

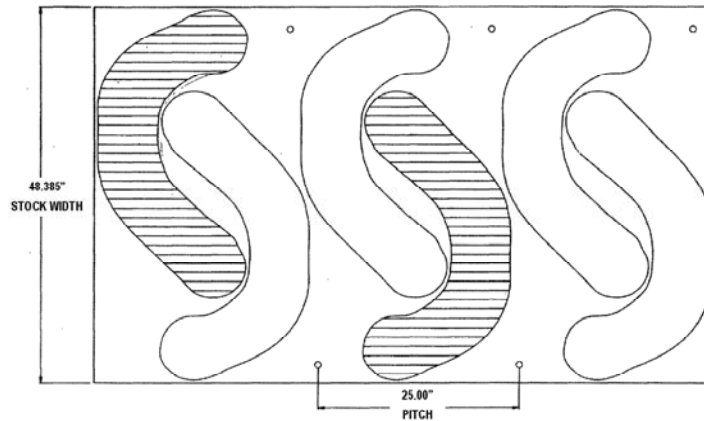
Spartanburg Discovers ROI with BLANKNEST

Spartanburg Steel Products Inc., Spartanburg, South Carolina, USA, a Tier-One supplier to automotive and non-automotive OEMs, produces stampings for Toyota, BMW, Mercedes, and John Deere, among others. Spartanburg Steel Products is a full service supplier for buyers of metal stampings, welded sub-assemblies, and major body modules.



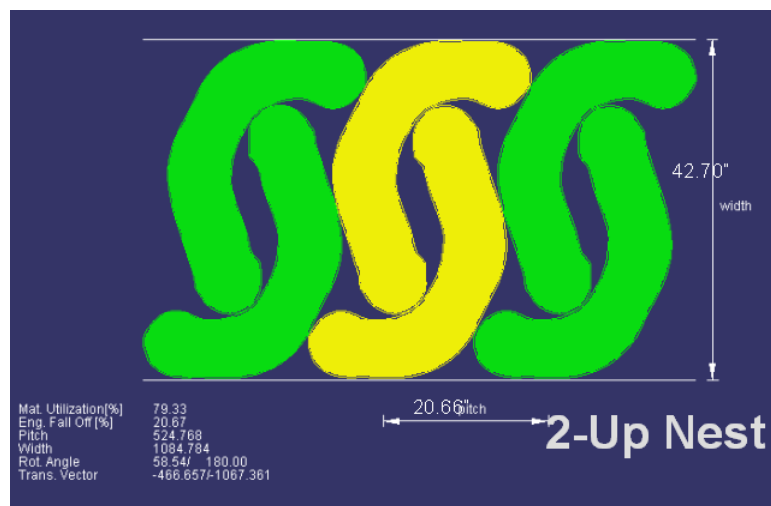
Recently Scott Moore, CAD Engineer at Spartanburg, performed a comparison analysis of manually nested blanks versus using the BLANKNEST software application, which optimally nests blanks.

Moore took a look at three programs currently on the production line to examine the effect of using software to optimize the nesting layout for material utilization. "We had the outside tool shop that built the die for us also specify the way the blank shapes were to be cut out of the coil. It was always our assumption that this was the best way to make these blanks," added Moore.



Manually determined nest for developed blank shapes.

"I reviewed the existing blank die design parameters that were determined by the tool shop and then I calculated the optimized layouts using BLANKNEST. In each comparison the results provided by BLANKNEST yielded an improved material utilization. Modest cost savings of \$22,994, \$24,540, and \$67,214 would have been realized if this software were used in the preliminary stages of die design in these programs," says Moore.



Optimal nest produced by BLANKNEST

Amazed at the results,

Moore decided to use BLANKNEST to optimize the nest for a current program. Again, he had the manually determined nest for comparison. He found that the optimization yielded a smaller pitch and rotated the blanks much further than the manually determined nest.

The new nest increased the coil's utilization from 60% to 79.33% resulting in a nest that was over four pounds lighter. At 200,000 vehicles per year, an astonishing \$712,075 could be saved. "Amazingly over the 6-year program, \$4,272,450 is the actual cost savings that is being applied towards a current automotive program."

Manual Calculation

Nest Layout Size = 48.386" (Coil) x 25.000" (Pitch) x .088" (t)

Gross Weight = 15.089 lbs / blank

BLANKNEST

Nest Layout Size = 42.708" (Coil) x 20.660" (Pitch) x .088" (t)

Gross Weight = 11.006 lbs / blank

Savings

4.083 lbs/blank x 4 parts/car x 200,000 car/yr x \$.218/lb = \$712,075 /yr.

\$4,272,450 Total Savings over a 6-year program

With stamping capabilities covering everything from small brackets to medium and large stampings, many with difficult requirements, Spartanburg Steel Products & Spartanburg Stainless Products have the ability to supply customers with a complete variety of operations and products. "In the automotive sector, we're all being squeezed to reduce our costs 10% or more. With BLANKNEST we can reduce the amount of scrap we're producing and more than recover our return on the investment on our first program," says Moore.