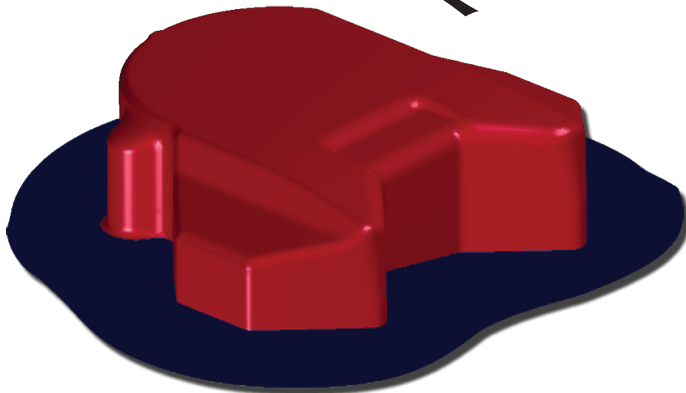


Blank, Nest & Generate Quotes



BSE is a complete solution for accurately estimating blank size along with blank nesting for maximum material utilization, minimum scrap and piece costs. Using streamlined procedures, this powerful module allows the user to predict thinning, thickening, thickness strain, major prin. strain, min prin. strain, strain tensor & generate a forming limit diagram (FLD).

BSE is now enhanced with nesting optimization to review all nesting possibilities and to maximize material utilization. BSE also offers enhanced FLD & thickness/thinning contour reporting capabilities.

The improved MSTEP offers even more accurate results for the blank outline and trim line.

Importable File Types

- IGES, VDA, DXF, STL, ACIS, LINE DATA, CATIA, NX, PRO-E, STEP, NASTRAN, DYNA, DYNAIN, ABAQUS

Part Preparation

- Separates top & bottom surfaces of solid-model parts
- Automatically generates middle surfaces
- Fixes & fills surface gaps & holes
- Automatically meshes
- Tips double-attached parts
- Fills holes & gaps between double-attached parts

A quick & easy process to check formability results & estimate manufacturing costs.

Blank Development

- Blank size estimates (accurately predicts flat blank profiles)
- Supports tailor welded blanks & double attached parts
- Outputs press direction automatically after running MSTEP
- Unfolds flanges
- Trim line calculations
- Produces the most accurate blank, accounting for linear bends and material stretch during the forming process
- Supports constraint conditions in the accurate method

Nesting

- Allows nesting with imported, created or MSTEP generated outline
- Supports outline development, editing & deletion
- Optimal 1-up, 2-up, 2-pair, mirror & multiple blank nesting
- Fitted geometry shape nesting: rectangle, parallel, trapezoid, isosceles trapezoid & arc
- Supports nesting with fixed angle, pitch or width
- Supports nesting with the range of angle, pitch & width
- Allows nesting in plate to align the outlines in plate position
- Calculates material utilization, fall-off & piece cost
- Calculates 3D trim line of each outline & outputs IGES
- Outputs 3D trim line in the original position & tipping position for double-attached parts

Forming Analysis

- Generates a forming limit diagram (FLD)
- Predicts thickness, thinning, thickening & strain

Report Generation

- Cost estimation reports (maximum material utilization & product piece cost)
- Formability reports (thickness, thinning & FLD)
- Supports different output units for nesting reports
- Offers a combined report for tailor welded blanks