



Material: Fe-2 % Cu - 0.2 % C; iron: water atomised ASC 100.29
copper: - 100 mesh, carbon: graphite UF4
sintering: 1120 °C, 30 min, endogas with controlled carbon potential
heat treatment: -
density: 7.01 g/cm³
mech. properties: -

Specimen: smooth, $K_t = 1$; ISO 3928; surface as sintered¹
Loading mode: axial; $R = -1$
Limiting no. of cycles: $2 \cdot 10^6$
Endurance limit: 143 MPa¹ (146 MPa this evaluation)
Reference: A. Bergmark: Materialdata för PM-Stål med Varierade Ytor och Geometrier;
Jernkontorets Forskning Report, Series D, No. 763; Jernkontoret, Stockholm, 1999

Stress amplitude:	135	140	145	150	MPa
Cycles to failure:	2000.000	291.764	469.345	507.860	· 1000
		2000.000	539.901	800.706	
		2000.000	821.219	2000.000	
		2000.000	2000.000		
		2000.000	2000.000		
			2000.000		

¹With burs removed by milling, a staircase test with 10 specimens gave an endurance limit of 139 Mpa.