Fig. 2. Factors influencing the metallurgical transformation during quench hardening. 

- **Workpiece / Component**
  - i. Alloy grade
  - ii. Mass/weight
  - iii. Geometry
  - iv. Surface roughness
  - v. Surface condition
  - vi. Load arrangement

- **Quenchant**
  - i. Density
  - ii. Viscosity
  - iii. Specific heat
  - iv. Thermal conductivity
  - v. Boiling temp
  - vi. Leidenfrost temp
  - vii. Wetting property

- **Quench Hardening**
  - i. Bath temperature
  - ii. Agitation rate
  - iii. Flow direction

- **Facility**

Fig. 2. Factors influencing the metallurgical transformation during quench hardening. 

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