**KEY BENEFITS**

- **Quality & Speed**
  PAM-DIEMAKER for CATIA V5 provides the convenience and efficiency of rapid die face design, with the quality of the native CAD surfacing, offering trade-oriented functionality directly inside CATIA.

- **Consistent Data Management**
  Die designs stored as CATPart models, can be retained, modified, and shared as required. By remaining ‘inside’ CATIA there is no data transfer or neutral file to risk regression of quality.

- **Engineering update**
  Fully integrated in CATIA, DIEMAKER takes advantage of the geometry update of CATIA, modifying the Die design as a result of changes in the Component design.

- **Connection to simulation for Early Process Feasibility**
  Native format connection to PAM-STAMP 2G allows fast and efficient simulation iterations. The rapid die design allows the assessment of different die design concepts (single/double attached, full/partial draw etc.), which can be quickly evaluated with simulation, to assure design feasibility.

Breakthrough solution allowing die designers to create the first draft of a die addendum within minutes directly in their CAD environment. PAM-DIEMAKER for CATIA V5 offers powerful interactive tools and functions which provide guidance and support for part preparation, binder development and die addendum design.

**PRODUCTIVE AND STREAMLINED ENVIRONMENT**

PAM-DIEMAKER for CATIA V5 optimizes the die designer’s workload by implementing design & process knowledge directly into the CATIA PLM context. The integration in CATIA V5 PLM environment provides a number of benefits:

- Instant productivity with minimal learning curve within a familiar user environment.
- The seamless integration combines the wide range of CATIA functionalities with PAM-DIEMAKER’s powerful tools, broadening the scope and bringing flexibility in the approach.
- Full CAD/simulation interoperability featuring native translator for rapid formability assessment with PAM-STAMP 2G protects data integrity.

**CONNECTION TO SIMULATION**

PAM-DIEMAKER for CATIA V5 provides a native format connection to PAM-STAMP 2G for easy data transfer to the simulation environment. The system provides efficient data transfer, passing all useful & relevant information, not only geometry, but also object descriptions, material information, and any process information defined in the PLM model, and the simple model updating functionality of PAM-STAMP 2G allows modeling of iterations with minimal effort.

1. Prepare part data
2. Tipping, binder design addendum profiles and die opening line
3. Finish: Automatic calculation of addendum faces and filletting
4. Die Design assessment
5. Final tool
OPEN THE WAY TO SIMULATION-BASED DIE DESIGN FOR VIRTUAL PRODUCT DEVELOPMENT

TRIMLINE ANALYSIS FUNCTION

· Maintains CATIA V5 native functionalities (sketcher, features...).
· Provides dedicated press tool design functions for blankholders, addendum, gainers, u-ends, and analysis tools, for draw depth, undercut, trimming angles.
· Blends in CATIA V5’s specific update mechanism.
· Preserves full compatibility with other CATIA V5 workbenches (Part design, CNC machining...).
· Achieves surface quality consistent with CATIA V5 surfaces. Typically: high quality surface.
· Delivers surfaces suitable for final die design and downstream processes (Solid design, CNC machining...).
· Links to simulation environment using native transfer 'bridge'.

PRODUCT ENGINEERING

FINAL CAD DIE FACE DESIGN

SOLID MODEL DIE DESIGN

CNC MACHINING

PRODUCT & DIE ENGINEERING

VIRTUAL TRY-OUT

TIME SAVING

Please check with our local distributors for information on platform availabilities and installation prerequisites.

For more information, visit: http://www.esi-group.com/products/metal-forming/catia-v5/benefits

ABOUT ESI GROUP

ESI is a world-leading supplier and pioneer of digital simulation software for prototyping and manufacturing processes that take into account the physics of materials. ESI has developed an extensive suite of coherent, industry-oriented applications to realistically simulate a product’s behavior during testing, to fine-tune manufacturing processes in accordance with desired product performance, and to evaluate the environment’s impact on product performance. ESI’s products represent a unique collaborative and open environment for Simulation-Based Design, enabling virtual prototypes to be improved in a continuous and collaborative manner while eliminating the need for physical prototypes during product development. The company employs over 750 high-level specialists worldwide covering more than 30 countries. ESI Group is listed in compartment C of NYSE Euronext Paris. For further information, visit www.esi-group.com.