

# Automotive Turbo Testing

## Project Overview

To characterise the air flows required to achieve a specified pressure drop at various turbo vane positions.

Very precise air flows are achieved by sucking air at high pressure through a combination of sonic nozzles. The software controls the switching of the nozzles to achieve a steady set pressure drop across the test piece. Mass air flow corrections for ambient conditions are done and flow, temperature, pressure data recorded and reported.

The control system has a fully interactive HMI and with air flow rates as high as 1800 kg/h the control circuits and software have been designed with an emphasis on the safety.

