Sheet metal operations - Other sheet metal forming processes

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1.Quiz - Key

1. What is the consideration of strain rate in explosive forming? Materials which do not become brittle at higher strain rates alone can be explosive formed.

- 2. What are the requirements for superplastic forming?
- 1. Material which has fine grained structure, 2. Material with high strain rate sensitivity parameter, 3. Resistance to grain growth at elevated temperatures.
- 3. Define spinnability.

It refers the maximum thickness reduction in spinning process. Maximum spinnability is equal to 50% reduction in thickness.

4. What is the principle of magnetic pulse forming? The Mechanical force created by opposing magnetic forces due to eddy current and original current, causes the deformation of the sheet metal.

5. Mention two advantages of superplastic forming. Intricate shapes can be formed. No residual stress.

6. What is cavitation in sheet forming? Formation of inter-granular cavities or voids by the process of nucleation.