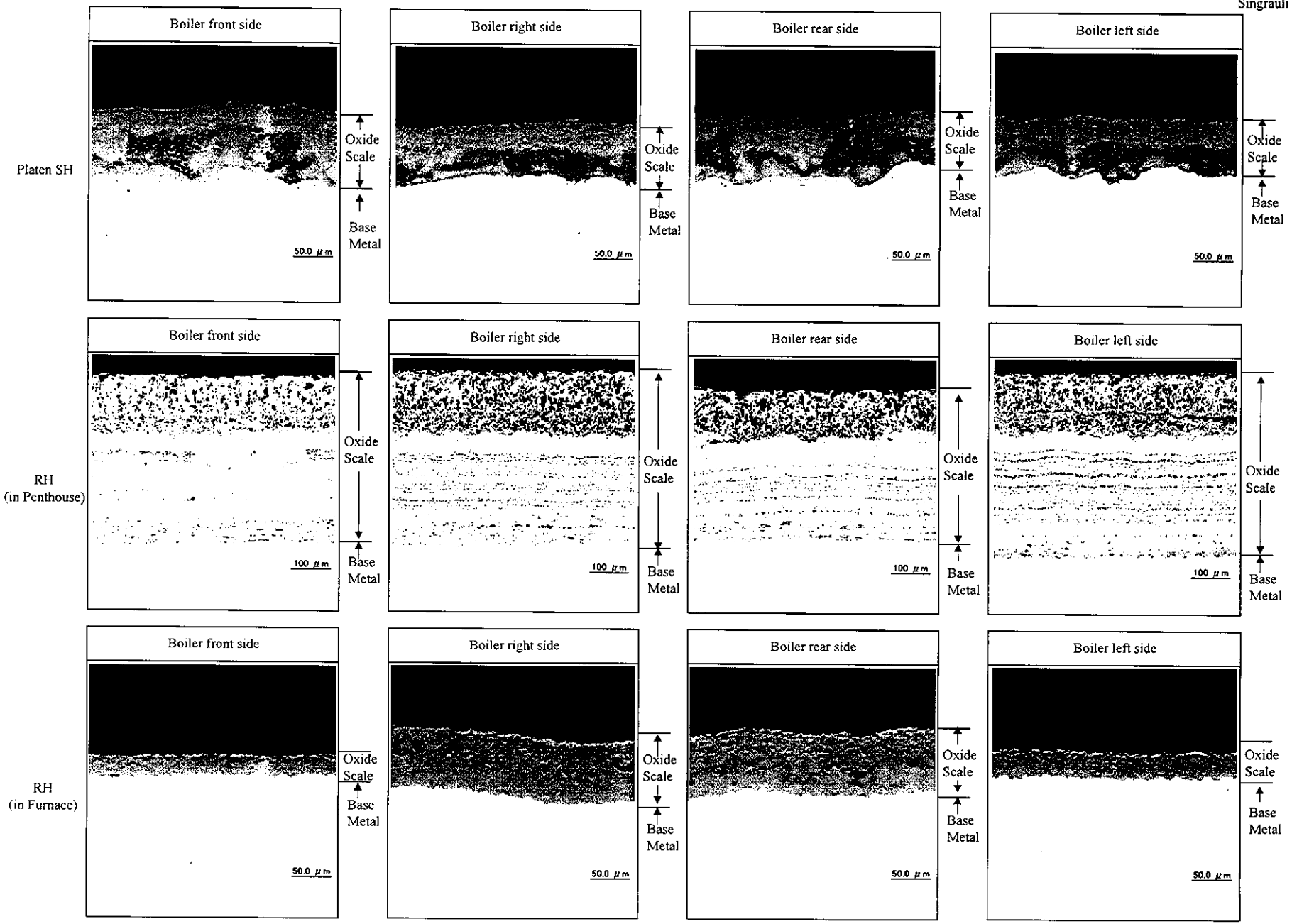
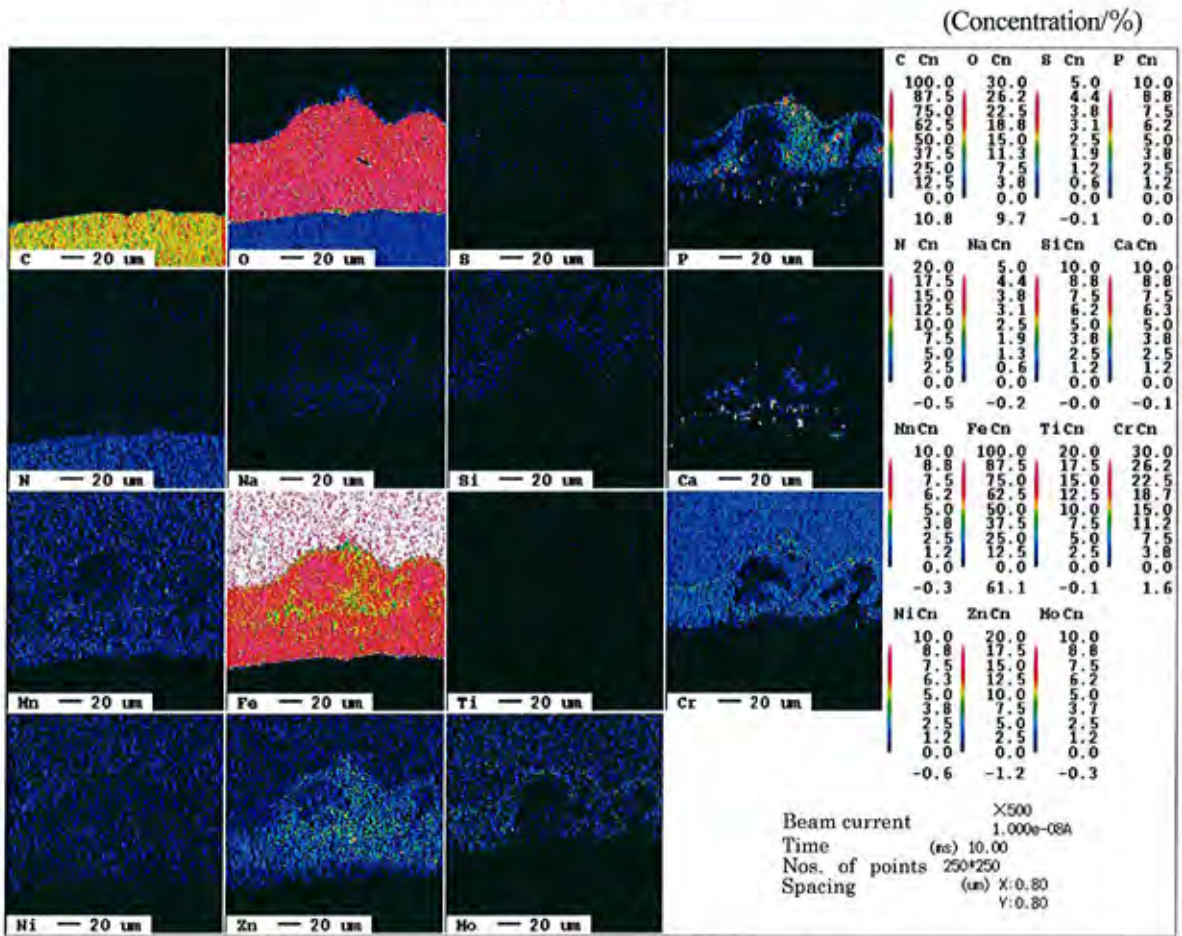
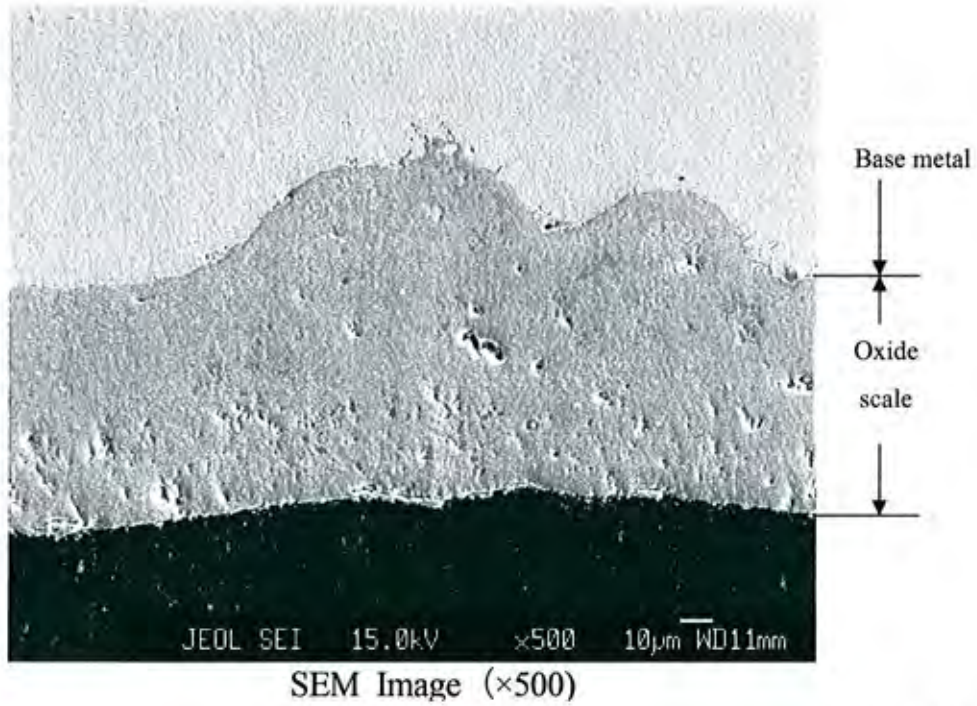


