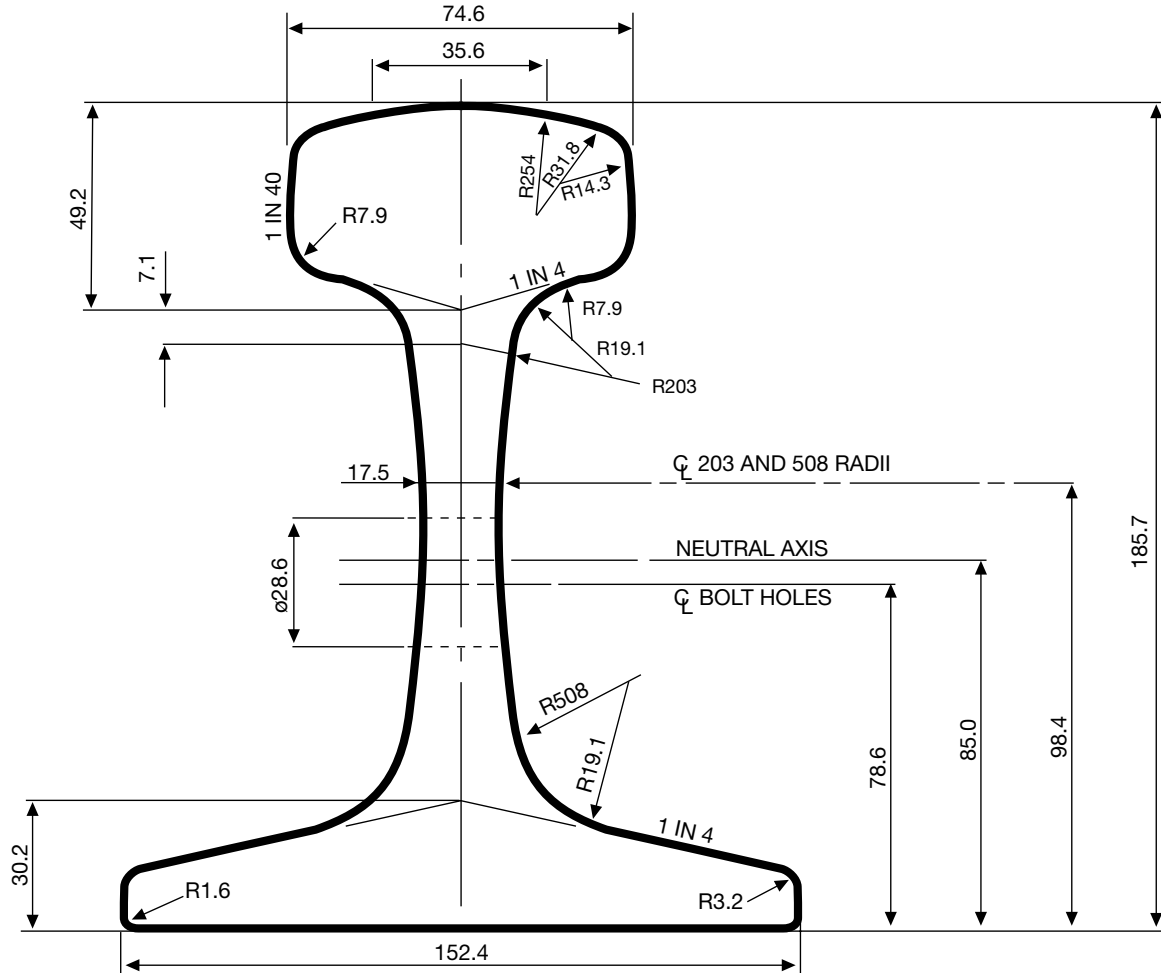




68 KG HEAD HARDENED RAIL

RT 19 HH



MECHANICAL PROPERTIES

Area of Head	3125 mm ²	Horizontal Axis	
Area of Web	2335 mm ²	Second Moment of Area	39.4 x 10 ⁶ mm ⁴
Area of Foot	3142 mm ²	Section Modulus Head	391.7 x 10 ³ mm ³
Total Area	8602 mm ²	Section Modulus Foot	463.8 x 10 ³ mm ³
Standard Lengths	12.5 m	Vertical Axis	
Calculated Mass	67.5 kg/m	Second Moment of Area	6.02 x 10 ⁶ mm ⁴

