The Welding Institute

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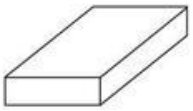
WELDING with CHOCOLATE

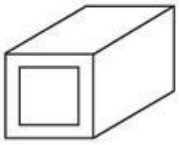
BRIDGE BUILDING - Bridges are made of all kinds of **materials**, wood, stone, steel, bamboo or concrete. The best material is the one that is cheaply available, and which will perform its required function.

The simplest bridge is a plank that spans the distance to be crossed. A box girder bridge is made from a long beam in a box shape instead of simply a plank, and the box shape makes the beam much stiffer.

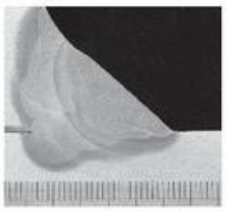
Bridge



Plank



Box girder



Fillet weld

Welding your chocolate box girder bridge

You can use welding to make a chocolate box girder bridge from single bars. The heat source we use is hot water (from a kettle) in a bottle.

1. Hold the edges of your chocolate bars against the bottle of hot water until they melt slightly.
2. Press the melted edges together in a right angle, and leave to cool. This is half the box section. Make another half-section in the same way.
3. When the half sections have cooled, melt the remaining long edges and press them together to form the box section. Leave to cool for at least 20 minutes, or put it in the fridge.