

# Fundamental Manufacturing Processes

<https://www.youtube.com/watch?v=1d3Gp8BdO9M&list=PL3AFB507B668AF162&index=4>

*\*\*Watch the following video clips and summarize information for each term - include summary/information and visual reference for each in your SKETCHBOOK.*

- 1) **Thermal & Abrasive Waterjet Cutting** (2:45 minutes)
- 2) **Plastic Finishing** (0:56 minutes)
- 3) **Composite Materials and Manufacturing** (1:11 minutes)
- 4) **Plastic Machining & Assembly** (1:16 minutes)
- 5) **Electrical Discharge Machining** (1:51 minutes)
- 6) **Welding** (2:05 minutes)
- 7) **Casting** (1:35 minutes)
- 8) **Forging** (1:51 minutes)
- 9) **Fastening & Assembly** (1:30 minutes)
- 10) **Computer Numerical Control /CNC** (2:17 minutes)
- 11) **Cutting Tool Materials** (1:26 minutes)
- 12) **Cutting Tool Geometries** (1:47 minutes)
- 13) **Sheet Metal Shearing & Bending** (1:46 minutes)
- 14) **Punch Presses** (2:24 minutes)
- 15) **Powder Metallurgy** (1:45 minutes)
- 16) **Plastic Blow Molding** (1:34 minutes)
- 17) **Plastic Injection Molding** (2:24 minutes)
- 18) **Die Casting** (2:02 minutes)
- 19) **Heat Treating** (2:13 minutes)
- 20) **Measurement & Gaging** (1:51 minutes)

- 21) **Painting & Powder Coating** (1:48 minutes)
- 22) **Deburring Processes** (2:12 minutes)
- 23) **Hydroforming** (1:51 minutes)
- 24) **Gears & Gear Manufacturing** (2:21 minutes)
- 25) **Sheet Metal Coiling Processing** (2:13 minutes)
- 26) **Tube Bending** (1:30 minutes)
- 27) **Rapid Prototyping** (2:24 minutes)
- 28) **Brazing & Soldering** (2:38 minutes)
- 29) **Industrial Robotics** (2:27 minutes)
- 30) **Extrusion Processes** (2:17 minutes)
- 31) **Plastic Injection Molds** (2:16 minutes)
- 32) **Metal Cutting Fluids** (1:39 minutes)
- 33) **Plastic Thermoforming** (2:08 minutes)
- 34) **Plating & Surface Coating** (2:14 minutes)
- 35) **Roll Forming** (2:08 minutes)
- 36) **Turning & the Lathe** (2:11 minutes)
- 37) **Milling & Machining Centers** (2:07 minutes)
- 38) **Holemaking** (1:23 minutes)
- 39) **Threading** (2:10 minutes)
- 40) **Workholding** (2:25 minutes)
- 41) **Grinding** (1:51 minutes)
- 42) **Sheet Metal Stamping Presses** (2:39 minutes)
- 43) **Sheet Metal Stamping Dies & Processes** (2:35 minutes)
- 44) **Mechanical & Non-Destructive Testing** (1:54 minutes)