TL (1) CH4: Process

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_ Mechanical engineering field _

1. Brazing:

- Meaning: Joining two pieces of metal without melting either by using a brazing alloy.

- Synonyms: Soldering, welding.
- Antonyms: Melting, fusing.

- Example: The blacksmith demonstrated his skill by brazing the intricate metal pieces together.

2. Forging:

- Meaning: Shaping metal by hammering or pressing it into the desired form.
- Synonyms: Hammering, shaping.
- Antonyms: Softening, weakening.
- Example: The artisan spent hours forging the elegant iron gate.

3. Extrusion:

- Meaning: Forcing metal through a restricted orifice to create a uniform cross-section.
- Synonyms: Squeezing, compression.
- Antonyms: Expansion, dilation.

- Example: The aluminum was transformed through the extrusion process into a seamless tube.

4. Casting:

- Meaning: Producing a metal object by pouring molten metal into a mold.
- Synonyms: Molding, shaping.
- Antonyms: Unmolding, dissolving.
- Example: The foundry workers were skilled in the art of casting intricate sculptures.
- 5. Machining:
 - Meaning: Using machine tools to cut and shape materials to specified dimensions.
 - Synonyms: Fabrication, processing.
 - Antonyms: Manual work, handcrafting.
 - Example: Precision machining is crucial in the production of complex mechanical parts.

6. Abrasive:

- Meaning: A material used for grinding, polishing, or cleaning a surface.
- Synonyms: Rough, harsh.
- Antonyms: Smooth, gentle.
- Example: Sandpaper is commonly used as an abrasive for smoothing wood surfaces.

7. Annealed:

- Meaning: Subjected to a process of heating and slow cooling to remove internal stresses.
- Synonyms: Tempered, softened.
- Antonyms: Hardened, stiffened.
- Example: The metal was annealed to enhance its malleability.

8. Thread Milling:

- Meaning: Producing threads using a milling cutter in a thread milling machine.
- Synonyms: Threading, cutting.
- Antonyms: Untangling, smoothing.
- Example: The CNC machine excelled in precise thread milling for intricate designs.

9. Galvanizing:

- Meaning: Applying a layer of zinc to iron or steel for corrosion protection.
- Synonyms: Coating, protecting.
- Antonyms: Rusting, corroding.
- Example: The bridge was galvanized to withstand the harsh weather conditions.

10. Shearing:

- Meaning: Cutting in a straight line using two opposed blades.
- Synonyms: Clipping, trimming.
- Antonyms: Combining, merging.
- Example: The metal sheets were sheared into precise dimensions for construction.

