Step-by-Step Process : The SLS System Process

1. Start with an STL file of your 3-D CAD data.

2. Enter the data into a SLS® system.

3. Spread a layer of powdered material. As the process begins, a precision roller mechanism automatically spreads a thin layer of powdered SLS material across the build platform.

4. Sinter a cross-section of the CAD file. Using data from the STL file, a CO2 laser selectively draws a cross section of the object on the layer of powder. As the laser draws the cross section, it selectively "sinters" (heats and fuses) the powder creating a solid mass that represents one cross section of the part.

5. Repeat. The system spreads and sinters layer after layer until the object is complete.

6. Remove the part. Once the part is complete, remove it from the part build chamber and blow away any loose powder.

7. Finish as desired. Use the part as is—or sand, anneal, coat, or paint it before using it for its intended application.

Rapid Product Development Group, Inc
2565 Summit Drive, San Diego, CA 92025
Tel: (760)740-9090 Fax: (760) 256-2061
Email: info@rpdg.com
Web: www.rpdg.com