



2016 Die Design and Simulation Software Experience Presentation

About US:

“Distinctive Machine Corporation is dedicated to getting the job done **right** and **on time**. Founded in 1991, we have a reputation for quality work and first-rate customer service.

Located near Northland Dr. and 10 Mile Rd. in Rockford, Michigan, our 17,000 ft.² facility is equipped to handle all your tooling needs and is capable of the fastest possible turnaround in any situation.”



Our Location

300 Byrne Industrial Dr.
Rockford, MI 49341

Sales and Services:

What We Do...

We specialize in metal stamping die construction, prototyping of parts & tooling, die repair, and engineering changes to existing dies. Our CAD/CAM/CNC department is equipped for any 2d & 3d machining, wire and laser cutting using the latest in equipment and procedures. We are confident we can meet or exceed your specifications. Our team of designers and diemakers have decades of combined experience to see your project through from concept to completion.

Our Company Goal...

To provide our customers with a durable, reliable, and maintainable product through the pursuit of the latest technology, with a trained team of employees ready to meet our customers' needs, now and in the future.

Do you need a quote on a special project? We will be very happy to quote price and delivery on any package or project.

Please contact Wayne Cowley at:

wcowley@distinctive-machine.com or

call (616) 433-4111.



Machine and Equipment List

- Williams-White Moline 400 Ton Press with 60" x 108" Bed - 28" Max Shut Height
- Coil Feeder - Max Width of 36"
- Clearing 350 Ton Press with 66" x 84" Bed - 39 1/8" Max Shut Height
- Clearing 200 Ton Press with 48" x 84" Bed - 33" Max Shut Height
- CAD Stations: (3) NX 7.5 Unigraphics + (2) VISI progress v20
- CAM Stations: (4) VISI Machining 2D/3D Toolpathing; (1) VISI Wire
- QUOTING Stations: (3) VISI Basic 2D/3D Modeling Systems
- Mighty Viper Model VMC1200, X=80" Y=40" Z=25" Travel
- Tree CNC Mill Model VMC1060, X=40" Y=24" Z=25" Travel
- Tree CNC Mill Model VMC 760, X=30" Y=16" Z=22" Travel
- (2) Fryer CNC Mills Model MC60, X=60" Y=30" Z=28" Travel
- Charmille FI 240 Wire Machine
- I-Machines iL2500 2D Laser with 48" x 96" Bed - Max Thickness 1/2"
- (2) Bridgeport Vertical Mills 9" x 42" Tables with Digital Readouts
- Cincinnati #3 Vertical Mill
- Grand Rapids 560 Surface Grinder 14" x 36"
- Grand Rapids 480 Surface Grinder 12" x 30"
- Boyer Schultz Surface Grinder 6" x 12"
- KO Lee Surface Grinder 8" x 15"
- Blanchard Grinder 36" Chuck
- Carlton 5' x 15" Radial Drill Press
- Carlton 6' x 17" Radial Drill Press
- Cincinnati Bickford 24" Super Service Drill Press
- 20" Wilton Gear Head Drill Press with Forward & Reverse
- Southbend 14 1/2" x 40" Lathe with 13" Turret Tail Stock
- Miller 250 Synchronwave Tig & Arc Welding
- Hobart 450 Mig Welder
- Parma Work-A-Matic Cut Off Saw
- (3) 5-Ton Bridge Cranes
- 12,000 lb. Allis Chalmers
- 8,000 lb. Allis Chalmer Lift Truck
- 4,700 lb. Nissan Lift Truck
- Flat Bed Truck Pick-Up and Delivery - 52,000 lb. G.V.W.



Why VISI?

