Inconel718

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Inconel718

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: École de technologie supØrieure
:

Fig. 4.1 Appearance of ETS.

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Ni Inconel718

TIG Tungsten Inert Gas = GTAW : Gas tungsten arc welding
(Fig. 5.1.1)

Fig. 5.1.2

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Fig. 5.1.1 Solidification crack Fig. 5.1.2 Schematic illustration of Solidification cracking.

1.33 mm Inconel718
Table 5.2.1 Inconel718 ERNiFeCr-2
Table 5.2.2 5.26 mm/s 2.54 mm/s 69.4 A 44 A
5.26 mm/s 3.38 mm/s

Table 5.2.1 Chemical composition (weight%)

Ni	Cr	Nb	Mo	Ti	Al	Co	Mn	Si	Cu	Ta	C	B
50.00 -55.00	17.00 -21.00	4.75 -5.50	2.80 -3.30	0.65 -1.15	0.20 -0.80	-1.00	-0.35	-0.35	-0.30	-0.05	-0.08	-0.006

Table 5.2.2 Experimental condition.

Welding speed, mm/s	2.54	5.26

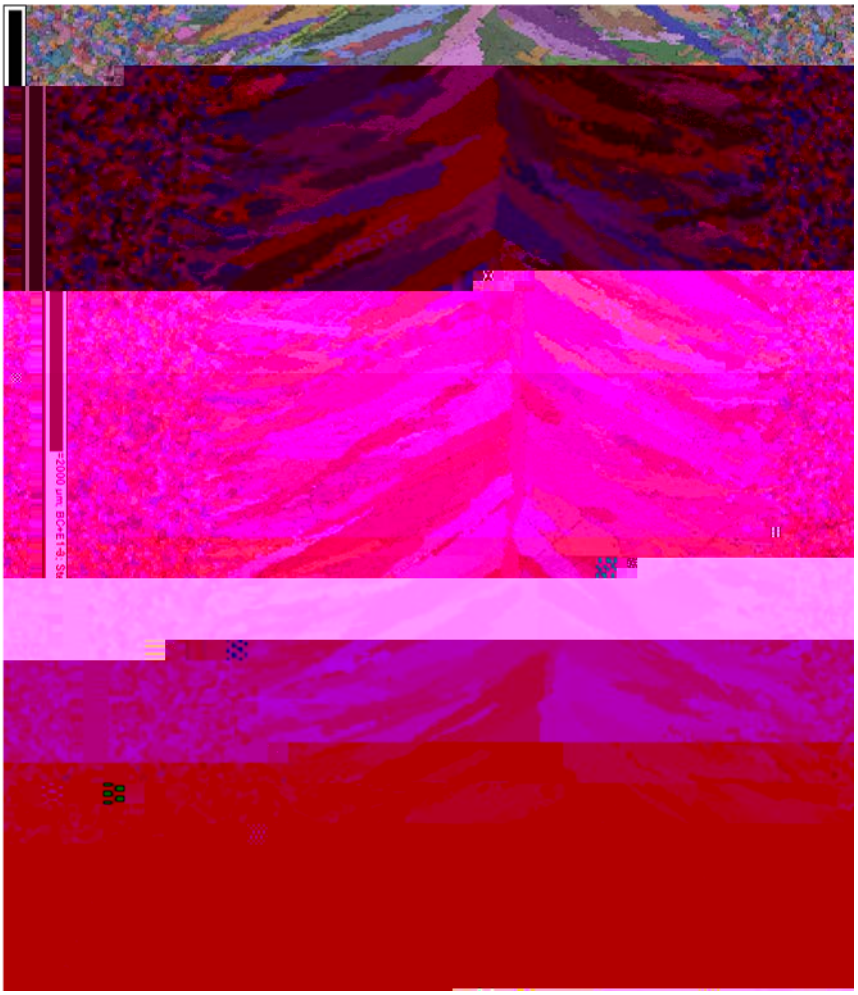

Fig. 5.3.1 EBSD Map of center line grain boundary.

(Welding speed : 2.54 mm/s, Arc current : 44 A, Wire feeding speed : 3.38 mm/s)

2.54 mm/s 44 A 3.38 mm/s

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