

Structolution	Company name	Job number BA-REPORT-001
	Project name Beam Analysis Project	Date / Revision 2026-02-03 / A
	Component name Floor Beam Analysis	Designer Test Runner
	Item title Beam Analysis Full Report	Checker Automated

Beam Analysis Report

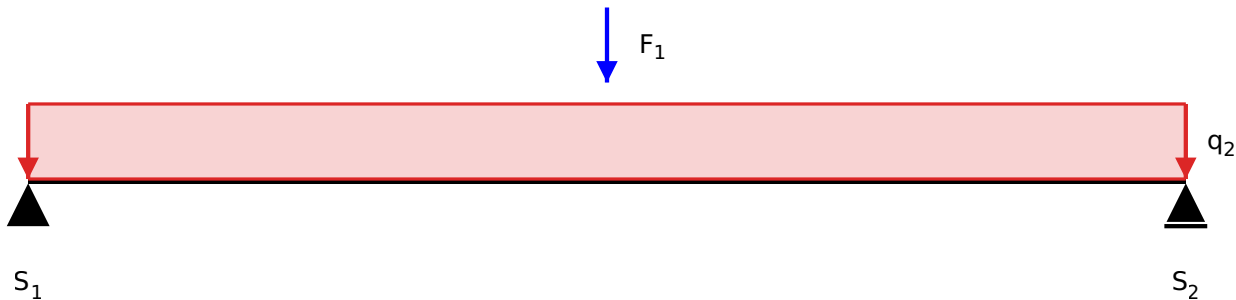
Input parameters

Beam	HEA 100
Production class	Hot rolled
Length	5000 mm
Young's modulus	210000 MPa

Maximum values

Max shear force	10 kN
Max bending moment	18.75 kNm
Max deflection	57.67 mm

System schema



Configuration

Supports

ID	Type	Position (mm)	Stiffness
S ₁	Hinged	0	-
S ₂	Roller	5000	-

Loads

Point loads ID	Position (mm)	F _x (kN)	F _z (kN)
F ₁	2500	0	10

Distributed load ID	x _{start} (mm)	x _{end} (mm)	q _{start} (kN/m)	q _{end} (kN/m)	q _{perp,start} (kN/m)	q _{perp,end} (kN/m)
q ₂	0	5000	2	2	0	0

Results

Support reactions

ID	Position (mm)	R _x (kN)	R _z (kN)	M _y (kNm)
S ₁	0	0	10	0
S ₂	5000	0	10	0

Internal forces & deflection

