1.3.28-11 Moments of inertia of different bodies / Steiner's theorem with Cobra3

What you can learn about ...

- ➔ Rigid body
- ➔ Moment of inertia
- ➔ Centre of gravity
- ➔ Axis of rotation
- ➔ Torsional vibration
- ➔ Spring constant
- ➔ Angular restoring force

Principle:

The moment of inertia of a solid body depends on its mass distribution and the axis of rotation. Steiner's theorem elucidates this relationship.

What you need:

Cobra3 Basic Unit	12150.00	1
Power supply, 12 V-	12151.99	1
RS232 cable	14602.00	1
Translation/Rotation Software	14512.61	1
Light barrier, compact	11207.20	1
Angular oscillation apparatus	02415.88	1
Portable balance, Mod. LS2000	46002.93	1
Block battery, 9 V	07496.10	1
Silk thread, l = 200 m	02412.00	1
Weight holder, 1 g	02407.00	1
Slotted weight, 1 g	03916.00	3
Bench clamp -PASS-	02010.00	1
Tripod base -PASS-	02002.55	1
Stand tube	02060.00	1
Measuring tape, l = 2 m	09936.00	1
Connecting cord, l = 100 cm, red	07363.01	1
Connecting cord, l = 100 cm, blue	07363.04	1
Connecting cord, l = 100 cm, yellow	07363.02	1
PC, Windows® 95 or higher		

Complete Equipment Set, Manual on CD-ROM included

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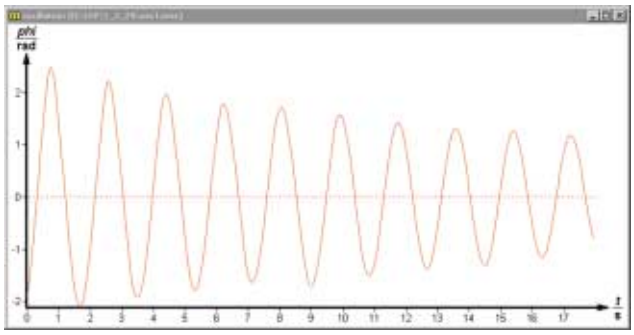

Typical measuring result

Tasks:

The moments of inertia of different bodies are determined by oscillation measurements. Steiner's theorem is verified.