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Mold Quotation Reference

INJECTION MOLD CLASSIFICATIONS (UP TO 400 TONS)

1. SPI CLASS 101 MOLD - 1 million cycles; Built for extremely high production. This is the highest priced mold and is made with only the highest quality materials.

- a. Detailed mold design required.
- b. Mold base to be minimum hardness of 280 BHN.
- c. Molding surfaces (cavities & cores) must be hardened to a minimum 50 R/C range. All other functional details, such as slides, heel blocks, ect. should also be of hardened tool steels.
- d. Ejection should be guided.
- e. Slides must have wear plates.
- f. Temperature control provisions to be in cavities, cores and slide cores whenever possible.
- g. Electroless nickel plating of all water channels is recommended. This greatly inhibits the chance of rust and makes it easy to clear sediment from plugged lines.

2. SPI CLASS 102 MOLD - 500k cycles; Medium to high production. Mold good for abrasive materials and/or parts requiring close tolerances. This is a high quality mold. Fairly high priced.

- a. Detailed mold design recommended.
- b. Mold base to be minimum hardness of 280 BHN.
- c. Molding surfaces (cavities and cores) must be hardened to a minimum of 48 R/C range. All other functional details, such as slides, heel blocks, gibs, wedge blocks, ect. should be heat-treated likewise.
- d. Temperature control provisions to be directly in cavities, cores, and slide

cores whenever possible.

- e. Parting line locks are recommended on all molds.
- f. The following items may or may not be required depending on the ultimate production quantities anticipated. It is recommended that those items desired be checked and made a firm requirement for quoting purposes:
 - i. Guided ejection
 - ii. Slide wear plates
 - iii. Electroless nickel plated water channels
 - iv. Plated cavities

3. SPI CLASS 103 MOLD - 250k cycles; Medium priced mold. This is a popular mold for low to medium production needs. Most common price range.

- a. Detailed mold design recommended.
- b. Mold base to be minimum hardness of 165 BHN.
- c. Molding surfaces (cavities and cores) must be hardened to a minimum of BHN range. All other s range functional details such as slides, heels blocks, gibs, wedge blocks, ect. should also be of hardened tool steels.
- d. All other extras are optional.

4. SPI CLASS 104 MOLD - 10k cycles; Low production mold. Used for limited production, preferably with non-abrasive materials. Low to moderate price range.

- a. Mold design recommended.
- b. Mold base can be mild steel or aluminum.
- c. Cavities can be aluminum, mild steel or any other agreed upon metal.
- d. All other extras are optional.