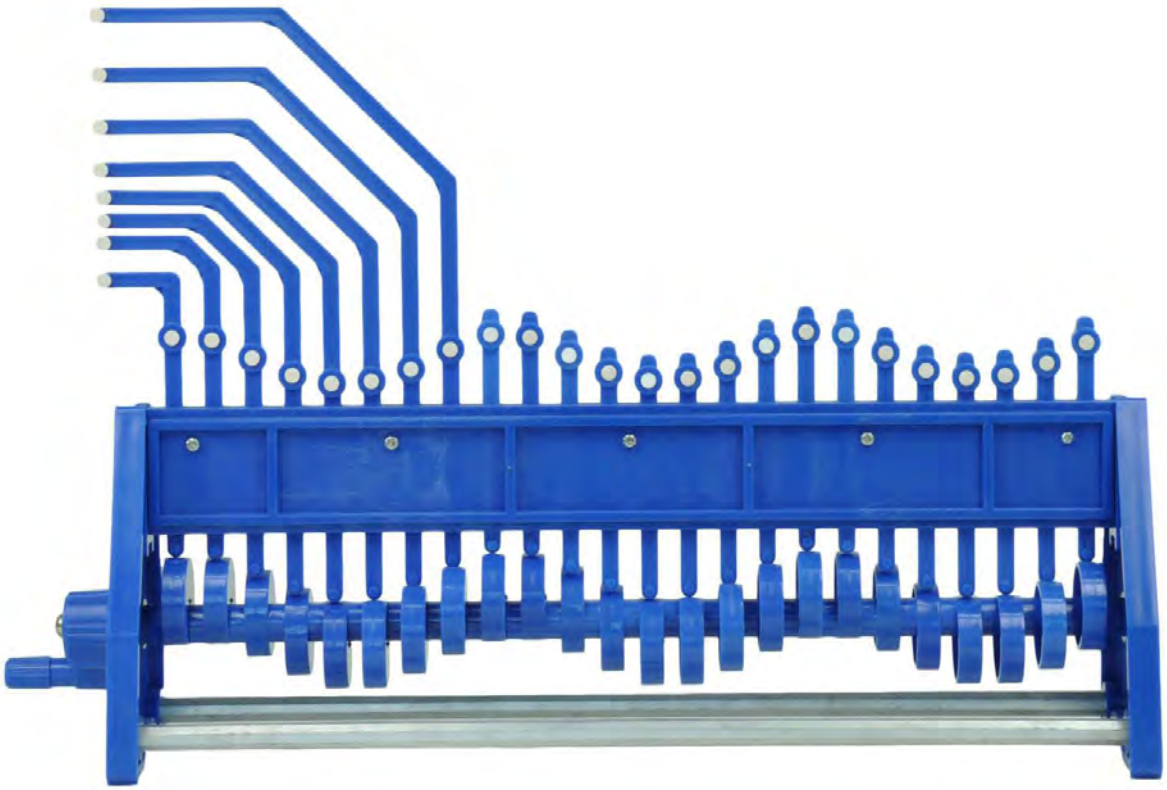
WAVE TYPES AND PROPAGATION, SIMPLE WAVE MASCHINE

SWD 02.01



Material:

Item Code	Qty	Description
DW404-1A	1	Wave demonstrator, simple

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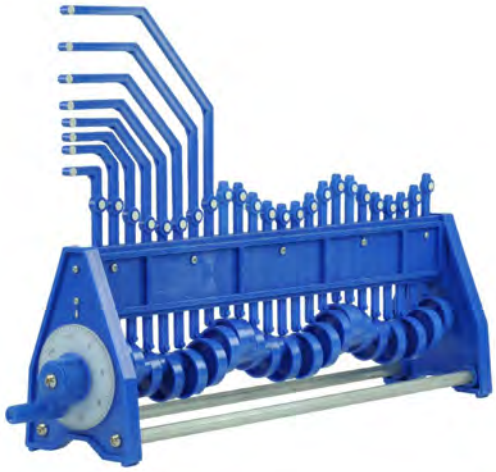
Goal:
Using a simple wave machine, two different types of waves and their propagation are to be explained.

Setup:
The wave demonstrator is placed on a stable base.



Experiment:
If you operate the device with the crank, you can observe the propagation forms of waves.

Result:
You can see two waves: One in sinusoidal form, which oscillates perpendicular to the direction of propagation and the other which can be described as "stretches and squeezes" and oscillates in the direction of propagation. The former waves are called transverse waves. The second waves are called longitudinal waves.

Note:
Longitudinal waves always oscillate in the direction of propagation and transverse waves always oscillate perpendicular to the direction of propagation.