COST OF INJECTION MOLDING

1. PROJECT CONSTRAINTS
   1. BUDGET
   2. LEAD TIME
   3. PRODUCTION QUANTITY
   4. PART DRAWINGS
   5. MATERIALS
   6. TOLERANCES
   7. SURFACE FINISH

2. MACHINE CONSTRAINTS
   1. MAX. SHOT SIZE
   2. MAX. MOLD SIZE
   3. MAX. CLAMPING FORCE
   4. PLASTICITY

3. COST ESTIMATION
   1. RAW MATERIAL COSTS
      a. Part weight
      b. Runner size
   2. MOLD COSTS
      a. Fixed min. time to start
      b. Raw material cost
      c. Hourly machine and op. rate
      d. Machine depreciation
      e. CAD design
      f. Fixed time per cavity machined
      g. Difficulty level
      h. Surface finish
   3. MANUFACTURING COSTS
      a. Cycle time for 1 cavity
      b. Prolonged cycle time per cavity
      c. Hourly machine op. rate
      d. Machine depreciation
      e. Consumables and other costs

4. FINDING OPTIMAL COST

   e.g.
   6000€
   4 WEEKS
   20K PCS
   8 CAVITIES

   e.g.
   1000€-5000€
   4-8 WEEKS
   20K-50K PCS