

Material	Application	$E / 10^3 \text{ N/mm}^2$	$\sigma_{bB} / \text{N/mm}^2$	Hardness
Standard gray cast iron, not heat treated	normal stress	85 - 115	≥ 350	96 - 106 HRB
Gray cast iron, heat treated	higher stress	100 - 130	≥ 500	108 - 114 HRB
Cast iron, heat treated with spheroidal graphite	high stress in Diesel engines	> 150	≥ 1300	104 - 114 HRB
Stainless steel X90CrMoV18	in particular for upper annular groove in gasoline engines	≈ 210	-	38 - 44 HRC