Beam Analysis

April 23, 2024, 4:59 p.m.

Beam details

This beam is 0.1m in length, with a second moment of area of 0.083333cm^4 and a Young's Modulus of 200GPa. No self-weight is applied to the beam.
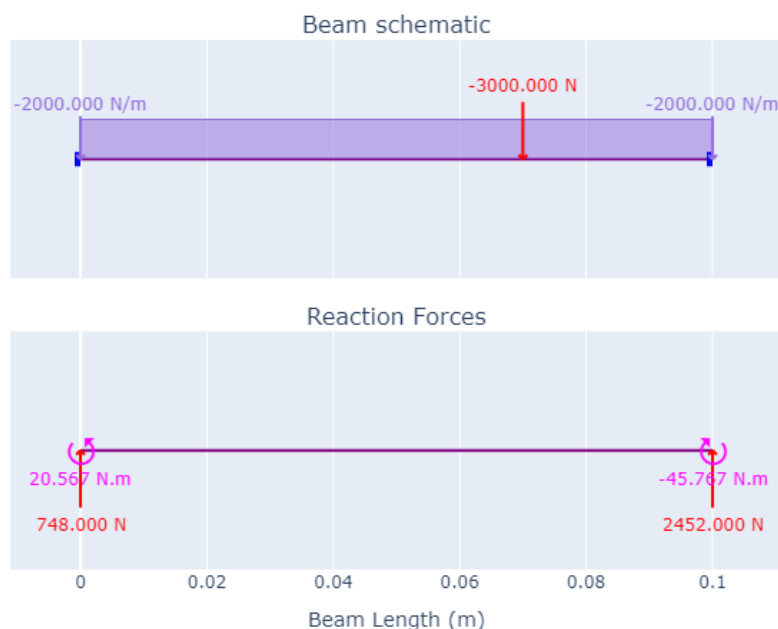
Both ends of the beam are fixed in position

There are no pin joints used to support the beam at any positions

Point loads are applied to the beam at the positions: 3.0kN at 0.07m,

Varying Distributed Loads are applied to the beam at the following positions: 2.0-2.0kN/m from 0m to 0.1m,

Beam force diagrams:

Beam External Conditions

Beam schematic

-3000.000 N

-2000.000 N/m   -2000.000 N/m

Reaction Forces

20.567 N.m   -45.767 N.m

748.000 N   2452.000 N

Beam Length (m)

This report must be checked & verified by a competant Civil Engineer.

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Beam forces summary

	Max predicted	Min predicted
Bending moment	0kNm	0kNm
Shear force	0.7kN	-2.5kN
Deflection	0mm	0mm

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