

**CLICK2  
EXTRUDE™**  
solidThinking

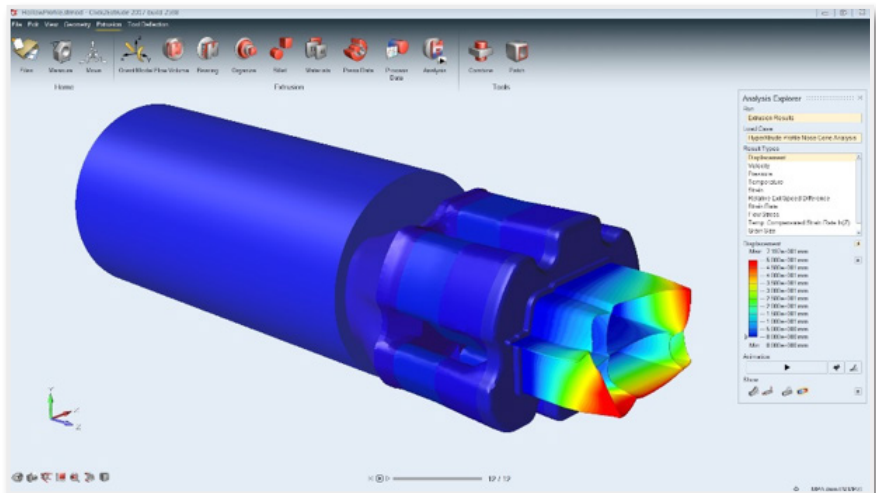
## Streamlined Metal Extrusion Simulation

Click2Extrude Metal allows users to enhance and optimize the extrusion process to drastically improve productivity and quality.

Fast, Easy, Accurate and Affordable

# Powerful and Accurate Extrusion Simulation without the Complexity

solidThinking Click2Extrude Metal has been designed with its end users in mind. The entire simulation environment has been upgraded to address a wide variety of users, from beginners to experts and from production engineers to process designers. Click2Extrude Metal allows for simulations to be performed quickly and accurately without the inconvenience of complicated tools and interfaces.

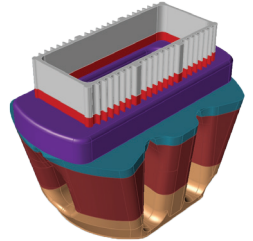


"Click2Extrude is a big step ahead in the model meshing for extrusion simulation. We reduce the time required by 50% and the element's quality is drastically better. Click2Extrude is also easy to use; a new engineer can become independent in a month's time."

Tommaso Pinter  
Chief Technology Officer  
Alumat & Almax Mori Group

# Metal Extrusion Simulation

## Extrusion Process



**Import & Orient**

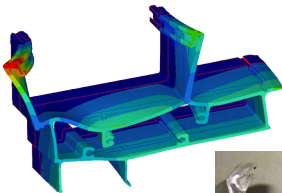
**Extract Flow Volume**

**Extract Bearing & Organize**

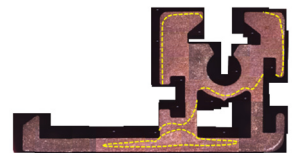
## Improve Quality

Visualize, predict and fix visible and invisible extrusion defects upfront before fabricating the dies for production. Save on expensive tryouts using Click2Extrude Metal early in the design cycle.

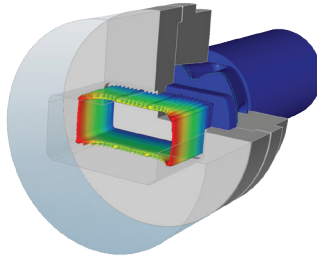
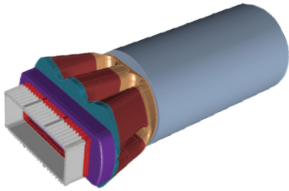
## Click2Extrude Metal Identifies Costly Defects Such As:



Profile Distortion



Charge Weld Defect



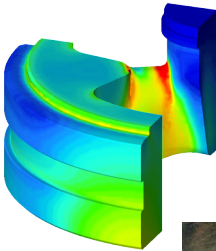
Define Material & Process

Simulate & Analyze

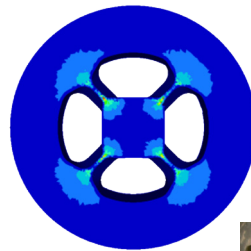
Extrude

Increase Productivity

Identify areas and causes of possible failure and rectify them upfront to reduce costly processes and die repairs.

