Bundled Deliverables Include:

- Process flow diagrams
- Proposed equipment layout
- Process equipment:
  - Rod harvester
  - Rod transport carts
  - Material handling equipment
  - Sizing equipment
  - Product conveyance system
  - Product packaging equipment
- Equipment manuals
- Safety procedures
- Operational procedures
- On-site installation oversight and start-up
- On-site personnel training

Because of our extensive engineering technology we’re able to provide a bundled step system for reliably harvesting, transporting, processing and packaging polysilicon rods and chunk. Process advantages expedite production flow more profitably than conventional alternatives in the marketplace.
Polysilicon Processing System

Service Commitment
GT Advanced Technologies is dedicated to delivering the highest levels of satisfaction in the implementation of our processes and equipment. We respond to the needs of our customers with proven solutions, comprehensive training and support.

About GT Advanced Technologies
GT Advanced Technologies Inc. (NASDAQ: GTAT) is a diversified technology company with innovative crystal growth equipment and solutions for the global solar, LED and electronics industries. Our products accelerate the adoption of new advanced materials that improve performance and lower the cost of manufacturing.

Predictive Handling Limits Exposure and Maximizes Yield Without Chemical Etching
Both photovoltaics and microelectronics require the production of higher-purity polysilicon. GT Advanced Technologies’ Processing System is fully integrated and will meet the quality demands of a solar or semiconductor facility without chemical etching to modulate impurities at the silicon surface.

One primary contributor to quality and throughput is GT’s predictive fragmentation methodology. Key advantages include:
• High purity process: minimal mechanical contacts
• Smooth and clean silicon surfaces: no sharp-edges
• Narrow particle distribution: controlled silicon size
• Minimal overgrinding: minimal fines generation
• High-speed rod processing: predictive production flow

GT’s Processing System equipment can efficiently manage polysilicon rods up to 3,000mm in length and >150mm in diameter in a closely controlled environment from harvest to clean room. All equipment in this processing room is manufactured from low contamination materials. This includes apparatus required for portioning, filling, final packaging and weighing, which is all designed to work in a cyclical sequence.

Polysilicon Production Solutions
GT Advanced Technologies offers complete state-of-the-art manufacturing capability necessary to produce polysilicon. By providing comprehensive packaged systems and stand-alone components, GT helps lower total cost-of-ownership and reduce time-to-market. Polysilicon production solutions include:

- Trichlorosilane (TCS) Reactor
- Monosilane (SiH₄) Filament Production
- SDR™500 CVD Polysilicon Processing
- Process and Product Analytical Techniques
- Project Support Engineering