



providing world-class leak test and assembly verification solutions

## SEAL SIZING ON A TRANSMISSION HUB

### Market Driver:

During assembly of automotive transmission hubs, the graphite filled nylon seals are molded to the correct size and then stretched to be placed over the control ports on the transmission hub shaft. The seals do not rebound back to their original size and need to be compressed. The previous method used was compressing the seals twice using a steel clam shell that is rotated 90° between compressions. This method tended to egg shape and pinch the seals.

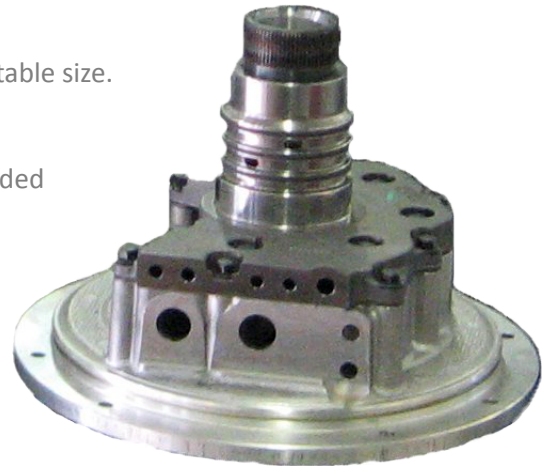


### Test Requirement:

Compress seals on a transmission hub down to an acceptable size.

### CTS Solution:

The photos on the right show one of three systems provided for three different parts and facilities. CTS is well known for its CTS connect line of sealing solutions. This technology was used to form the base of the seal sizing by increasing the hardness of the urethane and adjusting the amount of force to be applied. The displayed system uses a compression force of 35,000 Lbs of force to compress a harder than normal bladder to properly size the transmission seals.



### The Result:

In all solutions the customer is very pleased with the results and the solution of eliminating the old style clam shell that could damage the seals and the decrease in cycle time.

