## Targeted Contract Assembly

Solutions to Tackle Modern Challenges



We provide Industry 4.0 Targeted Assembly solutions that allow organizations to scale production & improve manufacturing processes.

## Targeted Contract Assembly Capabilities & Services

#### Stabilizer Bar Assembly

At PGS, we assemble links, bushings, brackets, and other components to the stabilizer bar, completing the full assembly at designated torque values. To optimize our operations, we've integrated vision systems for part verification, bar code scanners for labeling, and an End-of-line Scan to Container process to ensure traceability for every part in every shipment. This advanced process is designed to meet the stringent demands of OEM Automotive Customers.



### Differentials, RDUs, and Wheel Hubs

PGS specializes in assembling Differentials and Wheel Hubs for axles, ensuring a thorough part verification process before assembly. Each component undergoes scrutiny to guarantee all parts are present. Differentials are subjected to a multi-step torque-to-turn test to validate assembly completeness. Moreover, electronic locking differentials undergo rigorous testing to ensure proper locking functions and sensor positions in various scenarios.

PGS Assembly oversaw the entire process, including the assembly and testing of rear drive units for the Saturn Vue and Chevy Equinox service models. These units are vital for power transmission to the rear wheels, thus enhancing vehicle performance. Serving as rear axle or differential assemblies, they facilitate power transfer from the engine, allowing for speed differentiation during turns in rear-wheel or all-wheel drive systems.

#### Axle Assembly

PGS specializes in assembling service axles for Ford F150 and Mustang vehicles, offering comprehensive project management from sourcing carriers, tubes, bearings, seals, etc., to assembly, welding, and painting. We ensure axles meet customer specifications with precision, maintaining overall length within 0.04" and a tube position angle of 1.0 degree.





## Targeted Contract Assembly

# Secondary Systems used to support Assemblies.

#### Welding & Metal Fabrication

PGS employs diverse welding fabrication processes for manufacturing structures or final parts. We collaborate with TM Solutions, our partner specializing in Rack and Container building, who operate on-site at PGS. Together, we weld assemblies, offer cut-and-etch services, and meticulously validate weld parameters. With TM Solutions supplying steel, we benefit from reduced costs and enhanced material accessibility compared to other companies.



#### Makino U3i

#### **EDM Machining**

In 2022, PGS acquired advanced wire EDM machining tech for in-house component machining, typically outsourced. With diverse CNC equipment, including mills and machining centers, we meet customer needs. Flexibility to expand inventory and access equipment through Pinnacle Machine Tool partnership enables "renting" machinery as needed, optimizing production without floor space burden. This strategic alliance enhances PGS's manufacturing capabilities and resource utilization.



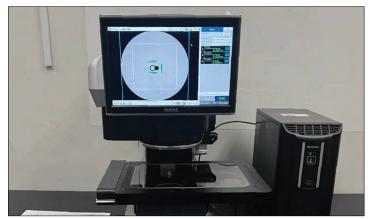
#### **CNC** Machining

PGS possesses and operates a diverse range of CNC equipment to meet our customers' manufacturing requirements, including mills, vertical and horizontal machining centers. We have the flexibility to expand our equipment inventory as needed. Through our key partnership with Pinnacle Machine Tool, we can access almost any equipment, even on a short-term basis. This unique arrangement allows us to "rent" equipment as required, eliminating the need to always maintain a full inventory on our floor.

#### Keyence System

PGS owns and operates a Keyence IM-8030T system that represents cutting-edge image dimension measurement solutions. Tailored for precision, it accurately gauges the dimensions and shapes of diverse parts and components through high-resolution imaging technology. Leveraging sophisticated image processing algorithms, the system meticulously analyzes captured images, delivering precise measurements. This capability aids manufacturers in upholding quality control standards and adhering to specifications throughout their production workflows.





## Targeted Contract Assembly

#### Polishing

In our facility, we emphasize the refinement and polishing of parts, both pre- and post-production. This specialized process involves using liquid and "nugget" media to meticulously smooth and perfect the surface of each component, achieving a uniform and flawless finish. By addressing imperfections and inconsistencies, we ensure that our final products surpass quality standards. Moreover, our meticulous attention to detail extends to post-assembly refinement, where any remaining roughness or irregularities are expertly resolved to ensure an impeccable end result.



"Precision Global Systems continues to provide valuable contributions to the military Defense complex. Their leadership & knowledge repeatedly aids in mitigating complex fallacies we face on a day-to-day basis. Working with a partner as strong as PGS makes my job easier."

- Ret. USA, COLONEL George B. Patten



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