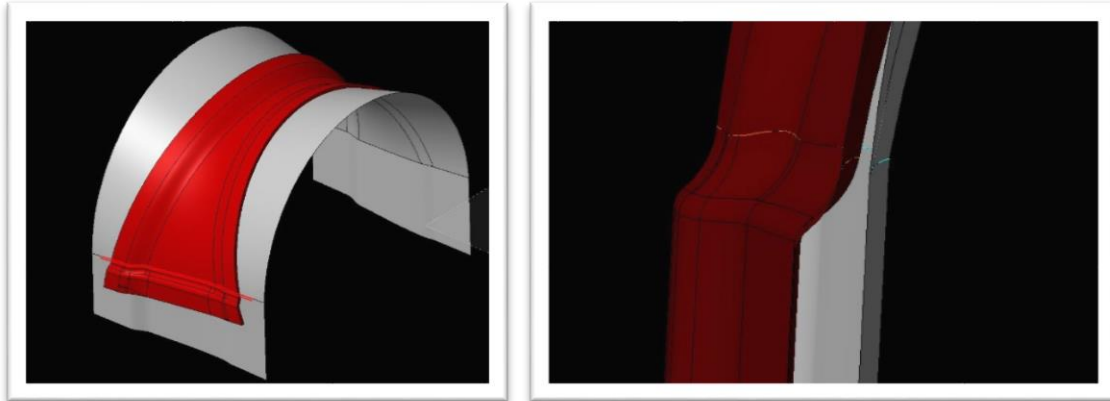


- Distinctive Machine began by replacing Auto-CAD and MasterCAM with VISI Version 9 in 2002.
- They needed a total package Solution.
- VISI Fit the bill because it was the easiest to transition into from the previous software they were using.
- VISI was the best all in one solution for Design and Machining.

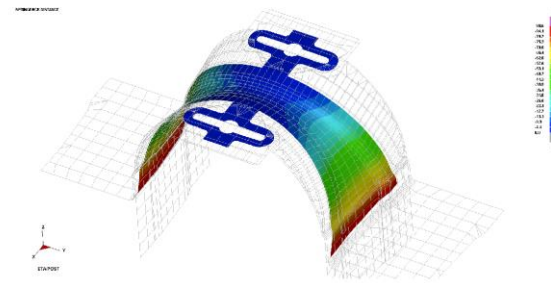
VISI Software

Distinctive Machine has taken advantage of the software upgrades that have taken place with each new releases of Visi.

Using Visi's new technologies like the springback tools and target driven deform tools, allows us to get from engineering to floor faster.

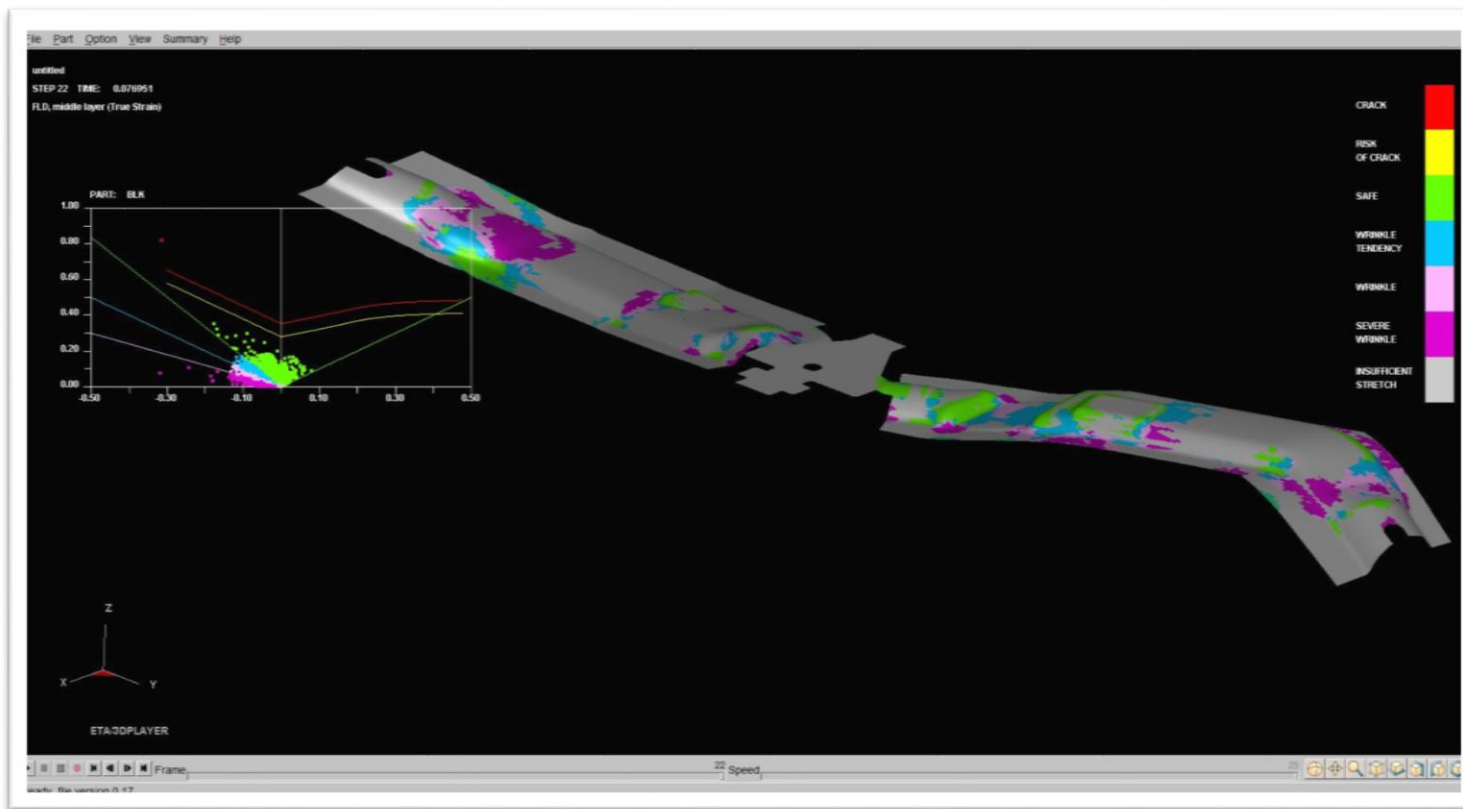


This also allows us to keep our designs up to date throughout the build process. Removing the need for reverse engineering at the end of a project.



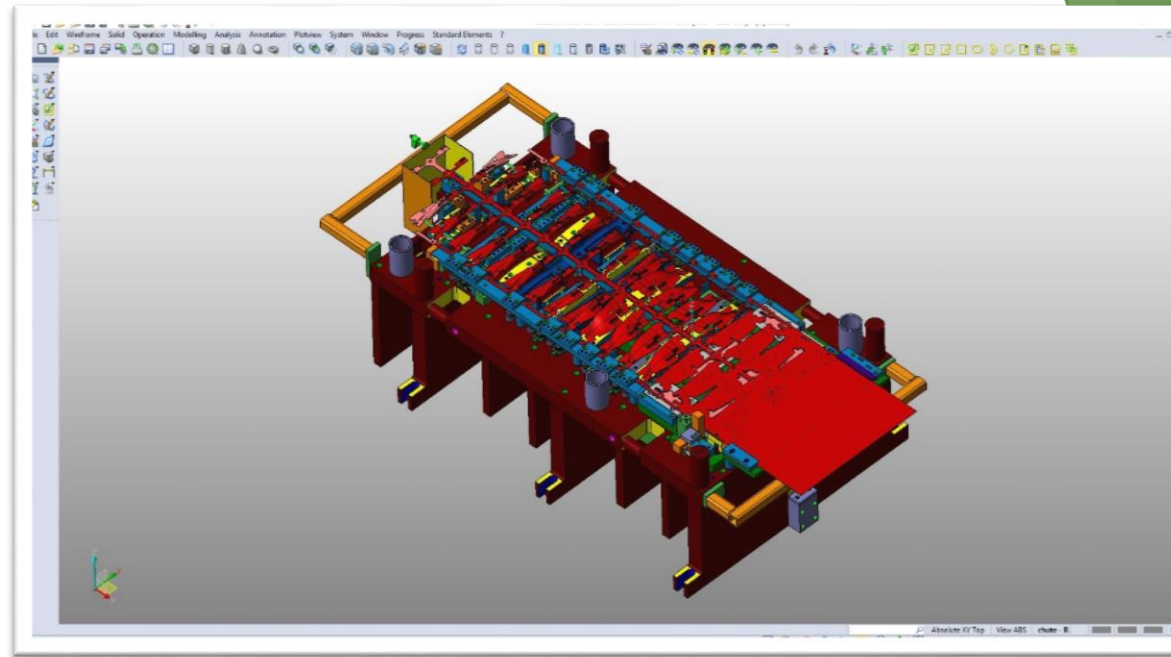
Simulation Process/Design:

Distinctive Machine uses Dyna Form as an FEA tool. We simulate tools prior to the design process in order to get an accurate forming analysis. We have found this has greatly reduced tryout time.



