

2025 Student Steel Bridge Competition
Equipment List for Each Construction Lane

1	Wood box for member check
1	Plywood template for stringer passageway and deck support
1	Plywood template for ground clearance (1/2" x 5-1/2" x 7")
1	Steel Bars - (1) 1/8" x 1" x 3" and (1) 1/4" x 1" x 3"
2	Tape measure (25 ft minimum)
1	Magnet
1	Level (4')
1	Flashlight
2	Stopwatch
5	Clipboard
5	Pencils
2	2x4 x 6" wood block with 25-ft string line
as needed	Colored tape for marking site layout (~150 yd per lane)
1	Copy of the <i>Rules</i> and official clarifications
1	Copy of this list

Updated: 02/04/2025

2025 Student Steel Bridge Competition
Equipment List for Each Lateral Load Station

1	Lateral load stand
1	Rope lanyard
1	Carabiner
1	Dog collar
1 set	Eye bolt with small square plate
1 pair	Two different-sized slotted loading plates (50 lb. total)
1	Steel grating (no tabs)
3	Loading angle (L4x3x1/2, 27" long, 25 lb each, painted gray)
1	Laser plumb-bob
4	Paper sway target: concentric 3/4" + 1/2" Radius Sway Target
1	Tape measure (25 ft minimum)
1	Roll of masking tape
1	Permanent marker
1	Clipboard
3	Pencils
as needed	Extra AAA batteries for laser plumb-bob
1	Copy of this list

Updated: 02/04/2025

2025 Student Steel Bridge Competition
Equipment List for Each Vertical Load Station

8	Safety support jack stands
4	Steel bearing plates (24" x 24"), if necessary
2	Steel grating with tabs
100	Loading angle (L4x3x1/2, 27" long, 25 lb each, painted gray) <i>One pallet with 56 angles and the other pallet with 44 angles</i>
2	Vertical deflection measurement device
1	Wood piece (2x4 x 3'-6" long)
1	Wood block (2x4 x 6")
1	Tape measure (25 ft. minimum)
1	Clipboard
1	Laser plumb-bob
4	Paper sway target with 3/4" radius
2	C-clamp
3	Pencils
3	Binder clips
1	Roll of masking tape
1	Permanent marker
2	Hard hats
2	Safety glasses
9	Toe covers (2 XS, 2 S, 4 M, 4 L, 4 XL, 2 XXL) as needed for volunteers without steel or composite toe boots
as needed	Extra AAA batteries for laser plumb-bob
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2025 Student Steel Bridge Competition
Equipment List for Each Weight Station

1	Clipboard
3	Pencils
5	Scales <i>(4 for measurements + 1 spare)</i>
4	Plywood pieces to protect the tops of scales <i>(the plywood should be 11" x 11" and at least 1" thick)</i>
1	Copy of this list

Updated: 02/05/2025