

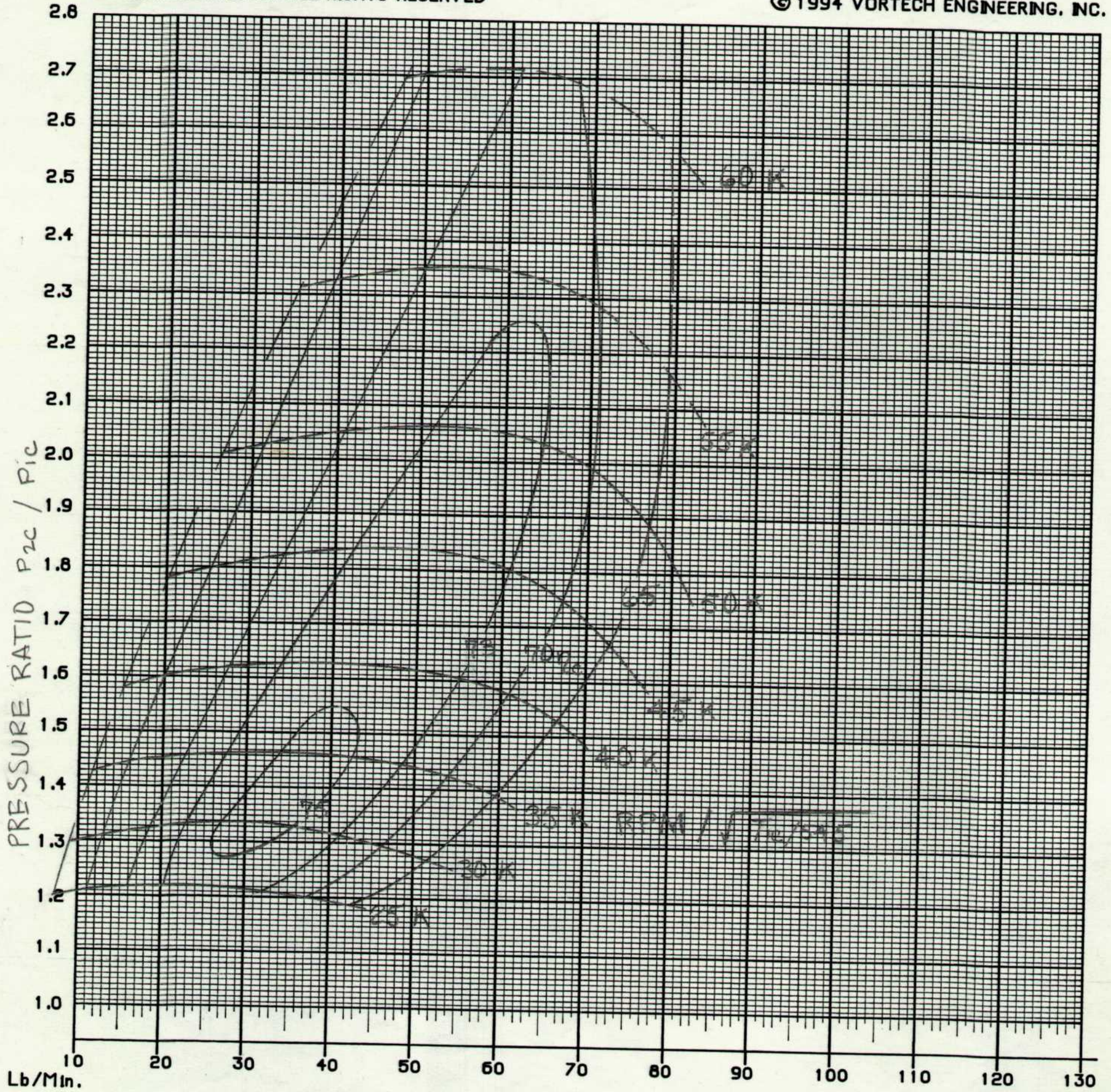
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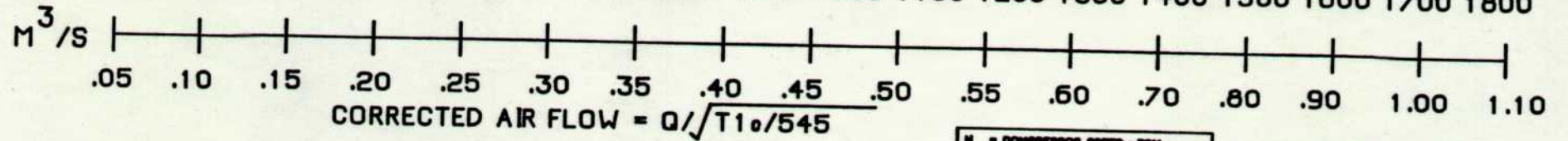
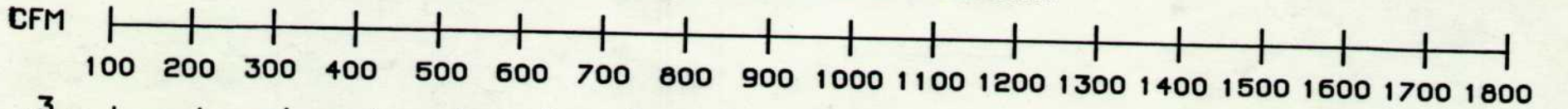
COMPRESSOR PERFORMANCE MAP

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CORRECTED MASS FLOW = $W \sqrt{T_{1e}/545} / (P_{1e}/28.4)$



N = COMPRESSOR SPEED - RPM
 h_c = COMPRESSOR ADIABATIC EFF.
 P_{1c} = COMPRESSOR INLET AIR TOTAL PRESSURE - IN. HG ABS.
 P_{2c} = COMPRESSOR DISCHARGE AIR TOTAL PRESSURE - IN. HG ABS.
 T_{1c} = COMPRESSOR INLET AIR TOTAL TEMPERATURE - DEG. RAN
 T_{2c} = COMPRESSOR DISCHARGE AIR TOTAL TEMPERATURE - DEG. RAN
 γ = 1.4
 $\gamma = \frac{P_{2c}/P_{1c}}{T_{2c}/T_{1c}} - 1$
 $h_c = \frac{T_{1c} \gamma}{T_{2c} - T_{1c}}$

COMPRESSOR MAP
 TRM: • V-ISC
 STD. PRESSURE = 28.4 IN HG A
 STD. TEMP. = 545 DEG. RANKINE

NOTES: