

2024 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" x 8")
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
1	Copy of the <i>Rules</i> and official clarifications
1	Copy of this list

Updated: 9/28/2023

2024 Student Steel Bridge Competition
Equipment List for Each Lateral Load Station

1	Lateral load stand
1 set	Rope lanyard, carabiner, and dog collar
1 set	Eye bolt with small square plate
1 set	Two different-sized slotted loading plates (50 lb. total)
1	Steel grating (no tabs)
1	Laser plumb-bob
4	Paper sway target with 3/4" radius
1	Tape measure (25 ft minimum)
3	Loading angle (L4x3x1/2, 27" long, 25 lb each, painted gray)
1	Clipboard
3	Pencils
as needed	Extra AAA batteries for laser plumb-bob
1	Copy of this list

Updated: 9/28/2023

2024 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)
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 tape
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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2024 Student Steel Bridge Competition
Equipment List for Each Weight Station

1	Clipboard
3	Pencils
4	Scales
4	Plywood pieces to protect the tops of scales (the plywood should be 11" x 11" and at least 1" thick)
1	Copy of this list

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2024 Student Steel Bridge Competition
Equipment List for Data Entry Station

1	Computer with the scoresheet
1	Table
4	Chairs
1	Printer with paper and sufficient ink/toner
1	Stapler with plenty of staples
as needed	Extension cords, power strip
as needed	Pens
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