Photo I -19 Cross sectional observation of sample tube inside surface

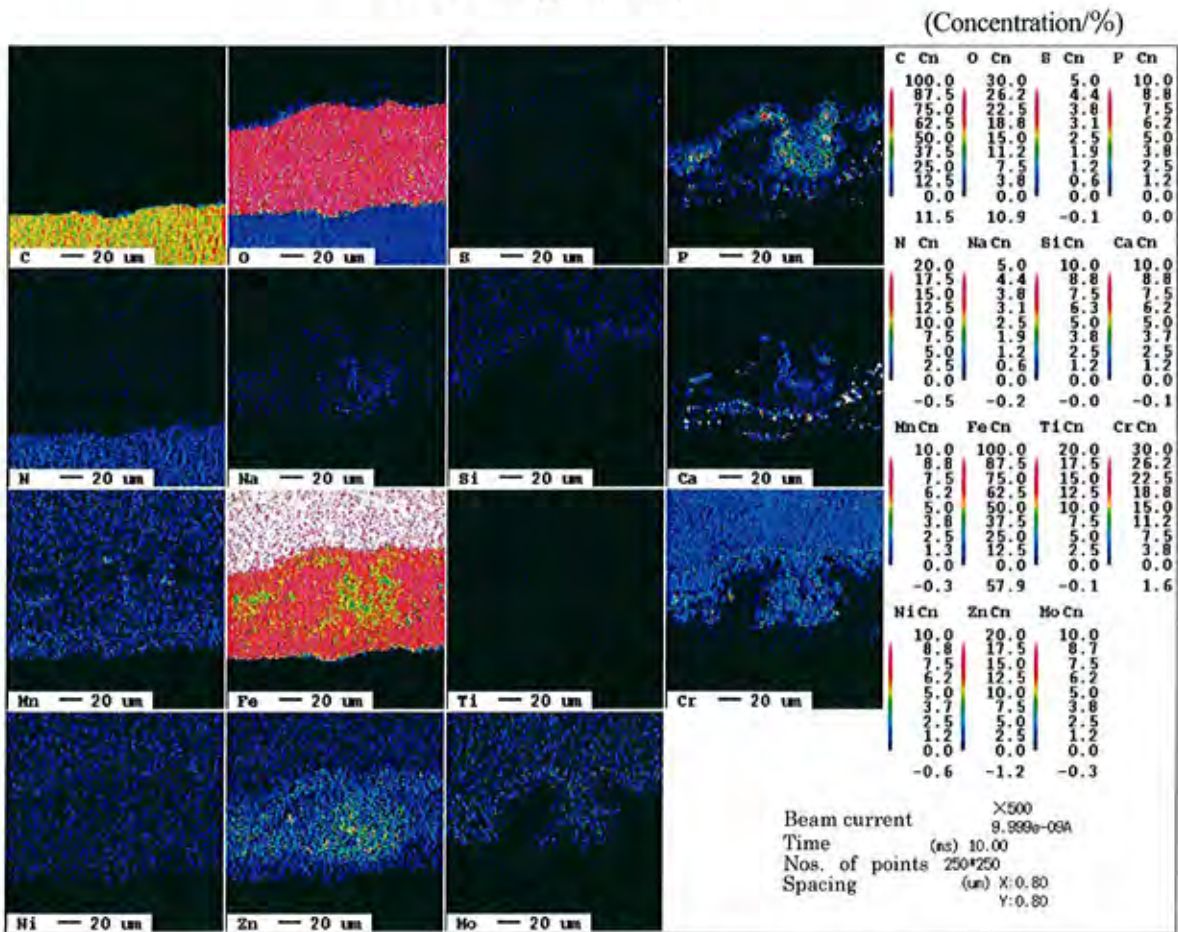
Singrauli Platen-SH [Front]



Element Mapping Image (brighter color indicates higher concentration)

Fig I-13. EPMA analysis results

Singrauli Platen-SH [Right]

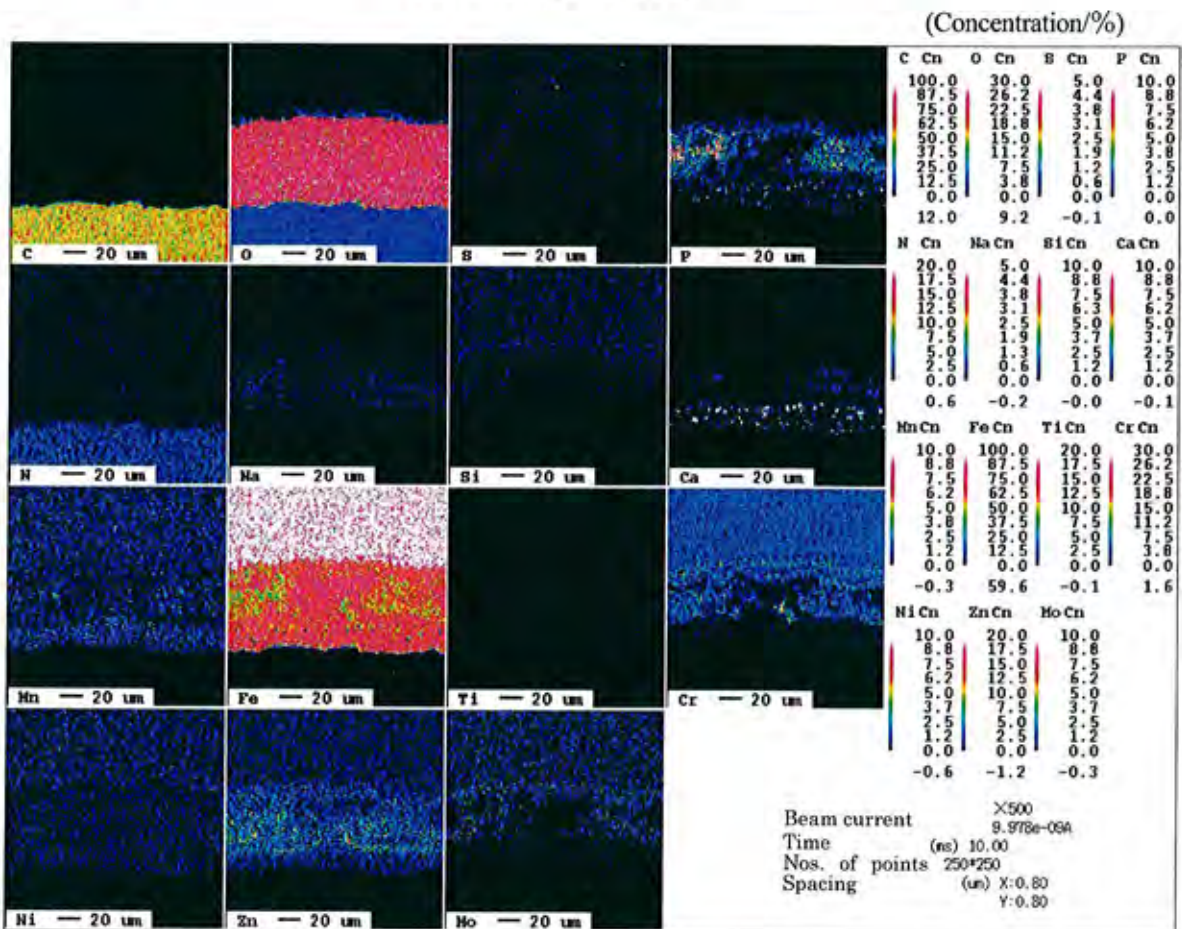
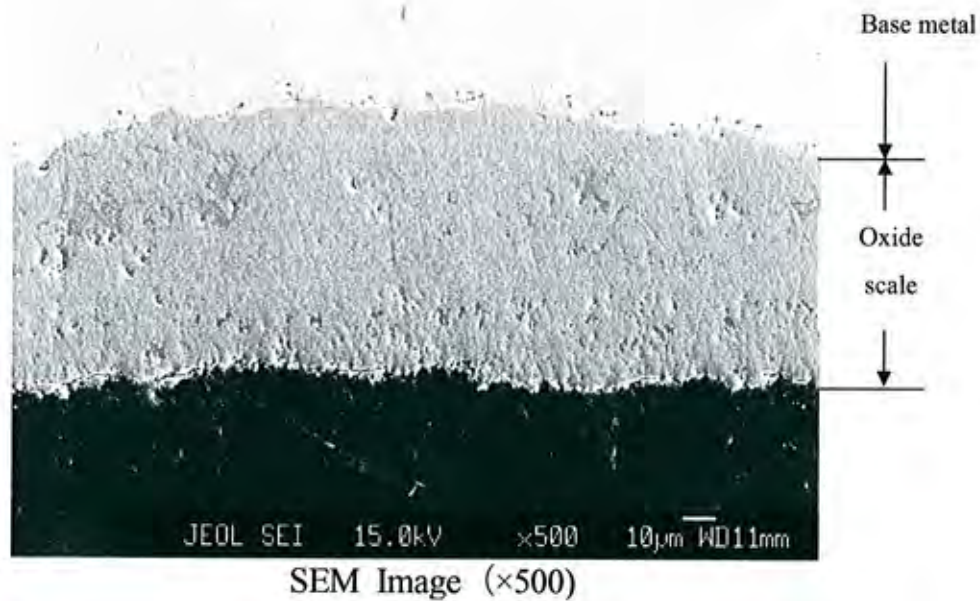


Element Mapping Image (brighter color indicates higher concentration)

Fig I -14. E PMA analysis results

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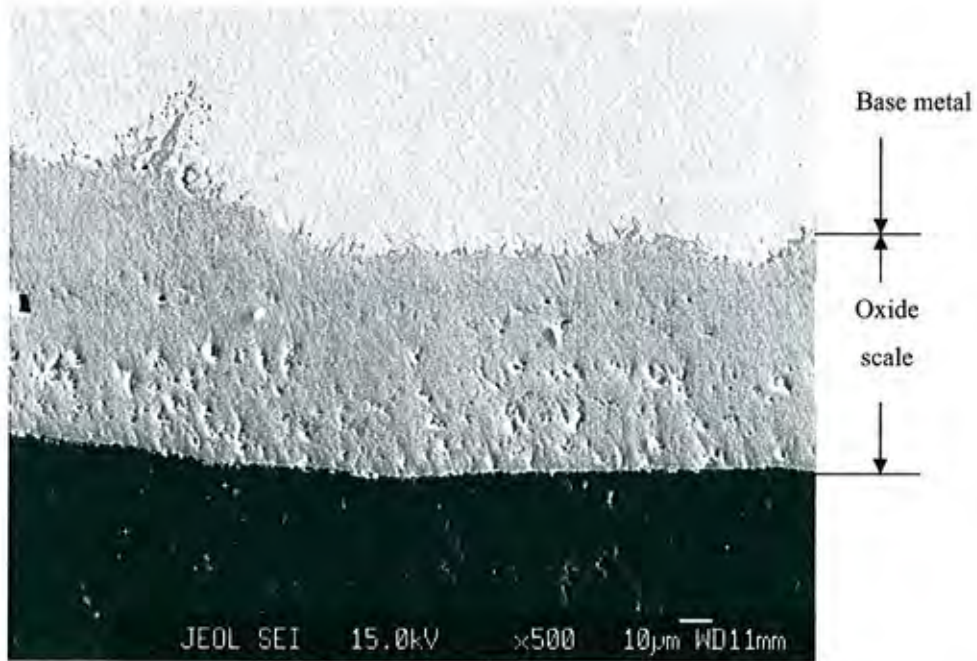
Singrauli Platen-SH [Rear]