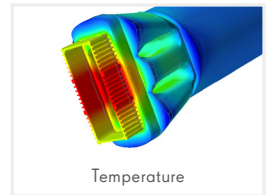
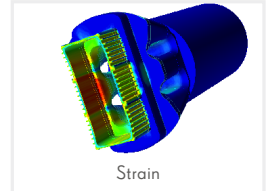
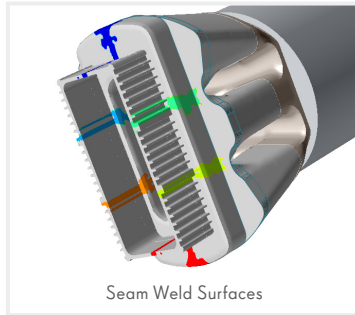
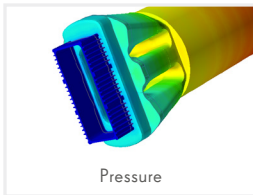
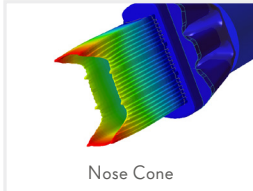


Tool Damage from Deflection



Tool Damage from Excessive Cycling

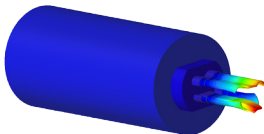
## Powerful Result Visualization



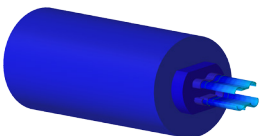
## Optimize Extrusion Process

Balancing the die by fine tuning the bearing lengths manually and iteratively in production can be time consuming and expensive. Click2Extrude Metal automatically optimizes the die with leading numerical methods in a single set up.

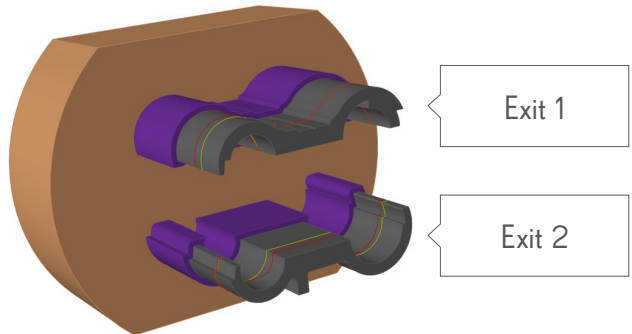
## Bearing Length Optimization



Initial Bearing Design



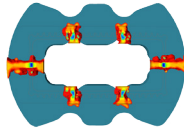
Optimized Bearing Design



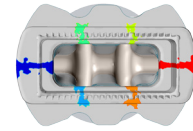
Initial & Optimized Bearing

"With Click2Extrude's newly designed interface I have cut my modeling and preprocessing time on average from 2 hours to 10 minutes."

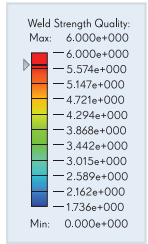
Jeff Skinner  
Sales & Technical Representative  
Thumb Tool & Die Engineering



Weld Strength



Seam Weld Surfaces



## Click2Extrude Metal Benefits

solidThinking Click2Extrude Metal is a simulation environment designed to help metal extrusion companies meet the ever increasing demands to produce complex profiles at reduced costs. Click2Extrude Metal is a virtual press in which users can visualize material flow and temperature inside a die during extrusion in order to make necessary changes to ensure balanced flow, while identifying and eliminating product defects.

### EARLY DETECTION OF VISIBLE DEFECTS SUCH AS:

- Profile distortion
- Uneven wall thickness
- Die pickup lines (streak lines)

### EARLY DETECTION OF INVISIBLE DEFECTS SUCH AS:

- Charge weld between multiple cycles
- Seam weld in hollow profiles
- Skin defects (backend defects)
- Accurate grain size prediction

### MAINTAIN PRODUCTION SCHEDULES BY EARLY DETECTION OF:

- Incorrect bearing lengths and automatic bearing length optimization
- Die deflection
- Dummy block failures
- Container line expansion
- Die wear and excessive heating
- Improper thermal management

### MINIMAL TRAINING WITH MAXIMUM BENEFIT

By focusing on ease of use and managing all complexities in the background, Click2Extrude Metal eliminates the costly and time consuming training most other extrusion simulation software requires.

Click2Extrude is available for:





Windows 10, 8.1, 7


Supported Languages

Chinese  
English  
French  
German  
Italian

Japanese  
Korean  
Portuguese  
Spanish

Learn more at  
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