

1?

?2-1

??	360	460	545	640	770	855	985
?(W/(m·?))	16.8	18.3	20.2	22.4	24.1	25.3	28.0

2.1.3 GH738???? ?2-2?

?2-2

??	515	540	573	603	665	707
c/(J/(kg·?))						

2.1.4 GH738????? ?2-3?

?2-3

??	20?100	20?200	20?300	20?400	20?500	20?600	20?700	20?800	20?900
??/10-6?-1	12.47	12.73	13.04	13.53	13.97	14.47	15.05	15.68	15.95

2.2 GH738?? ?=8.22g/cm3?2.3 GH738??? 2.4 GH738??? ?????? 2.5 GH738?????2.5.1 GH738????? ?
 ??????????100h?????????2-4? 2.5.2 GH738????? ??????????????

?2-4

??	900	1000
????/(g/(m ² · h))	0.083	0.226

??GH738?????3.1 GH738???????????? ?3-1?

?3-1

????				HBS	????			
??	?b/MPa	?5/%	?/%	??	?/MPa	t/h	?5/%	
	???				???			
815	608	20	32	299?387	815	328	23	8

??GH738????? 4.1 GH738????? ??????????????980?1050?????????????????630?????????????800??????M23C6
 ??????????????700?????????????1020?? 4.2 GH738??-??-?????? 4.3 GH738???????? ??????????????????
 ??????????????(Ni0.883Fe0.03Cr0.048Co0.039)3.28(Al0.38Ti0.62Mo??)?????????????20%????????M23C6?
 ??????????????(Cr0.746Mo0.094Ni0.084Co0.041Fe0.023Ti0.012)23C6????????????Ti(CN)?TiN?????????650
 ???730?????????3000h?????????????????????????3%?1%?????????????????????146nm???196nm?177nm?????MC?M

23C6????????????????????????????????0.5%????0.76%?0.78%????????????????????????????????GH738???????? 5.1
GH738?????5.1.1 GH738?????????5-1?5.1.2 GH738????????????5-2? 5.1.3 GH738????????????????????????
????????????????????1150?1170????????????????1040?1170????????????1000????????????????????1070?1110????????
????????25%????????1180????????????10%????????????????????????MC????????????????????????980?1080??
????????????????MC????????????????M23C6????????????????????4?5???????????????? 5.3 GH738???????? ?
???????????????????????? 5.4 GH738???????? ?
????????????????????????????????