



## Turret Forming, CNC Machining, and Laser Cutting?!

This month we are featuring a part that looks simple, but actually takes a unique journey through our shop. The first step for this part is at our turret. Flat blanks are loaded in the turret, and a custom forming tool is used to punch the embossed ring, and a ½” diameter hole is punched in the center of the part. This ½” hole is used for the next operation in our CNC Machining center. Using the hole in the center of the blank to locate the part, the six slots are then added into the embossed ring. The next step is the laser where a custom fixture was designed to pick up on the slots added during the previous operation. With the part now properly oriented the laser cuts the final outside diameter and inside diameter and features. Using the laser to cut the final inner and outer perimeters saves CNC time resulting in a less expensive and more quickly produced part.

### Quiz:

What is the name of the Greek goddess whose return was believed to signal the start of spring?

- A. Demeter
- B. Persephone
- C. Hades
- D. Freya

### Problem:

The diagram shows 15 billiard balls that fit exactly inside a triangular rack. The rigid rack prevents the balls from sliding. What is the largest number of balls that can be removed so that the remaining balls are theoretically unable to move?



\*Please be sure to check our website for answers to all previous months Problems and Quizzes! Go to [www.metalwork.com](http://www.metalwork.com) and click on Problem of the Month link.

### Quote:

“Worry is like a rocking chair: it gives you something to do but never gets you anywhere.”

~ Erma Bombeck ~

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**Come Visit Us!**

102D Park Drive  
Montgomeryville, PA  
P: 215.654.7778  
F: 215.654.7779  
E: [potm@metalwork.com](mailto:potm@metalwork.com)

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