• ' |. j ¿ %
C | Õ Å

€ s œ ¥ a · Z
2026 u •

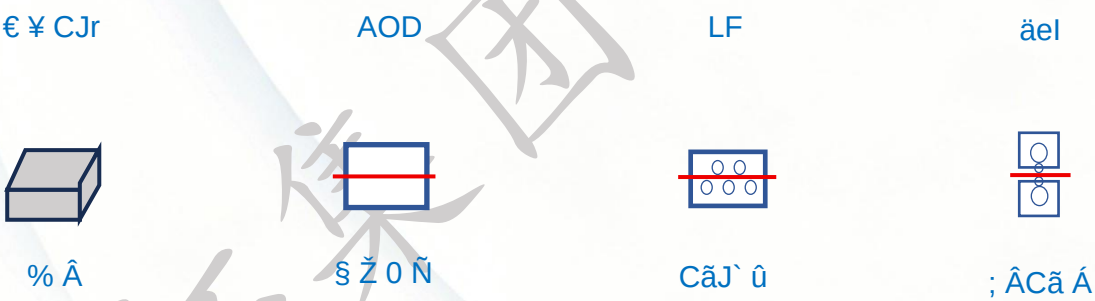
‡ . "ÒOÍ5p

CS"E ‰ ‡ Ï W -JØ

eMˆ Lü 0 Ä4Ø UKƒ .5Cz$Æ

N õ ¸ FPEý „.é aKƒK" = Jò ‚º >H AôA× Â 8°#w0A Q æ¸ ž *9OÌ ¼ >H ÁCS"E ‰ ‡ Ï W -JØ Â6F<¶ ÁCS"E ‰ ‡ Ï W -JØ > -." n?ú ‡ Ï W -JØ ¸ CS"E ‰ ‡ Ï W -JØ31 M Ý ÷ - ? * } 6 ‚º.¢ Ü < 9 ¸ * N 8‚º Ñ •]73 = Ñ œ]73 =6F<¶]73 Â *Q ‚º] -" >

‡ D ¨<BI



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‹ Ë – W7-

91mmÐJØ µ,º `M˜.¢ Ü < 9ì¬×¤)vA 7 `? VEYTTT#o%a25"'9‹XtTl×§E

‹ n Þ4ô4÷

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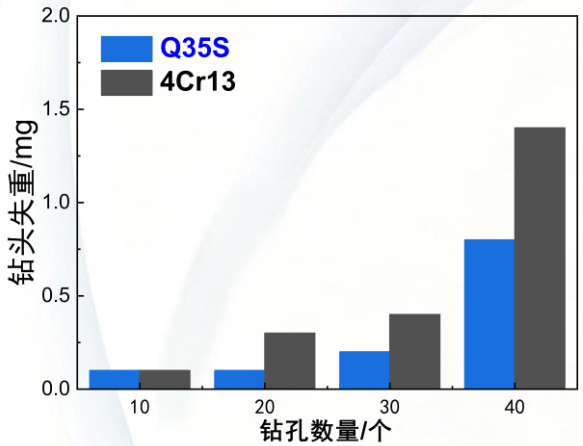
‡ ÂW× ¹ • ' |. j ¿ Q35S

‹ Jë z W7-



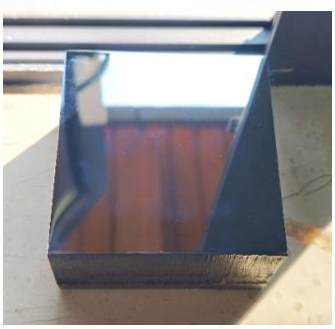
Q35SJñ €>žM˜

4Cr13Jñ €>žM˜

B PÂ ï# ÆE¢FU320r/min ¸ $' Ü 30mm¸ " Jñ10 ` Š ¸ #•H Jñ j gH >
Q35S,ºJñ j q gH H „ Ä 4Cr13 ¸ JJñ Š>ž M˜ * •#7 >

‹ Ë y W7- Ä 8000 Å

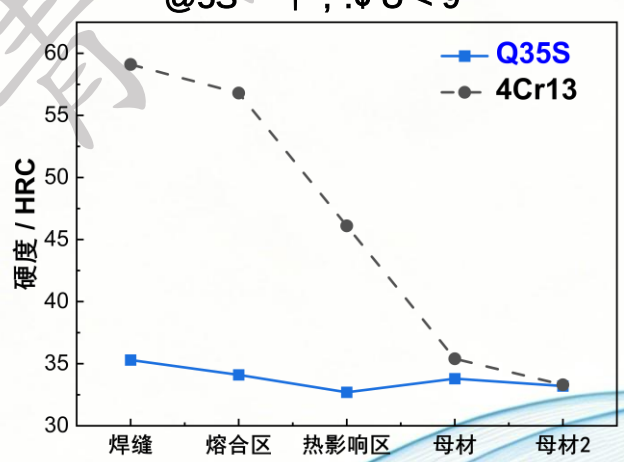
ž Y	= „ „	ó ¯ = „ o w … c Ra/ P d	ó ¯ = „ ¯ L … c 20 qd
Q35S	¯ M	0.018	1152
4Cr13	¾C¯	0.039	1137