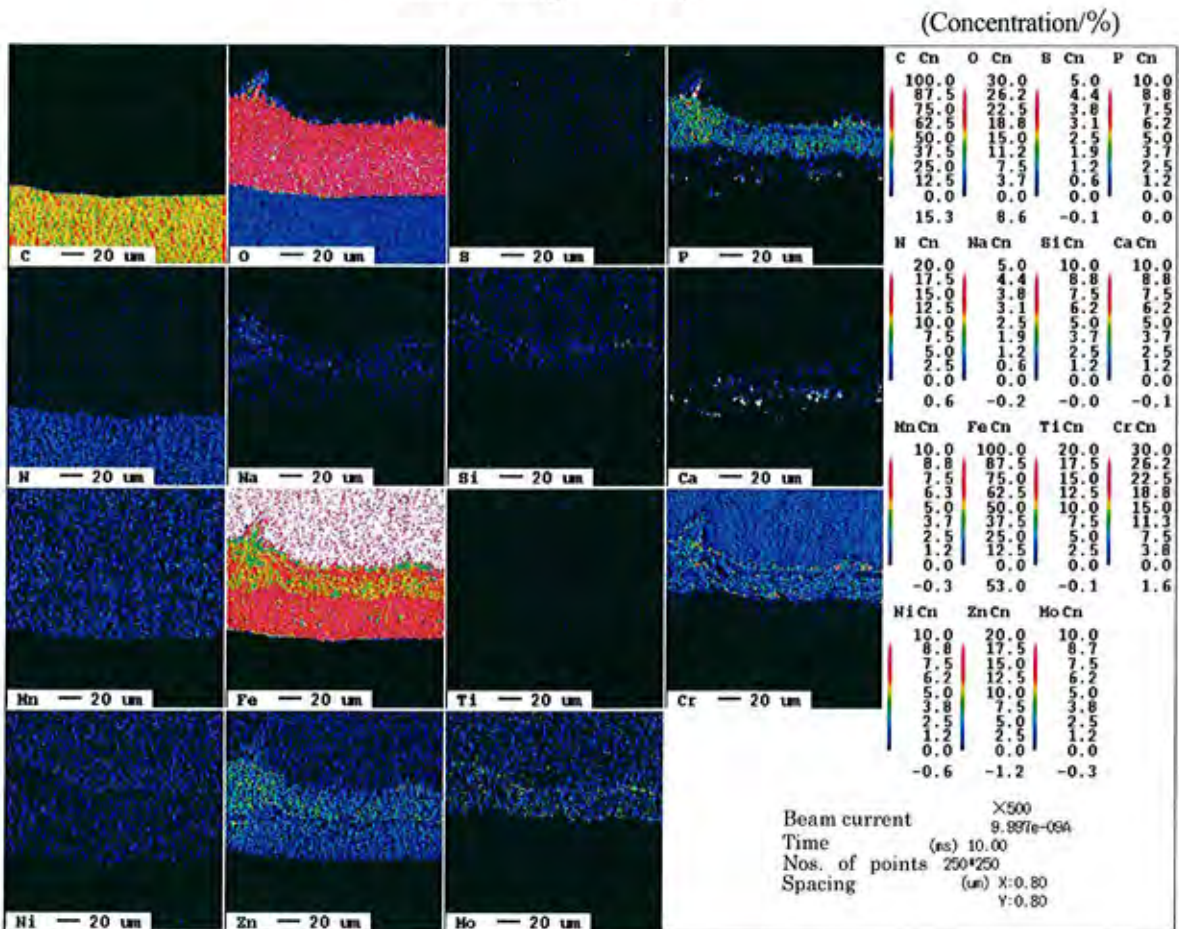
Element Mapping Image (brighter color indicates higher concentration)

Fig I -15. E PMA analysis results

Singrauli Platen-SH [Left]



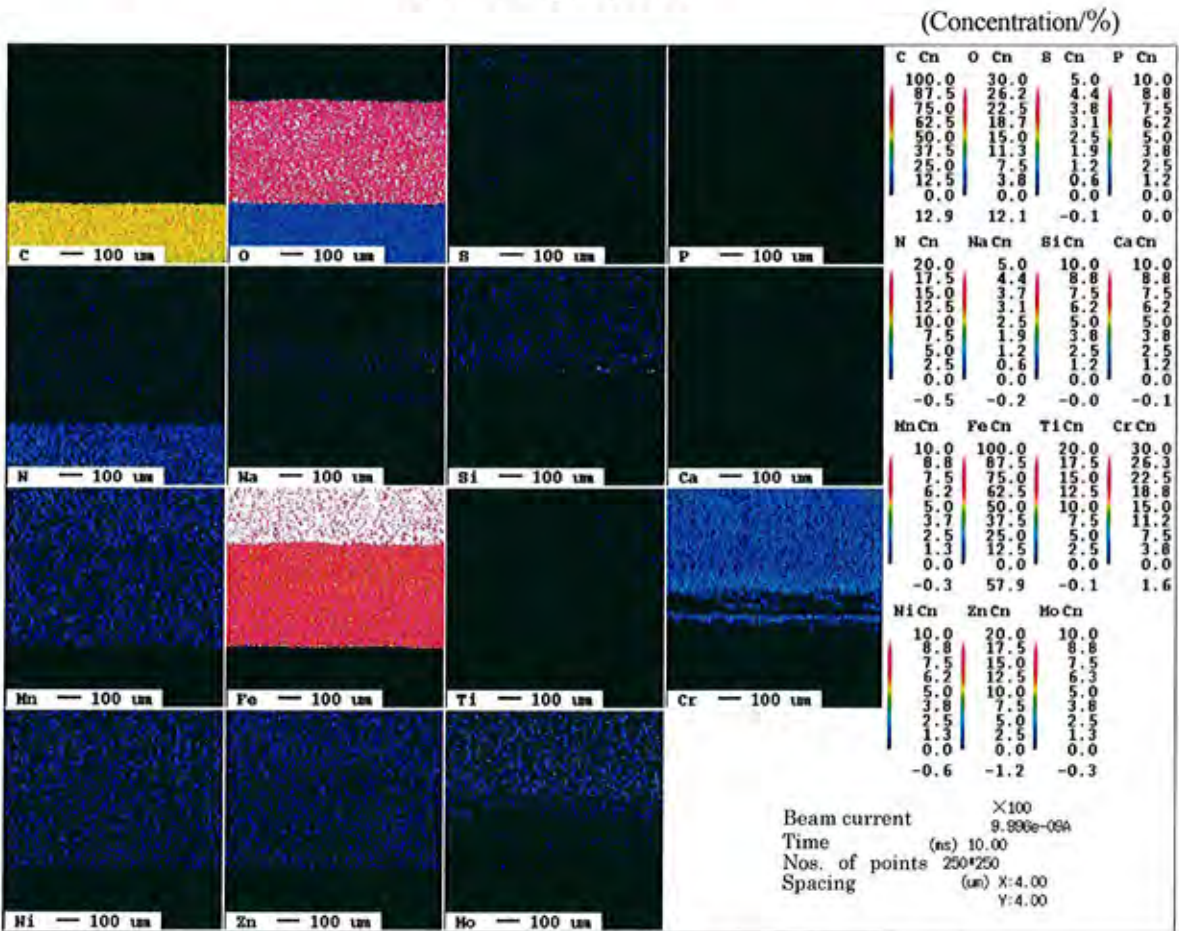
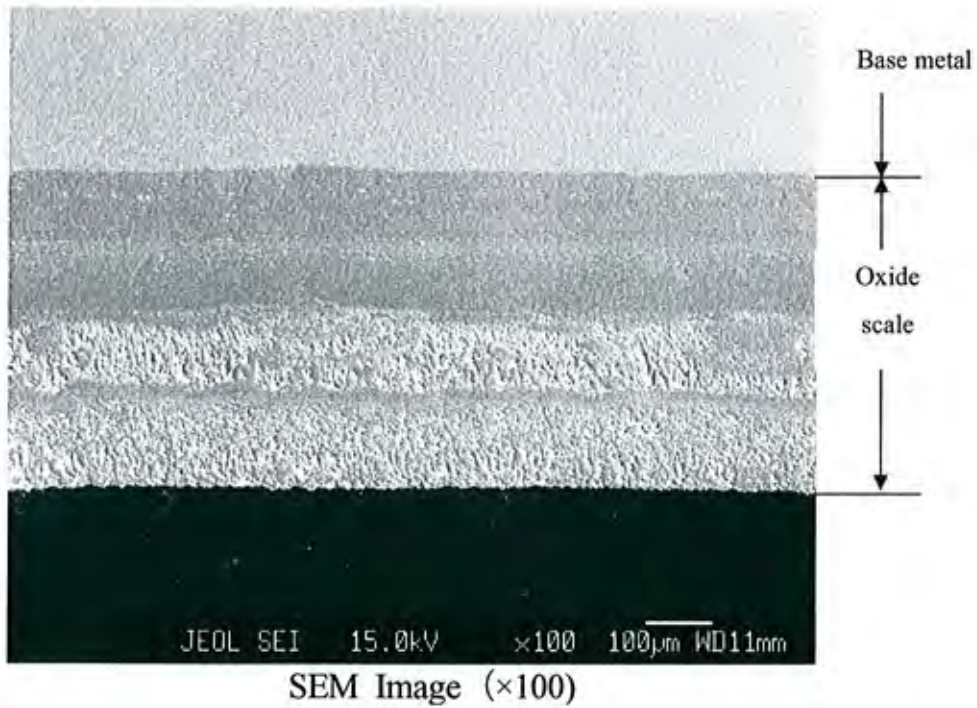
SEM Image (x500)



Element Mapping Image (brighter color indicates higher concentration)

Fig I -16. E PMA analysis results

Singrauli RH(in penthouse) [Front]

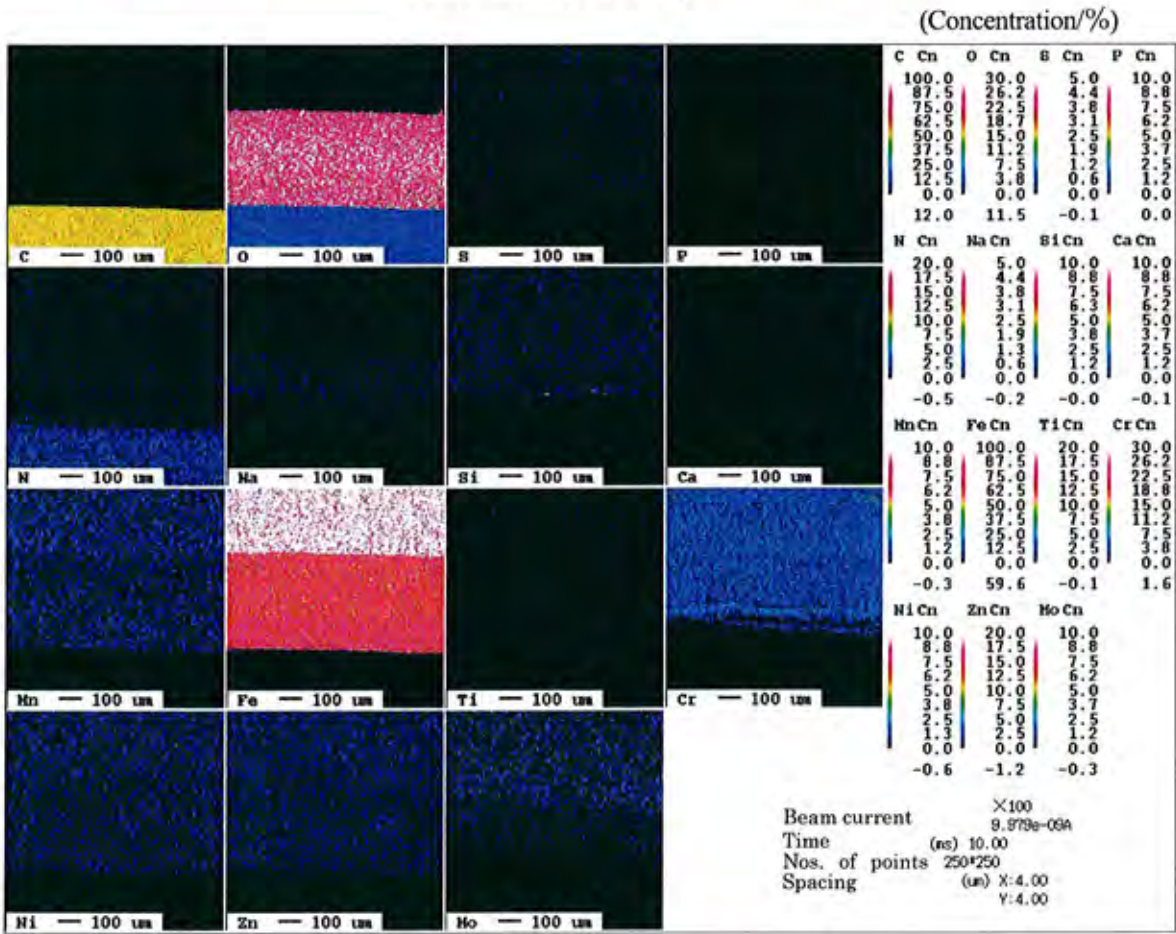
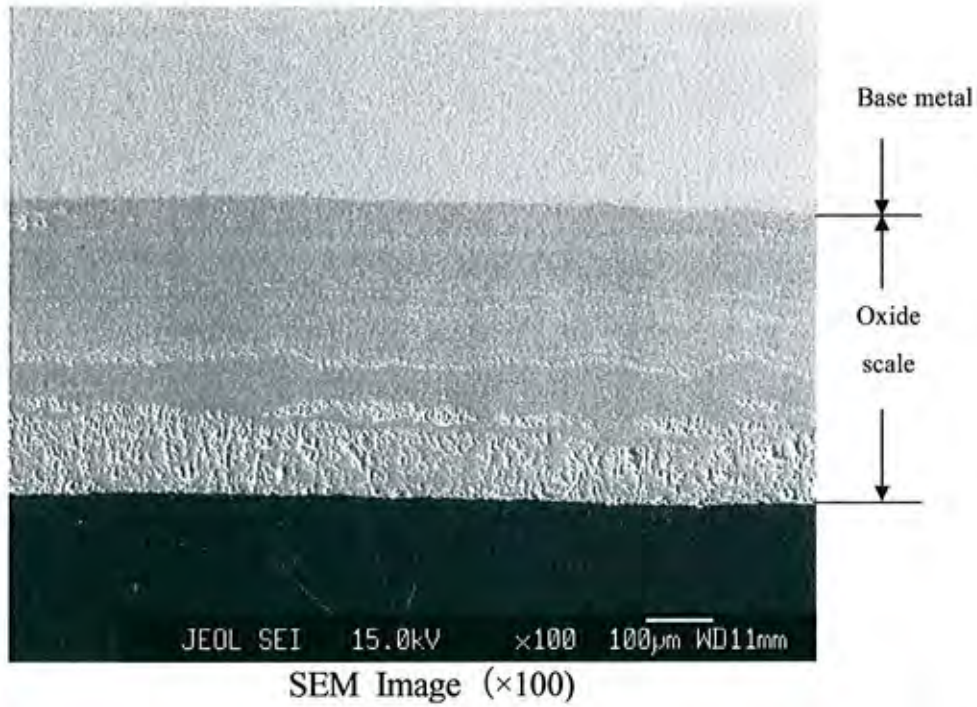


