



## ALIGNMENT LOCKS PERFORMANCE TESTING

Progressive Components regularly tests products through independent testing facilities nationwide.

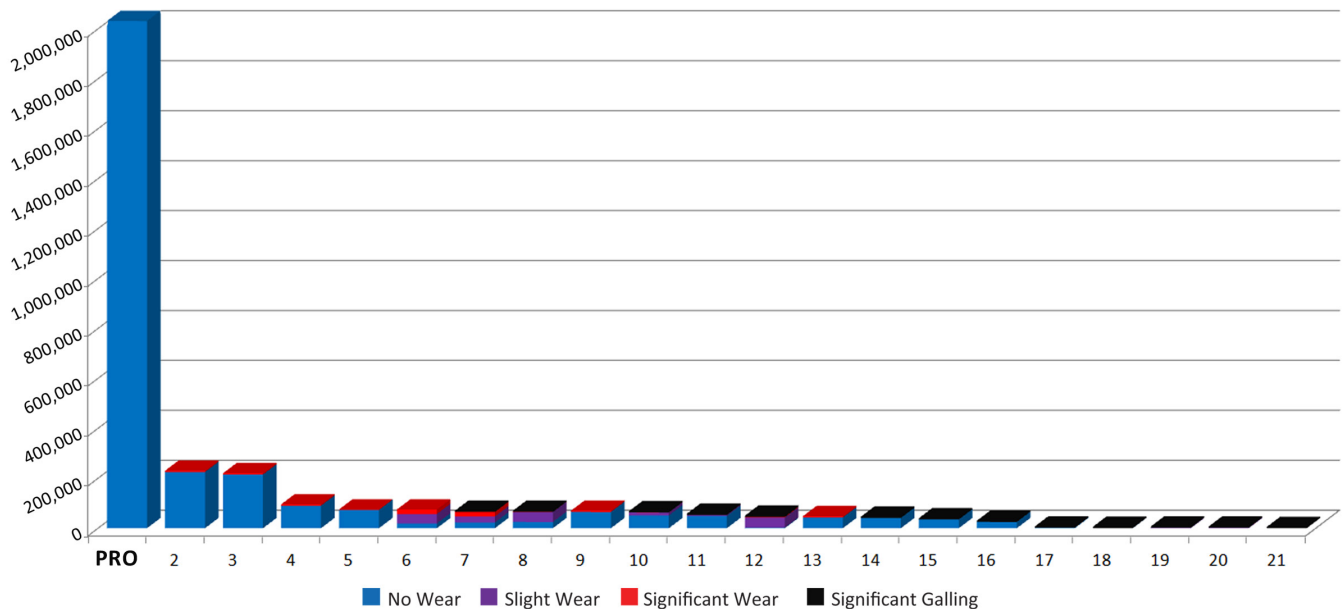
Before launching of the Z-Series® Alignment Locks, Progressive contracted Element Materials Technology to provide a thorough mold lock Performance Evaluation:

“Element Materials Technology has conducted independent life cycle testing of mold interlocks since 1999. The processes with fixtures and cycling were established to simulate use in the molding environment, but more severe loads were used to accelerate the failures at 4400 lbs of pressure. The locks tested have been from Progressive as well as other standard lock distributors in the US and Asia, plus several additional material and treatment combinations were tested for comparison.”

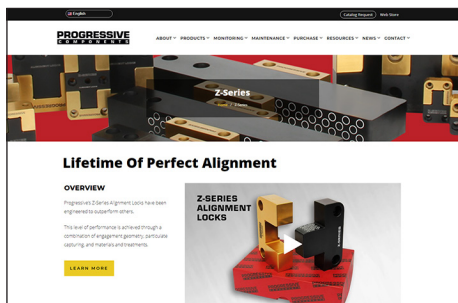
It was determined that the Progressive Components Z-Series Alignment Locks exceeded the 2-million cycle mark, and still displayed no measurable signs of wear of any type.

“Over 21 different tests were performed with the purpose of cycling until failure occurred. At no time during our tests over the years have we seen cycle performance at the level of this new design, represented as PRO in the chart below.”

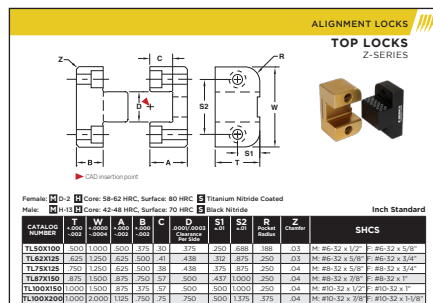
With the industry's widest selection of sizes in stock and competitively priced, specifying alignment locks from Progressive Components means your molds will have unmatched protection from damage and downtime.



## ONLINE DATA



Learn more at  
[procomps.com/z-series](http://procomps.com/z-series).



All catalog pages are online for  
forwarding to suppliers, customers, etc.

| TESTS AND RESULTS |          |             |               |          |                  |               |                 |         |        |
|-------------------|----------|-------------|---------------|----------|------------------|---------------|-----------------|---------|--------|
| Sample ID         | Material | Coating     | Core Hardness | Material | Coating          | Core Hardness | Lube            | Cycles  | Figure |
| PRO 2-Series      | D-2      | TIN         | 58-62 HRC     | H-13     | Nitro Carburized | 42-48 HRC     | Serol (INT/300) | 2000000 | 3      |
| PCS Tri-Lock      | A-2      | Black Oxide | 58-60 HRC     | A-2      | Black Oxide      | 58-60 HRC     | PCS Nano        | 225000  | 4      |
| DMS Self Lube     | S-7      | TIN         | 58-56 HRC     | O-6      | Black Oxide      | 58-50 HRC     | (INT/300)       | 215000  | 5      |
| PCS B&G           | A-2      | TIN         | 58-62 HRC     | H-13     | Malonite         | 40-44 HRC     | Lithium         | 80000   | 7      |
| DMS B&G           | B620     | TIN         | 58-62 HRC     | H-13     | Malonite         | 40-44 HRC     | Lithium         | 48000   | 8      |
| PCS Clad          | B620     | Armoxid     | 58-62 HRC     | O-6      | Black Oxide      | 60-62 HRC     | PCS Nano        | 40000   | 9      |
| China Brand       | D-2      | TIN         | 58-62 HRC     | YK30     | Black Oxide      | 50-52 HRC     | Lithium         | 400     | 10     |

View the entire independent  
testing report online.