

Product Name :
Nozzle Rig Bench

Product Code :
ENGLABINGCAG11100012



Description :

Nozzle Rig Bench

Technical Specification :

The variation of pressure along a nozzle profile as a function of back pressure
 The effect of back pressure on the mass rate of flow
 A comparison of theoretical and actual throat pressures on rates of flow
 Determination of critical pressure ratio for choked flow
 Calculation of velocity through length of nozzles of various forms
 Study of the effects of friction in a parallel nozzle
 Study of shock wave formation within nozzle divergence and at nozzle outlet
 Measurement of state at entry to the nozzle and subsequent calculation

To comprise a study framework and panels of all steel construction including student work surface and fitted with a steam chest constructed of mild steel.

The chest will include an inlet chamber fitted with a drain line, a throttling restrictor assembly and type K thermocouple, a temperature measuring point with type K thermocouple and a pressure measuring point coupled to 0-16 bar Bourdon type pressure gauge; an exhaust chamber fitted with a type K thermocouple, a pressure measuring point coupled to a -1 to 15 bar Bourdon type pressure gauge and an exhaust line, a water cooled surface condenser with a capacity of 31 kg/ hr, a traversing nozzle pressure measuring assembly including a stainless steel measuring probe, a -1 to 12 bar calibrated pressure test gauge and a nozzle distance indicator.



Engineering Lab Equipment India