Element Mapping Image (brighter color indicates higher concentration)

Fig I -17. E PMA analysis results

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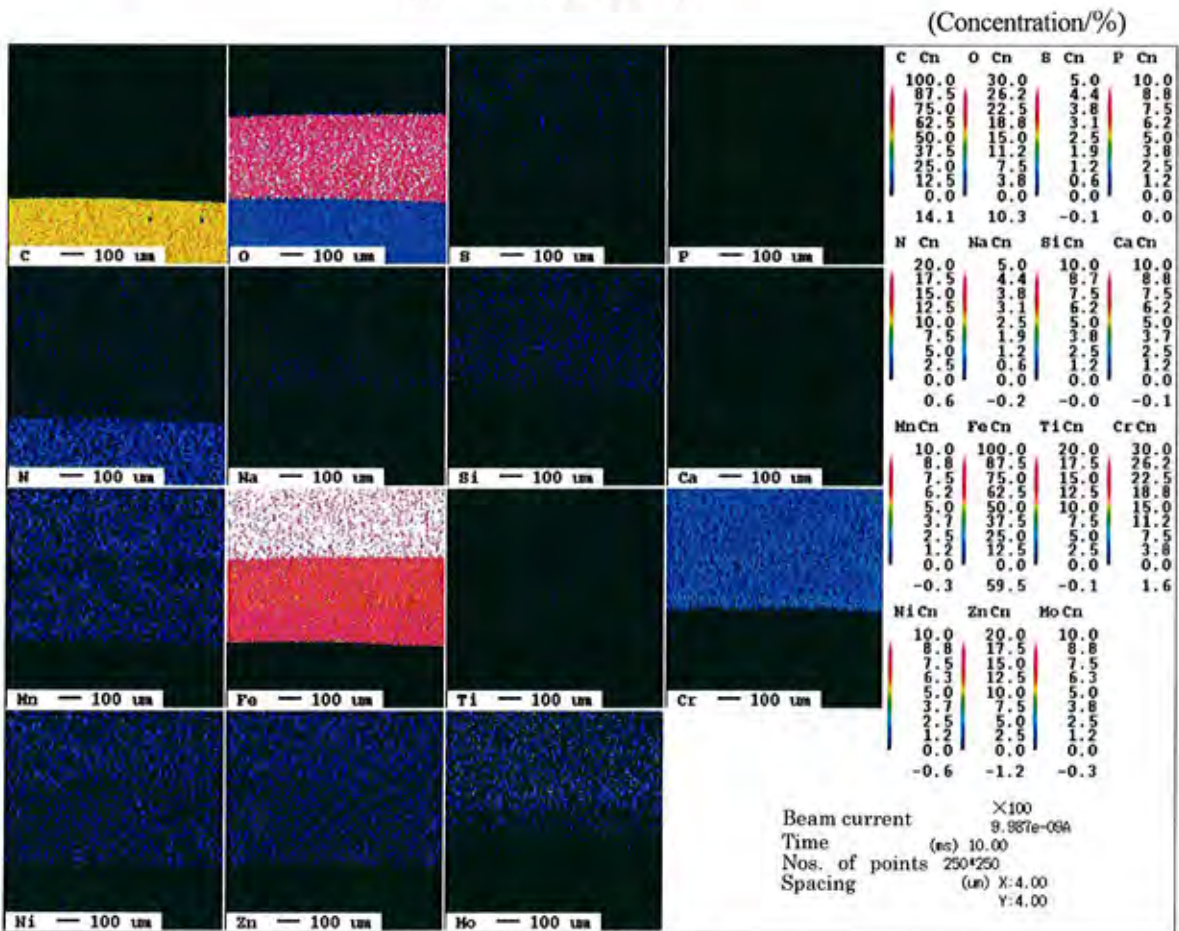
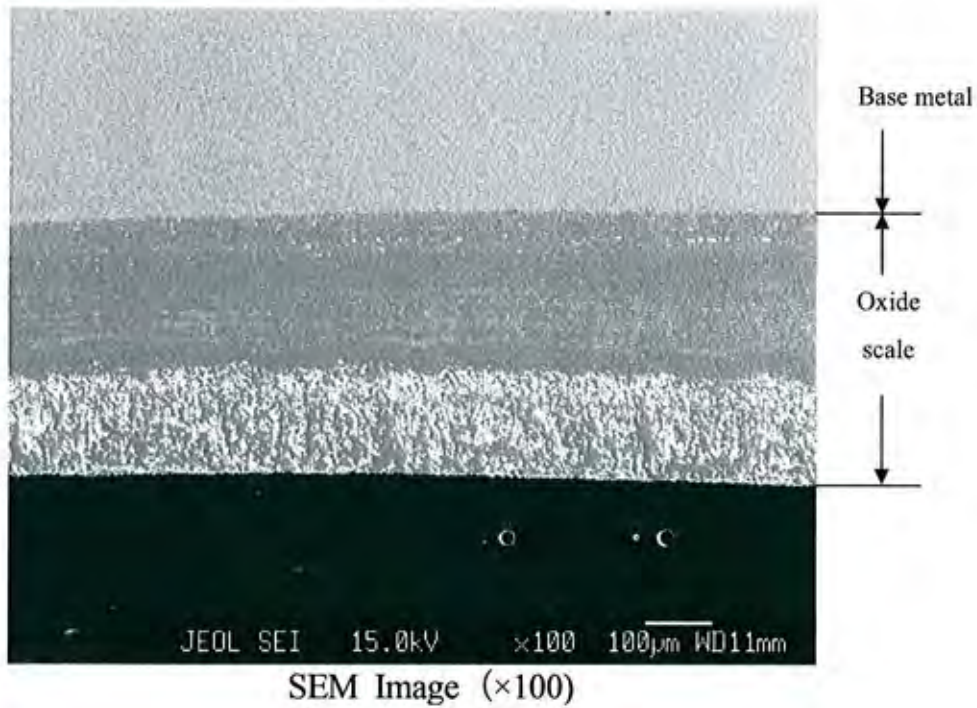
Singrauli RH(in penthouse) [Right]



Element Mapping Image (brighter color indicates higher concentration)

Fig I -18. E PMA analysis results

Singrauli RH(in penthouse) [Rear]

