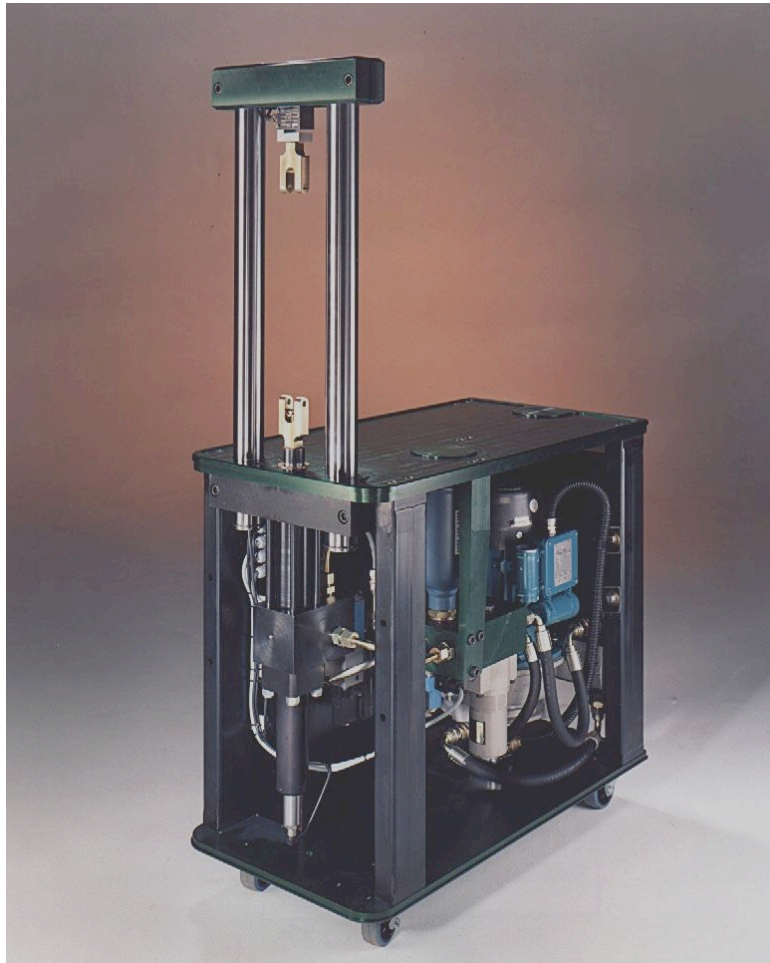


# HYDRAULIC SHOCK ABSORBER TEST RIG



- ❑ Hydraulic dynamometer for the testing of race car and motorcycle dampers and suspension units.
- ❑ Designed for frequencies up to 80hz depending on stroke and software.
- ❑ Columns collapse for easy transportation allowing the unit to be used trackside for result evaluation.
- ❑ Dyno supplied without software or computer. Assistance can be given to customer to source the correct equipment and advice given with the software either in LabVIEW or more dedicated software where required.
- ❑ Supplying the test rig in this format allows customers to develop their own dyno to do the tasks they require. As requirements change, the dyno can then be tailored to suit the application.
- ❑ Competitively priced.

## **SPECIFICATION**

POWER REQUIREMENTS	2.2kW 240/110vac 50/60hz
MAXIMUM PRESSURE	210 bar
MAXIMUM FLOW	5 lpm
STROKE	± 50mm (others available)
MAXIMUM FORCE	1000 kg

## **SIZE**

HEIGHT OPEN	1400 mm
HEIGHT CLOSED	1050 mm
TABLE HEIGHT	730 mm
WIDTH	420 mm
LENGTH	800 mm

## **OPTIONS**

- Supplied with simulated carbon fibre panelling and worktop.
- Supplied without computer interface card.
- Supplied without software.
- Fully tested and certified, with handbook and service manual.

## **ELECTRICAL SPECIFICATIONS**

5VDC TTL controls for the following functions:

- Start.
- Stop.
- Enable hydraulic valve.
- Unload hydraulic system and accumulator.

## **INPUT SIGNAL FROM DAQ CARD**

Command signal required to drive the hydraulic servo valve 0-10V DC

## **OUTPUT SIGNAL FROM DAQ CARD**

To plot the performance graphs via a laptop

- Load 0-1000 KG = 0 ± 10V DC
- Displacement = 0 -10V DC

Emergency stop and reset by non-software driven safety relay.

## **ACCUMULATOR DATA**

Fawcett Christie Hydraulics 1.0 Litre accumulator.  
Stored volume at ratio 1.25:1 = 124cc

This is between 168bar and 210bar.  
This represents 196 mm of stroke  
@+/- 12.5 mm = 7 cycles  
@+/- 25.0 mm = 3 cycles  
@+/- 50.0 mm = 1.5 cycles

## **DAMPER MAX LENGTH.**

377mm between centres.

## **CONTINUOUS VELOCITY.**

@+/- 12.5 mm = 2.5 Hz  
@+/- 25.0 mm = 1.25 Hz  
@+/- 50.0 mm = 0.62 Hz

## **PEAK VELOCITY**

1000 mm/sec

## **COOLING**

Inbuilt air blast cooling  
Capability to run continuous tests when ambient temperature below 25°C.

## **POWER REQUIREMENTS**

240V AC 50/60Hz 15 Amps  
110V AC 50/60Hz 30 Amps