Die Design Types

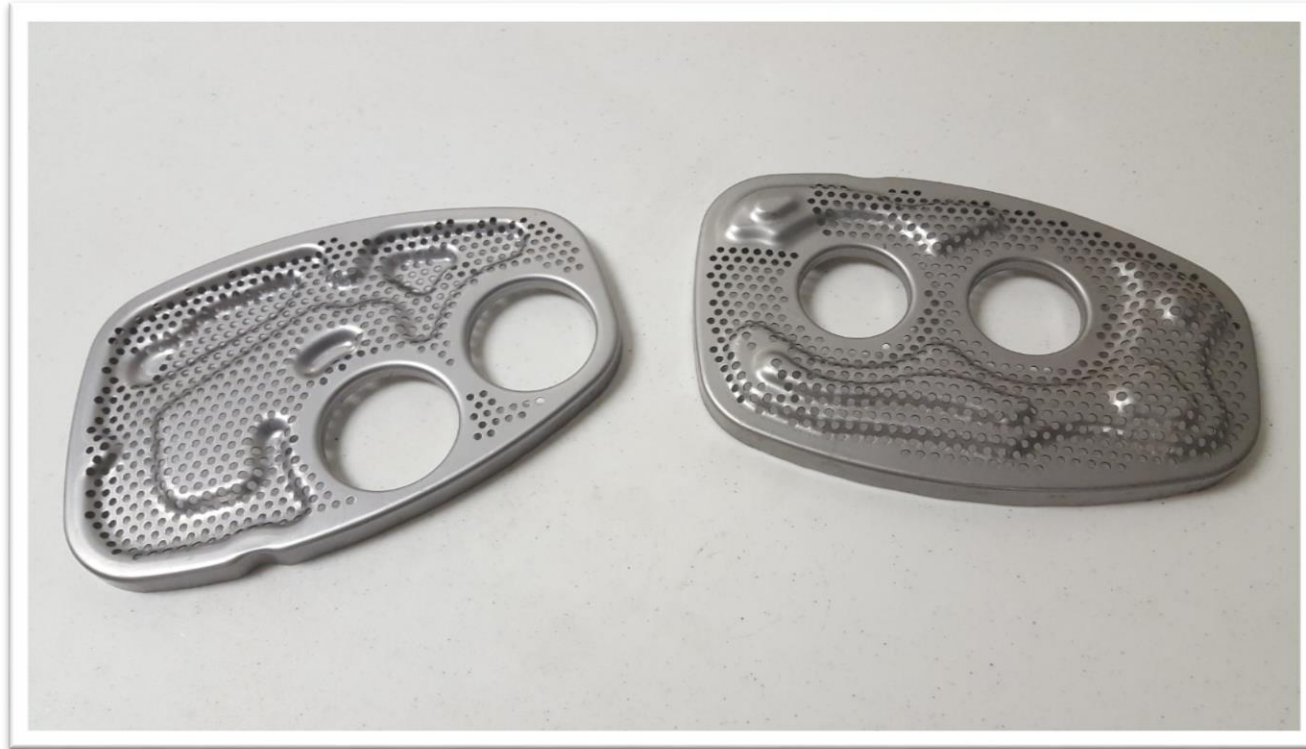
Typical Progressive Die Strip- CAD Model in VISI on right, Actual progressive strip on bottom.



Die Design Types

Interchangeable Baffle Progressive Die

Kind of a niche for us, as one progressive die produces sometimes as many as 7-10 internal muffler baffles with an exact outer profile shape using a quick changeover of die components



Die Design Types

Larger Progressive dies producing heat shields



Die Design Types

Smaller complex progressive dies for all kinds of applications.



Upcoming Challenges:

- Distinctive Machine looks toward the future:
- The acquisition of Bigger CNC Machines and Presses
- The addition of more shop floor space
- CMM in house - no more part checking outside of the facility

In Summary:

Thank You!