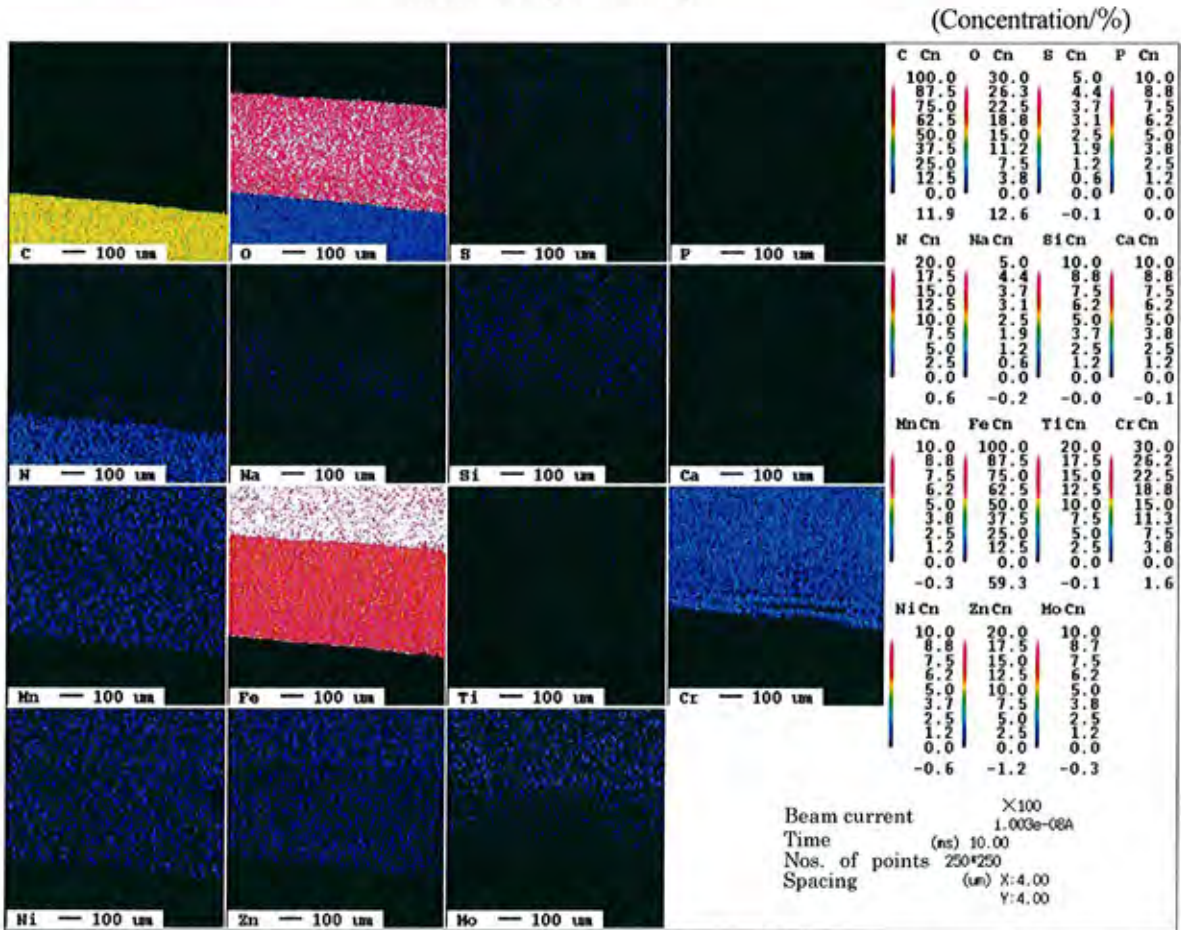
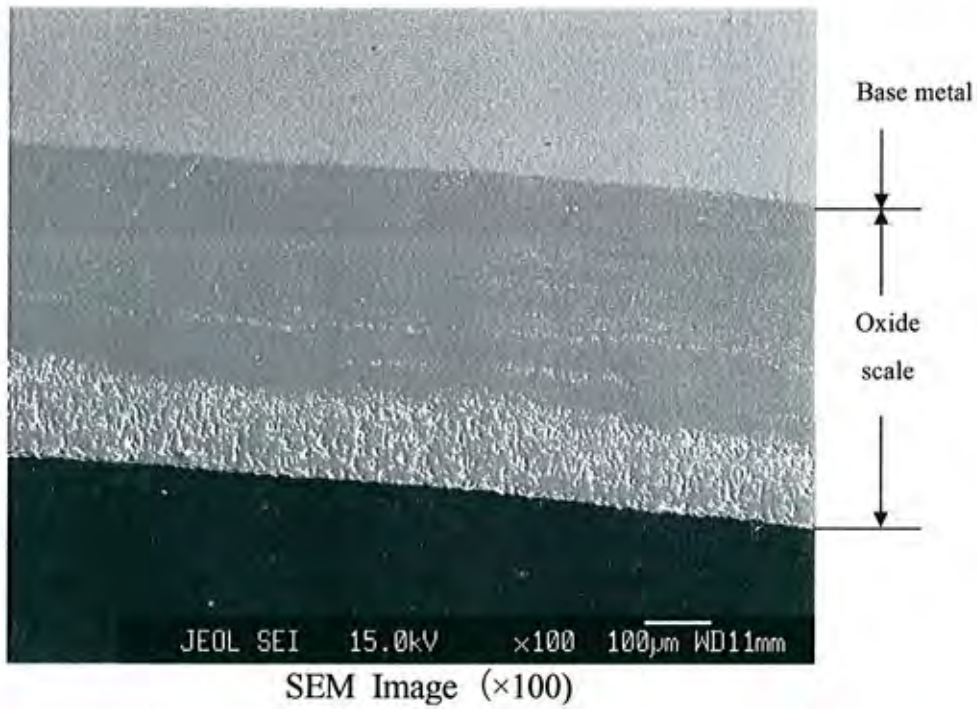


Element Mapping Image (brighter color indicates higher concentration)

Fig I -19. E PMA analysis results

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Singrauli RH(in penthouse) [Left]

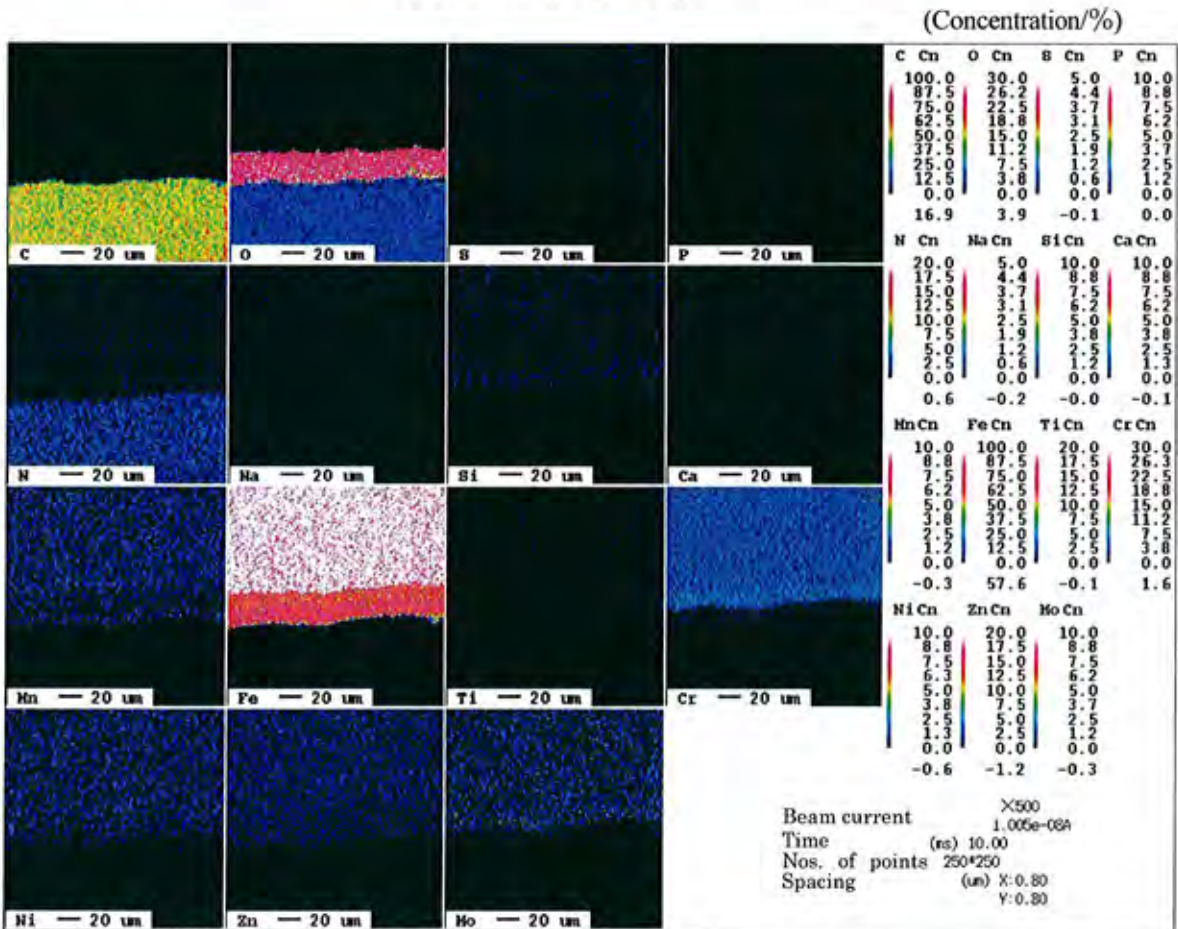
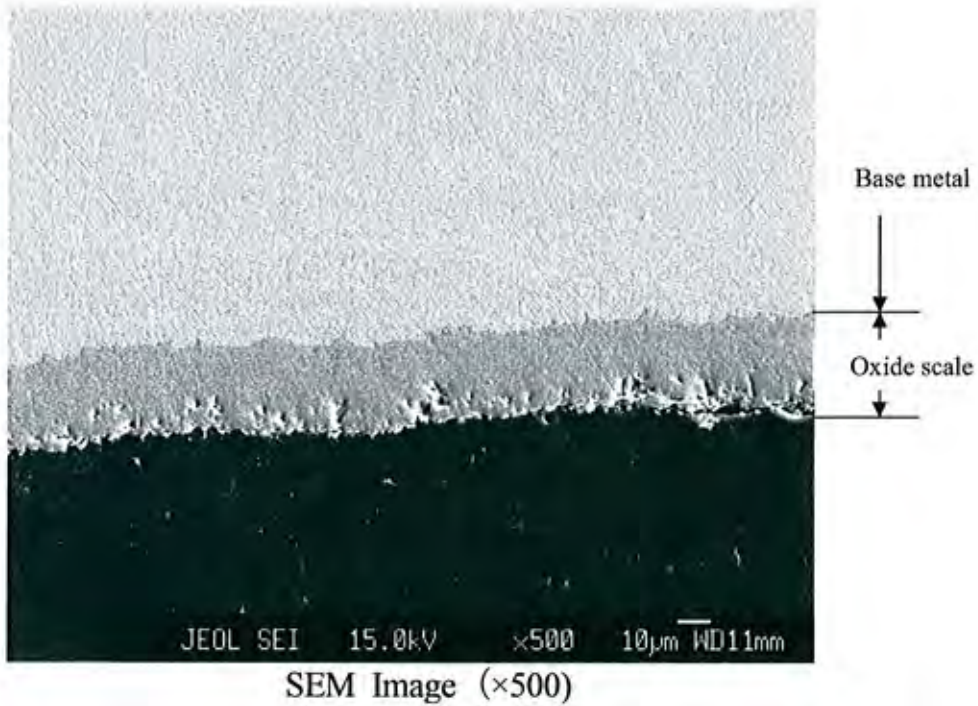


Element Mapping Image (brighter color indicates higher concentration)