Q35S # U } 6,º.¢ Ü < 9 ÂCS"E ‰4ú4ý9í Í N 8 Ñ •]73 ¸ 8000$ @ Ñ • Tñ &ï =.8-r ¸-." 4Cr13W -JØ ¸ Ñ •M˜2Í3 ÜLƒ „ 50% @ >

‹ ':>• W7-

'@5S " † ,º.¢ Ü < 9



Q35S@ N MÅMÈ

Q35S8 'Ê'@ D.¢ Ü D" † 0 b 68* ¸ '@ ƒ M6Nº'# ¸ '@ D M6'# :*< >

‡ ÂW× ¹ • ' |. j ¿ Q35S

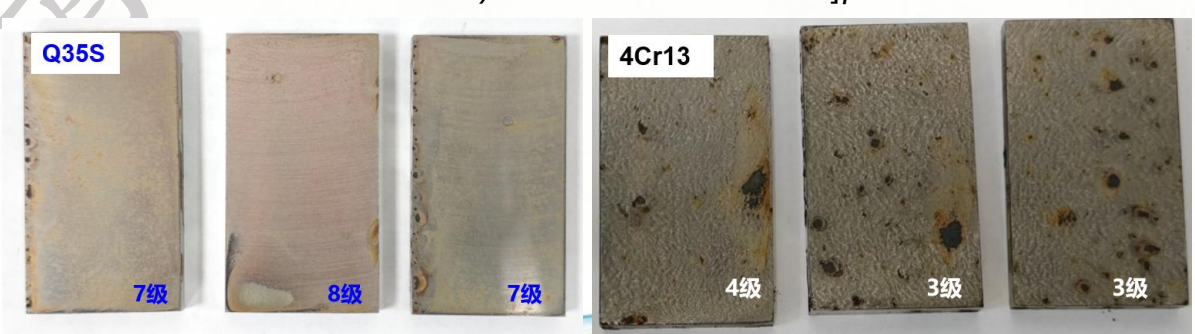
‹ 6@<° W7-

ž Y	C¯W× Ô¤mV	C¯W× û ´g/(m²*h)	ð z á g/(m²*h)
Q35S	11	76.6	0.05
4Cr13	-73	88.7	0.20

K œ> l *RõW×4ì × ¦ •

.é l D K" y3V ˜ F.é L(Ÿ ¸ Lƒ „6F&ï<¶]73 > 4 6W -JØGý+^ „.éAô
A×¸ G ¼.é L(Ÿ,º Æ 0 ¸ } ¼6F&ï<¶]73 >

4 G) R4ì ð z o-o3 •RõW× ¤]ƒ



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‡ C | € Đ

Q32M ¿ ¹Rù Q32M p × | f Ô

Q2311Ni ¿ ¹Rù Q35S Cã W

Q32M ¿ ¹Rù Q2311Ni ¿ Â

Q32M ¿ Ï C W ˆ ò Q32M :I ‹] È

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‡ > É È

2‰6D %gz"Ò5 !*o#
ZL2025 1 1409065.6
E HÎ&û •M£& dNG E..• ' | 'R4š9" xc£"Ë w!7_!4º;Ö F
ZL2026 1 0354210.3
E HÎ&û •M£& dNG E..• ' | eU % "Ë w!7_!4º;Ö F

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\ ¢ ¢ Â4ì ×

‹ ŽSGRq x d•10^{-6}/qÁ

ž Y	25~100℃	25~200℃	25~300℃	25~400℃
Q2311Ni	11.4	12.3	13.1	13.6
1.2311	11.5	12.4	13.0	13.5
Q32M/Q2311NiH	11.5	12.4	13.0	13.5
1.2738	11.5	12.5	12.9	13.5
Q35S	11.5	12.4	13.0	13.5
4Cr13	11.5	12.5	12.9	13.5

‹ ,Cã x d W/(oápº‰o¿

ž Y	25℃	100℃	200℃	300℃	400℃
Q2311Ni	30.27	31.01	32.27	33.60	32.93
1.2311	40.02	40.16	39.85	38.93	37.30
Q32M/Q2311NiH	29.91	30.89	32.41	33.23	33.08
1.2738	36.89	35.79	35.26	34.27	33.45
Q35S	23.75	24.64	26.07	26.75	27.61
4Cr13	37.67	38.22	38.77	37.96	37.53

‹ $ …g/cm^3

ž Y	Q2311Ni	1.2311	Q32M/ Q2311NiH	1.2738	Q35S	4Cr13
$ …	7.82	7.85	7.82	7.85	7.76	7.85

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