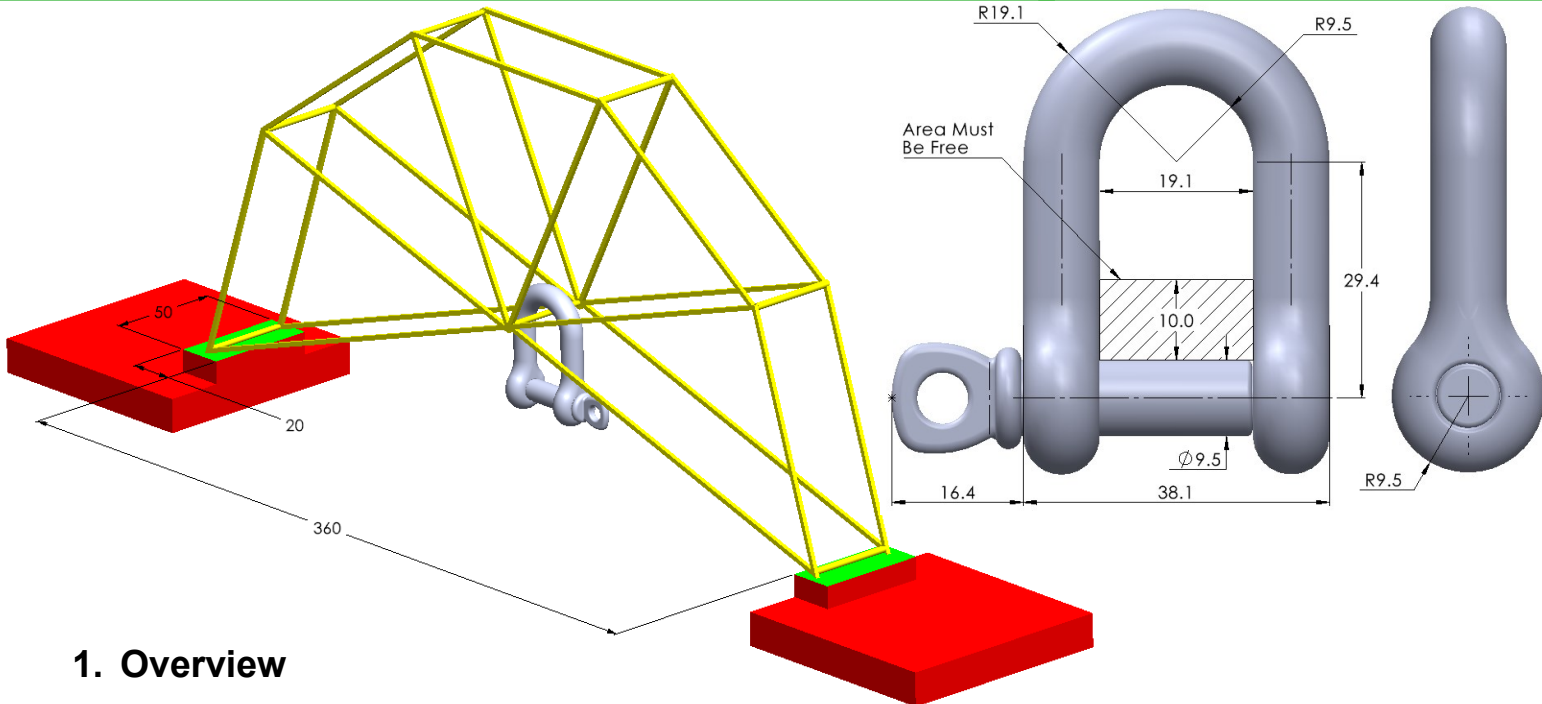


Fieldhouse Challenge: '100g Bridge'



1. Overview

£1000 to the bridge that can support the most weight.

Novel design ideas are encouraged, and we may award prizes for this too if good enough!

2. Details

Bridge Material	Any material that is of greater density than air can be used (Must be safe to handle and NO EXPLOSIVES!!)
Bridge Weight	Entire structure must weigh less than 100g (+2%)
Support Pad Material + Restrictions	Steel – The bridge cannot be anchored to the pads and can only touch the pad on the upper surface, this includes whilst deforming. Structure can rotate about the inner edges whilst deforming, however 50x20mm blocks are detached and may move with lateral forces. The structure (D shackle not included) cannot be greater than 50mm below the top of the pads before or whilst deforming
Support Pad Size	50mm x 20mm, as per diagram
Size Limit	1m x 1m x 1m
Span	360mm, as per diagram
D Shackle	A Stainless-Steel D Shackle will be provided. Structures to have a simple and intuitive location for this to attach halfway across the span. This does not count towards the weight or dimensions of the structure. Dimensions as per diagram
Adding Weight Process	We will attach an electronic winch to the shackle and slowly increase the loading. The force will be recorded using a strain gauge.
Postal Address	Lancombe, Brompton Regis, Dulverton, Somerset, TA22 9NT
Postal Deadline	Needs to arrive by the 30 th Apr 2021 to stand a chance of winning. UK: We ask for £10 if you'd like it back. International: Postal fee if you'd like it back
Categories	There are no categories, everyone will be competing against each other
Cost to Enter	Free
Prize	£1000.00

Note that the competition will be completely remote - all structures are to be posted to us and we will record all the entries. The full results list will be available and published as soon as possible after the 30th of Apr.

'Fieldhouse Challenges' are organised and run by **Fieldhouse Engineering Ltd**, a UK Engineering Firm