Fig I -20. E PMA analysis results

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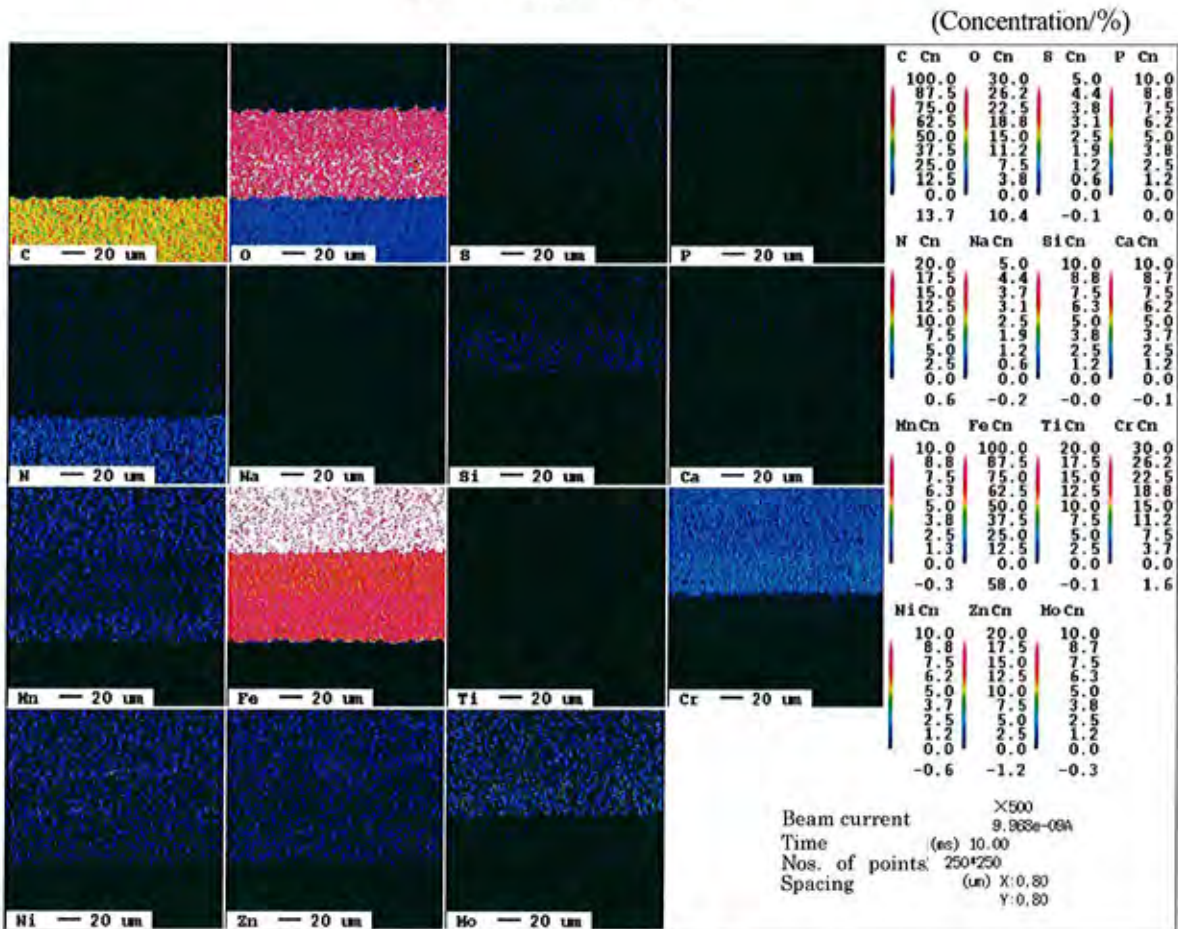
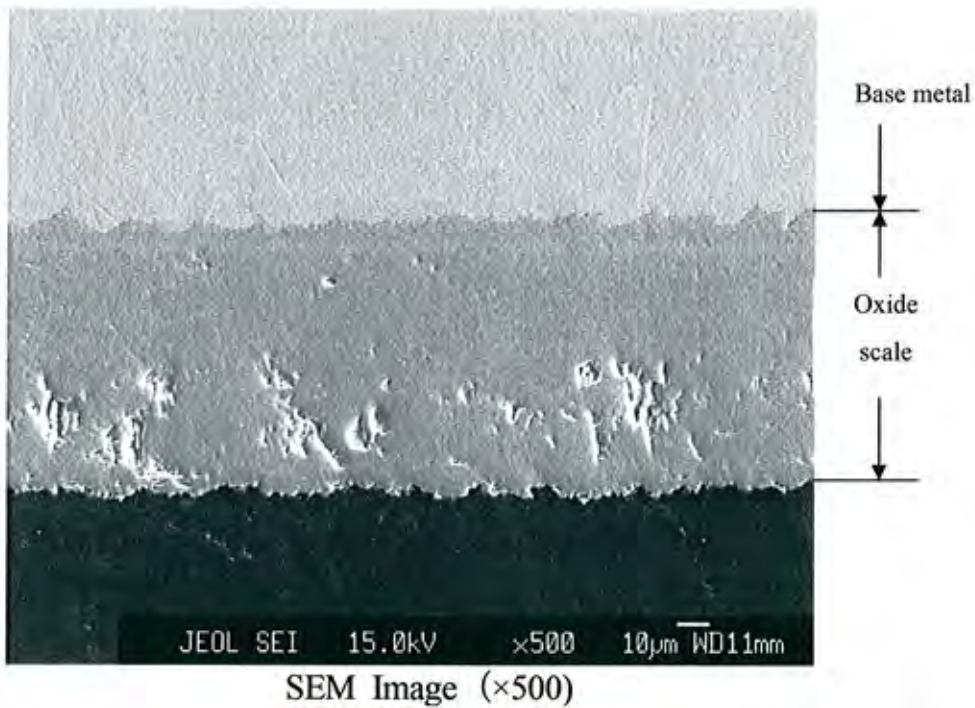
Singrauli RH(in furnace) [Front]



Element Mapping Image (brighter color indicates higher concentration)

Fig I -21. E PMA analysis results

Singrauli RH(in furnace) [Right]



Element Mapping Image (brighter color indicates higher concentration)

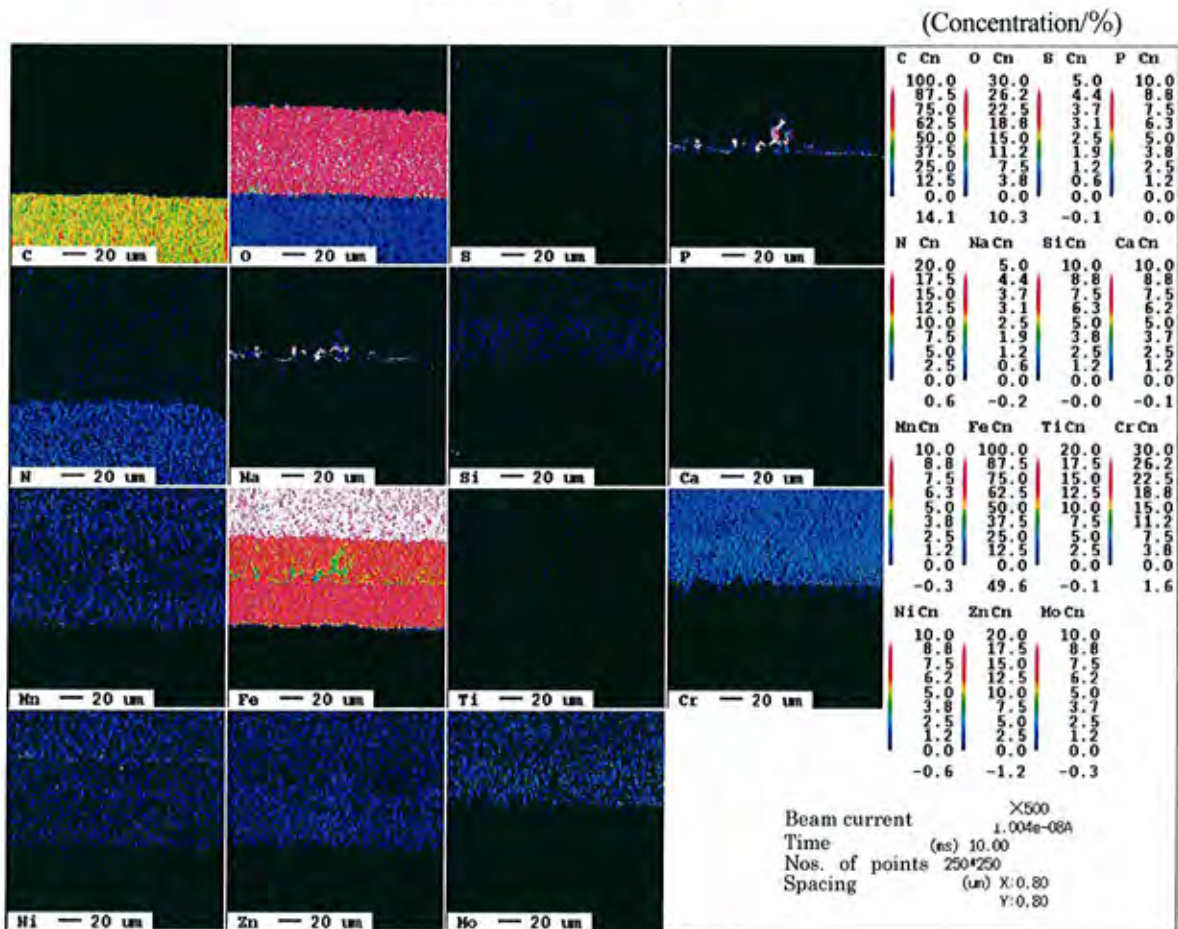
Fig I -22. E PMA analysis results

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Singrauli RH(in furnace) [Rear]



SEM Image (×500)

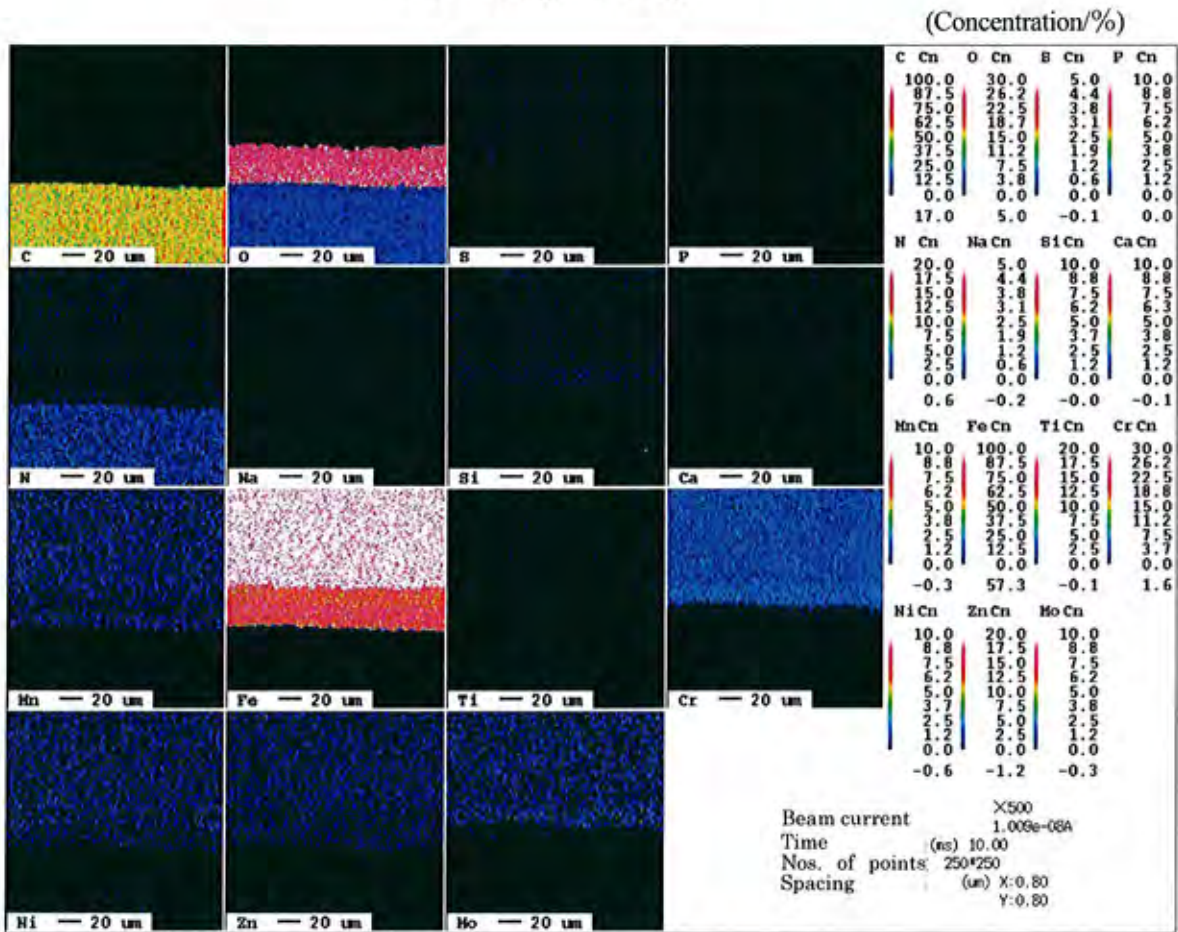
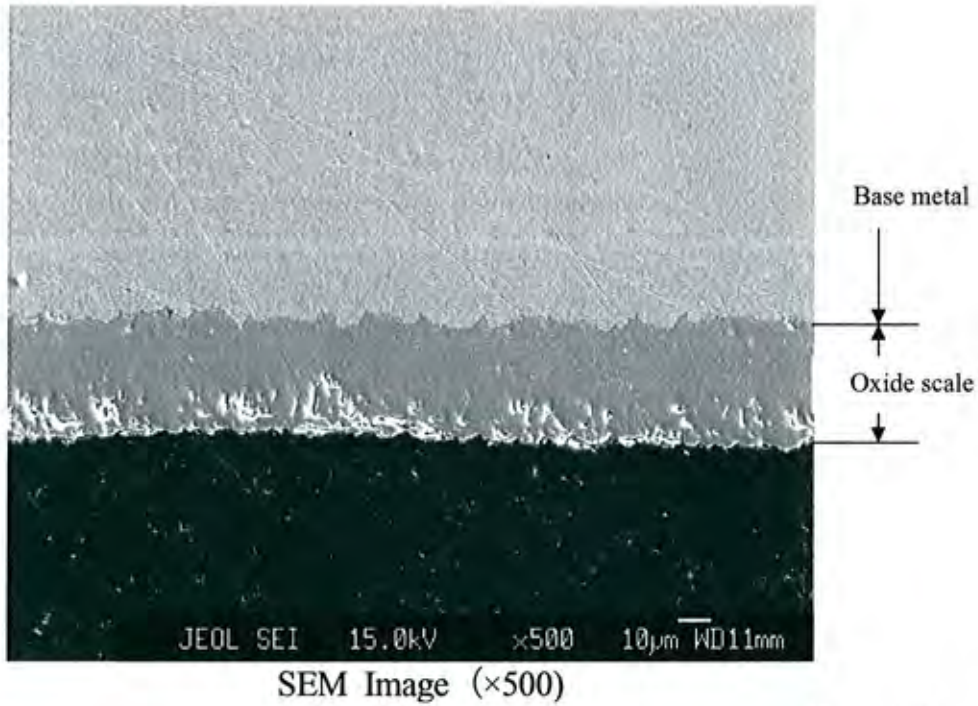


