



P6135 SERIES AND PARALLEL PUMP TEST SET

EXPERIMENTAL CAPABILITIES

- ◆ Parallel operation characteristics of two identical pumps operating at the same speed
- ◆ Series operation characteristics of two identical pumps operating at the same speed
- ◆ Parallel operation characteristics of two identical pumps operating at different speeds
- ◆ Series operation characteristics of two identical pumps operating at different speeds

INTRODUCTION

Cussons P6135 Series/Parallel Centrifugal Pump Test Set allows the student to study the resultant flows and heads for two similar independent pumps operating in a series or parallel configuration.

DESCRIPTION

The apparatus consists of a P6100 Hydraulics Bench, complete with P6101 Auxiliary Pump and Speed Control Unit and a P6102 Pump Speed Display Unit, enabling each pump to be run over its full speed range.

The pumps concerned are identical centrifugal units and are mounted on the baseplate of the P6100 Hydraulics Bench and driven by individual motors, both of which have their own variable speed controller. The speed of the selected pump can be displayed individually on P6102 Pump Speed Display.

Suitable associated pipework and valving arrangements are supplied to allow easy operation of both pumps in either series or parallel configurations. This allows the approximate doubling of discharge flow and head when operating in parallel and series modes respectively.

Suction and delivery pressures can be varied by means of the inlet and outlet valves on the P6100 Hydraulics Bench and displayed on a bourdon pressure gauge. Flow measurement is measured via calibrated weir or stepped volumetric measuring tank supplied with P6100 Hydraulics Bench.

A P6109 Wattmeter is included to measure the electrical input to the pumps.

Pump Performance: 42 litres per minute against 5 metres head. Maximum head of 20 metres of water at zero flow.

Optional Accessories:- P6108 Rotameter (0.4 to 4m³/h).