

????

%  
5.5 ~ 6.753.5 ~ 4.5 ≤ 0.30 ≤ 0.05 ≤ 0.20 ≤ 0.03 ≤ 0.015

$\frac{Mpa}{\geq 895} \frac{Mpa}{\geq 830} \frac{\%}{\geq 10}$

$\beta^{??}$

$\alpha^+_{\beta} \rightarrow$

$\beta$

$\alpha - Ti - Al \alpha - Ti - Al \rightarrow \beta - Ti + \beta - Ti - Al \beta - Ti, \beta - Ti - Al$   
 $\beta - Ti - V \quad \beta - Ti - V \rightarrow \beta - Ti - V \quad \beta - Ti - V$

$\beta$   
?

$\beta^{??}\beta\alpha\alpha'\alpha'\alpha\beta^1?^2?$

????

$\alpha^+_{\beta/\beta}$

$T_{\beta} = 885^{\circ}\text{C} + \sum \quad \times \quad (\alpha + \beta) / \beta$

(1)

?

?

?

?β????

(Wt%)

Al 2.0 ~ 7.0 23.0°C/1.0% +123.76°C

V 0 ~ 10.0 -14.0°C/1.0% -56.84°C

Fe 0 ~ 15.0 -16.5°C/1.0% -2.145°C

C 0 ~ 0.15 +2.0°C/0.01% +2.4°C

O 0 ~ 1.0 +2.0°C/0.01% +22.4°C

N 0 ~ 0.5 +5.5°C/0.01% +4.95°C

H 0 ~ 0.50 -5.5°C/0.01% -2.2°C

$T_{\beta} = 885^{\circ}\text{C} + \sum (\delta_{Al} + \delta_V + \delta_{Fe} + \delta_C + \delta_O + \delta_N + \delta_H) = 885^{\circ}\text{C} + (123.76 - 56.84 - 2.145 + 2.4 + 22.4 + 4.95 - 2.2)^{\circ}\text{C} = 885^{\circ}\text{C} + 92.3$

(2)

$\frac{977.325 - 975}{975} =$

0.238%

25mm ×

7.5mm??

250mm ×

150mm

????0.05mm

3??7 ×

8 =

??

$\alpha^+_{\beta\beta}$

$\beta\beta$

$\alpha\alpha'\beta\alpha\alpha'?$

$\alpha\alpha'$

$\beta\alpha'$

?

?

$\alpha^+_{\beta?}$

$\beta?$

?

$\alpha^+_{\beta?}$

$\beta?$

?

???

$\beta 977.325 -$

30 =

947.325 ≈

950°C

??

WQAC

FCAC

WQAC

FCAC

WQAC

FCAC

WQAC

FCAC

WQAC

FCAC