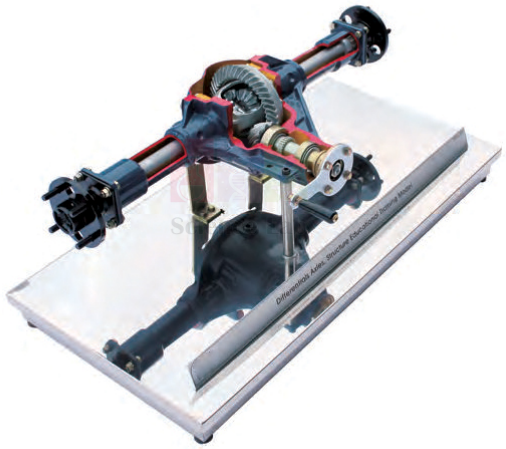
Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Differential Gear

Product Code :

SLE/ATE/25



Email : sales@scilabexport.com
Phone: +91-7082934803

Description :

The Differential Gear is a hand-turned cut-section trainer built around a real axle differential, so students can watch how the drive from the pinion is shared between the two axle shafts. The incised sections are painted in different colours, which lets each gear in the power path be picked out, named and followed as the assembly turns.

Differential gear trainer specifications

Parameter	Detail
Composition	Differential gear from a real axle
Operation	Manual; gear movement observed by turning by hand
Construction	Teaching unit with incised (cut-away) sections
Colour coding	Incised sections painted in different colours
Weight	Approx. 40 kg
Size	Approx. 800 × 500 × 300 mm
Product code	SLE/ATE/25
Minimum order	10 units
Dispatch	Usually within 7 to 10 working days
Manufacturer	ScienceLab (Jain Scientific Equipments Pvt Ltd), Ambala, India

Driveline practicals with the differential

Straight ahead and cornering. Chalk a mark on each axle shaft and turn the input with both sides free: the shafts turn together and the small gears stay still on their cross-shaft. Then hold one shaft and turn the input again. The other shaft now runs at twice the speed of the carrier, and students see the small gears spinning.

Final drive ratio by counting. Count the teeth on the pinion and on the crown wheel through the cut-away, or count the input turns for one turn of the carrier. Divide to find the final drive reduction and compare the two methods.

Tracing the power path. Using the colour coding, students label each part from the input pinion to the crown wheel, carrier, small gears, side gears and axle shafts. The heavy duty vehicles differential gear model and the tractor differential gear model then show the same idea at a larger scale.

A bevel epicyclic train. Set the trainer beside the planetary gear cut model and compare the two. The differential carrier works as the planet carrier, the small gears as pl
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