

Andrew Chick 1909134

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ACMA 4000.

(d) Question 3

Brazing is higher quality because the material properties are not affected. You can also join many different materials. By brazing the strength, hardness, yield strength are not compromised.

By welding, the temperature you put into the material affects the properties. If the hardness is affected for example the material may fracture when absorbing energy.

(e) TIG welding - this uses electrical energy to heat at a point where you need to join material.

Electron beam welding - this is where a high velocity of electrons is applied to the point of joining. This allows repeatability and accuracy to your joining as well as the advantage of joining different materials.