Element Mapping Image (brighter color indicates higher concentration)

Fig I -23. E PMA analysis results

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Singrauli RH(in furnace) [Left]



Element Mapping Image (brighter color indicates higher concentration)

Fig I -24. E PMA analysis results

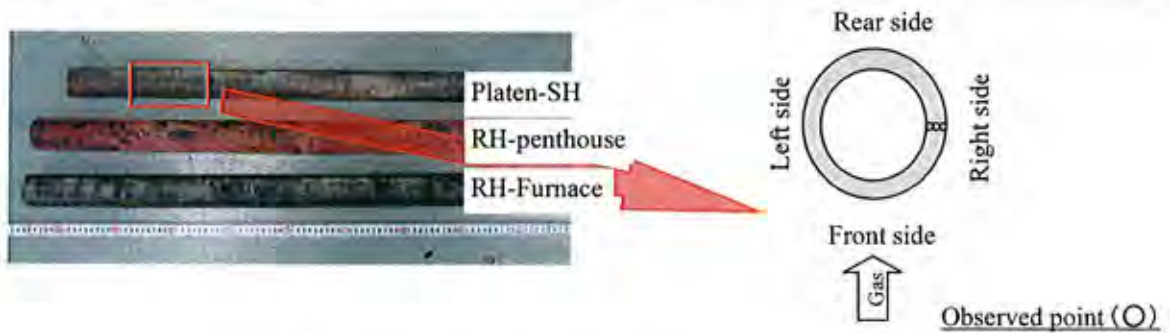
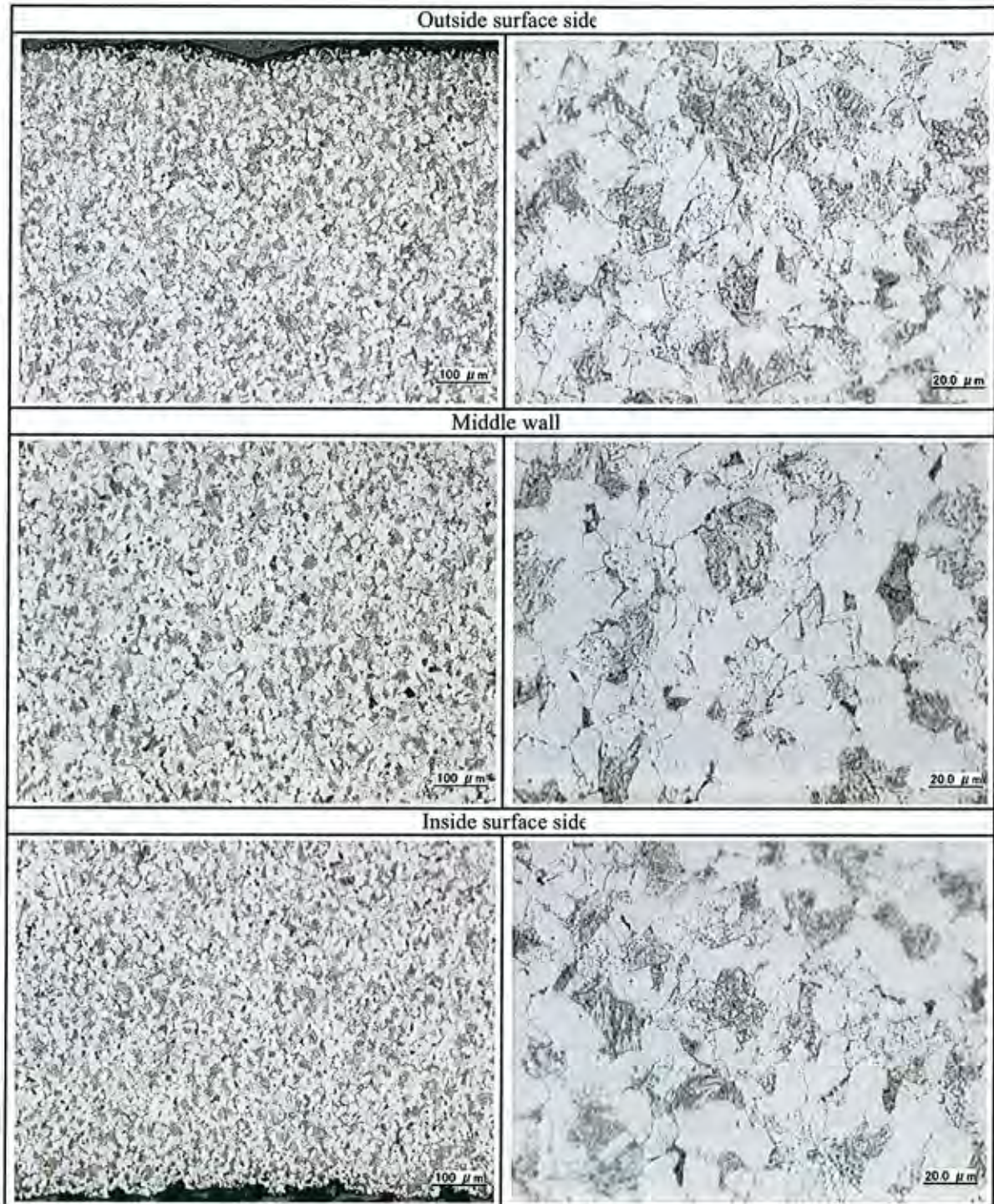


Photo I -20 Microstructure observation at cross section of sample tub
 (Platen-SH (right side, Base Metal))

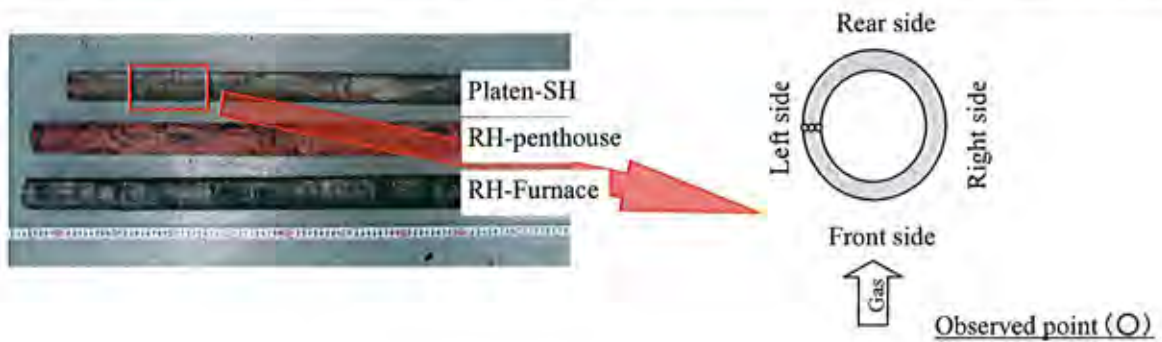
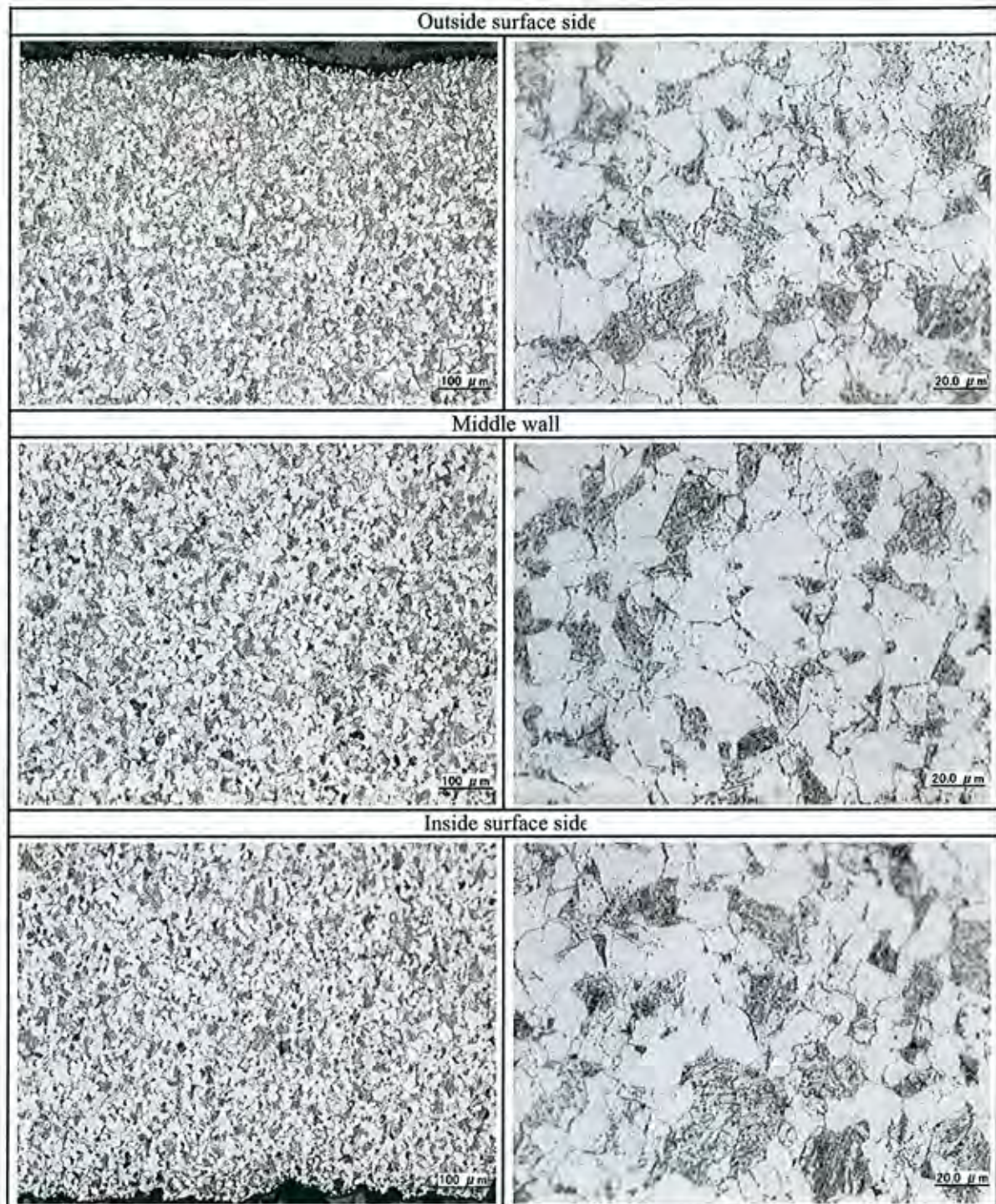


