

Interpolation/Extrapolation - Determination of Intermediate Data

NOTE: Always begin a new case by retrieving the original file. Direct entry of data in cells that originally contain table lookups could cause functions to be lost, or incorrect calculations. I format cells requiring entry colored **RED**; calculated values are black.

- 1.) Enter the service/reference at cell [C4].
- 2.) Enter the known data in the red cells.
- 3.) The calculated values are shown as appropriate.

Print out using direct Excel commands. This application is provided by Chemical Engineers Resource Website, visit @ [:heresources.com](http://heresources.com) for additional selections.

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Consistent with GOOD ENGINEERING PRACTICE, the burden rests with the USER of these spreadsheets to review ALL calculations, and assumptions. The USER IS FULLY RESPONSIBLE for the results or decisions based on This Spreadsheet Requires MACROS to be ENABLED to ASSURE proper operation. See the Workbook Help Sheet for Additional Instructions on

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Interpolation - Determination of Intermediate Data

Determine: **Combustor Pilot BTUH Rating**

Single Interpolation		
	A	B
1	0.5	204000
2	0.632	228288
3	0.75	250000

Interpolation - Determination of Intermediate Data

Determine: **Combustor Pilot BTUH Rating**

Double Interpolation

	A	B	C
Ref.	1170	1200	1400
1	21	22.345	26.5741
2	29.7	46.6132	53.2224
3	30	47.45	54.1413

Linear Extrapolation - Prediction of Data

Determine: **Predicted Steam Trap Rate at Increased Pressure**

Linear Extrapolation - Data Prediction

Ref.	Unit	Notes
X ₁ =	300	Steam Trap Pressure point 1 (psig)
Y ₁ =	400	Steam Trap Flow point 1 (lb/hr)
X ₂ =	400	Steam Trap Pressure point 2 (psig)
Y ₂ =	450	Steam Trap Flow point 2 (lb/hr)
X =	550	Steam Trap Pressure point 3 (psig)
Y =	525	Steam Trap Flow point 3 Calc'd (lb/hr)

