HV-TURBO A/S:

Plotting performance map.

HV-TURBO A/S would like a program which can plot performance maps for radial blowers automatically. The performance map has flow along the horizontal axis and pressure along the vertical axis and shows the isentropic effieciency as function of flow and pressure.

Input data for the program are measured dimensionless values of flow, pressure and efficiency in several combinations of inlet guide vane and diffuser settings. The output of the program should be a flow- pressure-plot containing curves which indicates combinations of flow and pressure for each inlet guide vane position and diffuser position, respectively. Furthermore the plot should contain contours of efficiency.

Finally it should be possible to give a combination of flow and pressure as input and get interpolated values of inlet guide vane position and diffuser position based on the performance map.