Photo I -21 Microstructure observation at cross section of sample tub
[Platen-SH (left side, Base Metal)]



Photo I -22 Microstructure observation at cross section of sample tube
 [RH-Penthouse (right side, Base Metal)]

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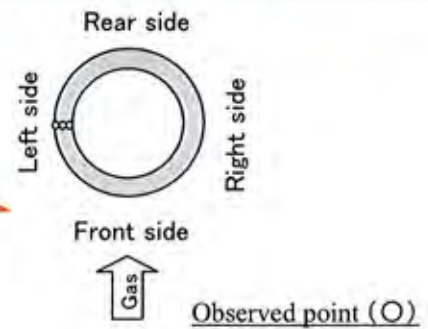
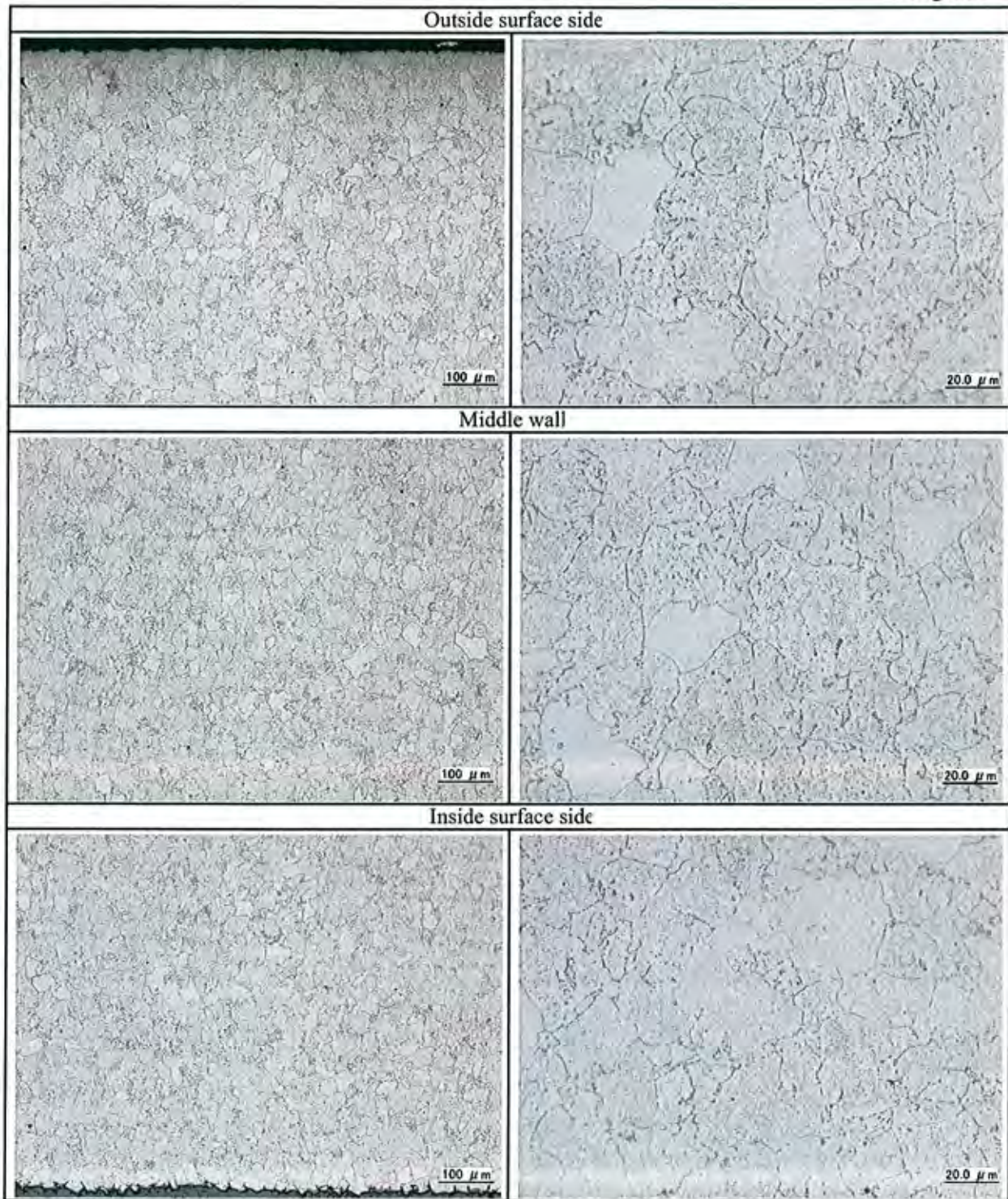


Photo I -23 Microstructure observation at cross section of sample tube
 [RH-Penthouse (right side, Base Metal)]

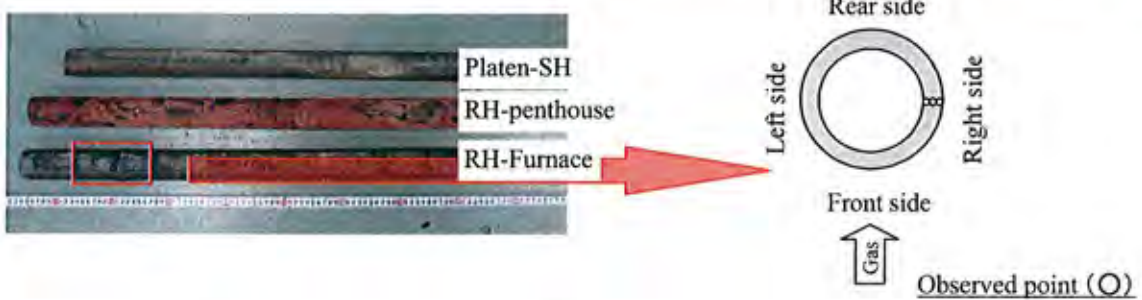
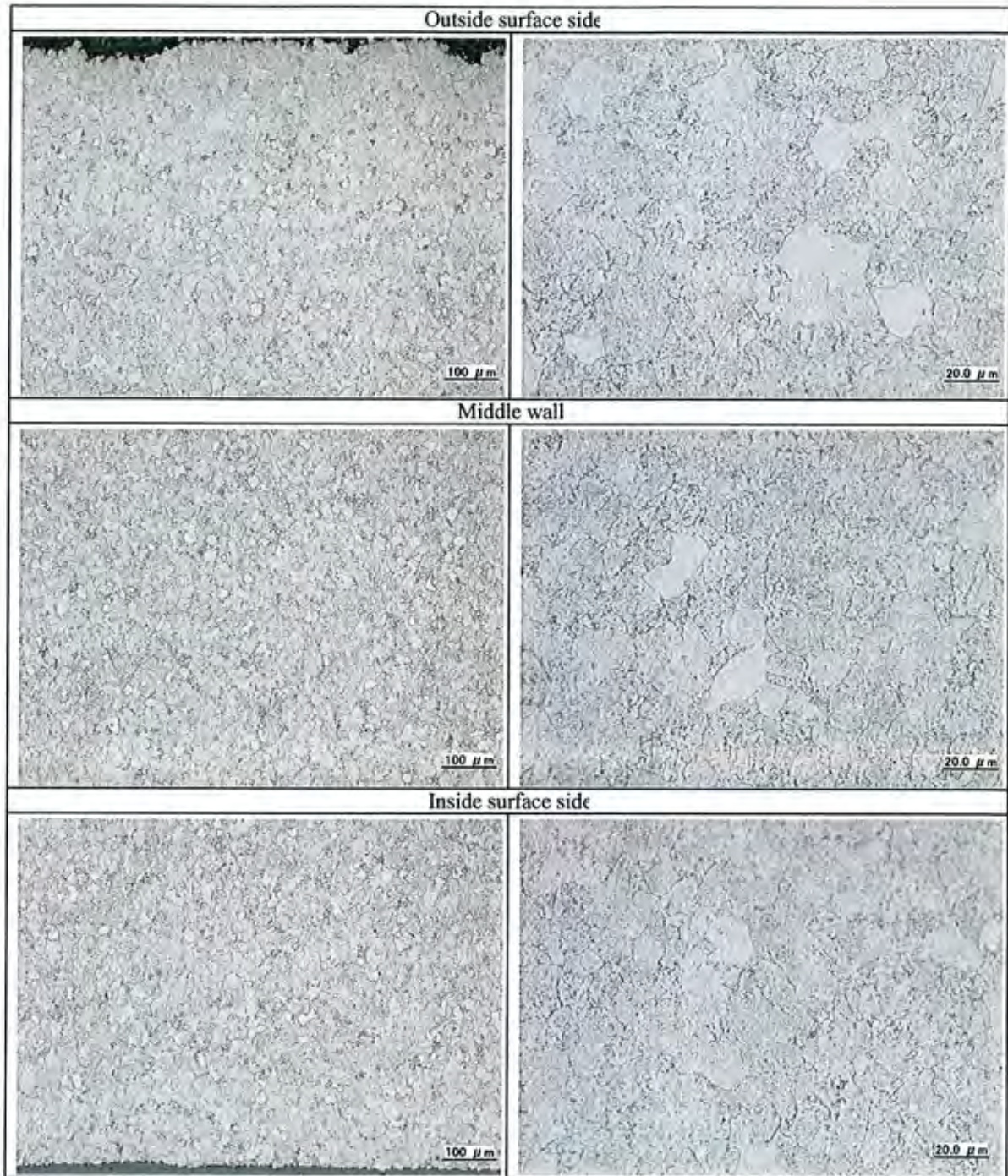


Photo I -24 Microstructure observation at cross section of sample tube
[RH-Furnace (right side, Base Metal)]

50-