AccurET Modular
ETEL’s position controllers range is widely used in leading edge machines of various high-tech industries. A broad power range is available to allow machine builders to drive any kind of motors with the best performance in a minimal footprint.

AccurET position controllers are based on a decentralized architecture. This allows an important part of the machine control software to be located at axis level. In addition, the decentralized architecture ensures the same level of performance and real-time communication speed regardless of the number of axes controlled in the machine. With high computation power, fast real-time communication bus and state of the art control algorithms, ETEL’s controllers are successfully used in areas such as:

- Wafer process control
- Lithography
- Wafer and die level packaging
- Photovoltaic
- Test and control equipment
- Printing / scanning
- Placement machines
- Flat panel display (FPD)

Advanced Features

Along the years, ETEL has always focused on developing advanced control features to make its position controllers unique in the market. From the first prototype commissioning to the serial production of machines, ETEL advanced features provide a simple access to major time savings, throughput enhancement and precision increase.

ETEL advanced features start to bring advantages at a very early stage of a machine design. For instance, Identification Tools, are available to allow a one-click evaluation of machine mechanical design, identify resonances and adapt controller setting. While commissioning the machine, other tools like Friction Compensation and Stage Protection can be used to cancel repeatable errors and to secure system behavior in case of unexpected events.

In addition, the core of ETEL unique features is designed to bring higher throughput together with the most stringent position accuracy levels. Trajectory Filters have the ability to adapt trajectory shapes to minimize settling times. In combination with Dual Encoder Feedback capabilities and/or Gantry Control functions, outstanding performance can be reached with minimal tuning effort.

ETEL develops functions that are continuously setting the next milestones in motion control. In fact, with the Fast Trigger feature, AccurET controllers can react to a real position crossing event in 1D or 2D within a few nanoseconds. This opens new possibilities at the machine control level.

Last but not least, ETEL Force Control algorithm is the flagship of advanced software features. With zero stop time and milli-Newton accuracy levels, accurate placement with force control can be performed at the highest ever throughput and with a precision never achieved till now.

Motion Control Architecture

ETEL develops functions that are continuously setting the next milestones in motion control. In fact, with the Fast Trigger feature, AccurET controllers can react to a real position crossing event in 1D or 2D within a few nanoseconds. This opens new possibilities at the machine control level.