

Jain Laboratory Instruments







Product Code . JL-SML-10079

Portal Frame Apparatus

Description

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Portal Frames used for the measurement of horizontal reaction are made stiffer by using M. S. flats rectangular cross section (10mm thick and 40mm wide).

All are true to shape. The ends can be other fixed of hinged as desired.

The end at which horizontal reaction, is to be measured, is provided with ball bearing rollers, which easily rolls on a smooth rolling platform.

At the roller end a chord is attached which is connected further to spring balance.

The spring balance records the horizontal reaction, for the measurement of slope and deflection.

Both the columns of the portal frame can be clamped (fixed) or pivoted (hinged) and required.

Experiment:-

To study the behavior of a portal frame under different end conditions.

Technical Specification:-

Apparatus made up of M.S. plate of rectangular section of 3mm thick x 40cm wide.

Frame is provided with a provision to achieve different end conditions viz. hinged, roller & fixed.

The size of portal will be 40cm x 60cm. Portal may also have a provision for pulley arrangement and
hook arrangement for horizontal loading at different positions.
Apparatus is to be supplied complete with a supporting stand and a set of weights
Electronic load cells, displacement cell and Electronic Control Unit (ECU) provided with apparatus.
Software for digital calculations to easily performs by students.
Optional Accessories:-
PC/Laptop Set.