

Technical Information

CAD/ Rapid Prototyping

TYPES OF FILES ARMSTRONG CAN USE

	Can Create Stereo Model	Can Machine 2 Axis	Can Machine 3 Axis	Can Check Dimensions	Can Create Drawings
STL (Stereo Lithography File)	✓				
Pro Engineer Native Part	✓	✓	✓	✓	✓
IGS (Surfaced Translation File)	✗	✓	✓	✗	✗
IGS (Wireframe Trans. File)	\$	✓	✗	✓	✗
DXF, Cadkey parts & DWG's (2D Drawings)	\$	✓	\$	✗	✓

✓ Best option

✗ Requires some CAD work

\$ Requires some CAD work

CAD SOFTWARE AT ARMSTRONG MOLD

Pro-Engineer version 2000i & 2000i²
Surf Cam Version 7.0c

Cad Key 97
Solidview (w/ IGES Translator)

BENEFITS OF CAD

- Direct transfer of designers intent
- Tooling and hogouts produced directly from database
- Transfer speed = time savings

METHODS OF ELECTRONIC FILE TRANSFER

- FTP to Armstrong via upload @www.armstrongmold.com
- E-mail attachment to cad@armstrongmold.com
- FTP - pick up at customer site

STEREOLITHOGRAPHY

Rapid prototyping process used to create 3D models of any complexity from CAD files Solid CAD data is sliced into thin cross sections. A laser generating a UV beam is moved across a vat of photosensitive liquid polymer by a CAD scanning system. The laser draws each cross section turning the liquid to solid. Successive cross-sections are built one upon another creating a three dimensional plastic model.

BENEFITS OF STEREOLITHOGRAPHY

- Overnite prototype part creation
- RP prototype provide excellent mastern model for:
 - Aluminum castings via RPM or Airset
 - Plastic parts in thermoplastics or urethanes