

Material: Fe-2 % Cu - 0.8 % C; iron: water atomised ASC 100.29

copper: - 100 mesh, carbon: graphite

sintering: 1120 °C, 30 min, endogas with controlled carbon potential

heat treatment: -

density: 7.23 g/cm3, warm compacted with 0.6 % Densemix lubricant

mech. properties: -

Specimen: smooth, K_t = 1; ISO 3928; surface as sintered

Loading mode: axial; R = 0Limiting no. of cycles: $2 \cdot 10^6$

Endurance limit: 143 MPa (142 MPa this evaluation)

Reference: A. Bergmark: Materialdata för PM-Stäl med Varierade Ytor och Geometrier; Jernkontorets

Forskning Report, Series D, No. 763; Jernkontoret, Stockholm, 1999

Stress amplitude:	130	140	150	160	170	180	MPa
Cycles to failure:	2000.000	625.672	349.580	184.235	224.448	132.549	· 1000
	2000.000	1518.956	378.266	222.059			
		2000.000	531.256				
			2000.000				