TYPICAL MECHANICAL PROPERTIES (Minimum)

0.2% Proof Stress MPa	Tensile Strength MPa	% Elongation Gauge length = 5.65 √S ₀ 9
780	1130	

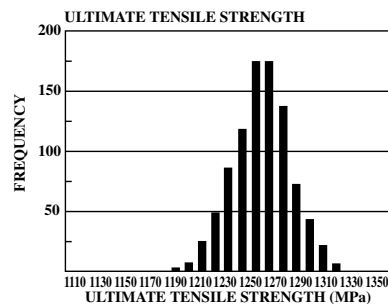
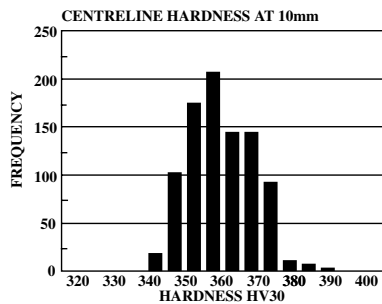
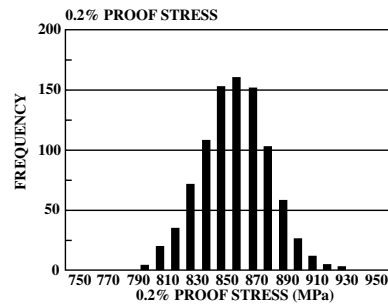
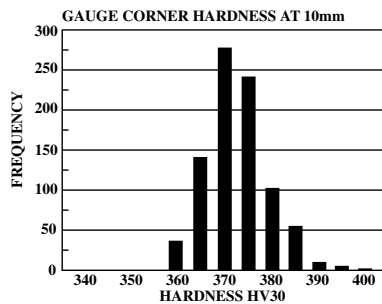
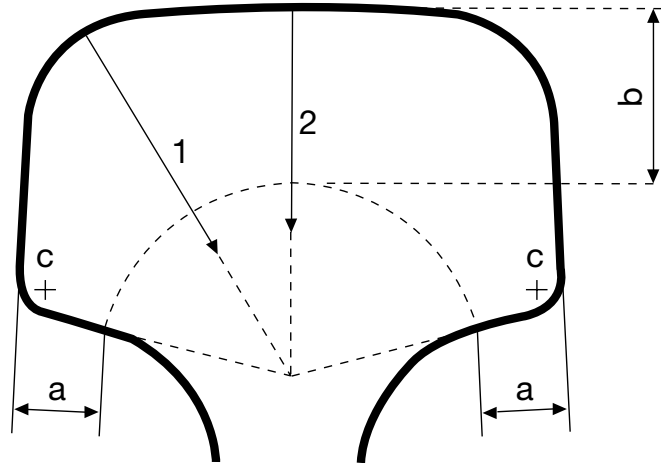
CHEMICAL COMPOSITION (%) Ladle Analysis

Carbon	Silicon	Manganese	Phosphorus	Sulphur
0.65 - 0.82	0.15 - 0.58	0.95 - 1.07	0.025 max	0.025 max



68 KG HEAD HARDENED RAIL

RT 19 HH



DEPTH OF HEAT TREATMENT			HEAD HARDNESS MINIMUM	
Dimensions (mm)	a	b	Surface Hardness	340 HB
	15 min	20 min	Rails are manufactured from fully killed steel.	
	23 max	40 max		

HARDNESS IN HEAT AFFECTED ZONES			
HV30	Position C	Traverse I	Traverse 2
At any point	-	430 max	430 max
10 mm from surface	-	360 min	340 min
2 mm below surface	430 max	-	-