The customer required precision force and distance control along with sophisticated analysis to assemble valve seats and valve guides to precise tolerances and give their customer data to prove it.

Additionally, the customer required a flexible assembly system that could accommodate many different part models, adapt to engineering updates and part improvements that could affect the assembly characteristics, along with the performance to handle the rigors of production manufacturing.

The Promess UltraPRO system with EMAP press was chosen for its precise control and almost infinite programming capability.

The UltraPRO controller is easily integrated into flexible assembly cells, large transfer lines or manual workstations. The UltraPRO system easily handles program changes and part model changes with its simple but powerful programming style. Couple that with its ability to interface with many different data storage software packages and you have a very powerful servo-controlled press system.

The result, each part is assembled exactly the same, allowing the cylinder head to function to its peak performance along with the data for each assembly. Customer needs meet and exceeded quickly, efficiently and with confidence to prove it.