MORE THAN MACHINES
Over half a century of experience, decades developing custom filament winding systems and years of cost reductions have led Engineering Technology Corporation to a competitive catalog of cost-effective and reliable standardized machinery to support the filament winding market. Our machines are designed and fabricated exclusively in Salt Lake City, Utah (USA) by quality oriented craftsmen to last decades.

Standard options range from laboratory scale table-top winders, specifically made for winding test coupons, up to multi-spindle automated pressure vessel winders with industry leading fiber payout.

In addition to machinery, our experts provide complete solutions for the filament winding industry, including: production consulting, onsite machinery installation, process integration, training and other services to meet our customers’ needs for manufacturing composite parts.

We are fully committed to the best outcome for each filament winding project, customer satisfaction and long-term partnerships.

**CATALOG OF STANDARD FILAMENT WINDERS**

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<tr>
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<th>SS</th>
<th>SS+</th>
<th>SM</th>
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<th>CXG</th>
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* Variable characteristic based on wound part specifications
STANDARD FILAMENT WINDERS: DESIGNED WITH THE CUSTOMER IN MIND

SS Filament Winder

- **Research and Development**
  - Ideal for R&D or educational use
  - 2 accurate axes of motion
  - Versatile wet winding or towpreg delivery systems

SS+ Filament Winder

- **Small-Scale Production**
  - Ideal for small production applications
  - 3 or 4 accurate axes of motion
  - Versatile wet winding or towpreg delivery systems
  - Integrated table, control cabinet and storage

SM Filament Winder

- **Economical Production**
  - Ideal for medium envelope part production
  - Up to 4 axes of motion in a portable platform with multiple bed lengths
  - Reliable, compact
STANDARD FILAMENT WINDERS: DESIGNED WITH THE CUSTOMER IN MIND

**SM+ Filament Winder**

- **High-Rate Production**
  - Ideal for medium envelope part production
  - High volume capability
  - Up to 5 axes of motion in a portable platform with multiple bed lengths
  - Reliable, compact

**CXG Filament Winder**

- **High-Speed Production**
  - Ideal for high volume automotive applications
  - 4 high-speed axes
  - Lightweight dual drive carriage

**SL Filament Winder**

- **Large-Scale Winding**
  - Ideal for Aerospace, Utility and Oil & Gas applications
  - Large format workhorse, easily handles any large tank or tube
  - Up to 6 axes of motion
COMPLETE SERVICE FOR THE FILAMENT WINDING INDUSTRY

Custom Filament Winders
As a worldwide leader in the filament winding industry, we strive to create solutions beyond the standards, built to suit any unique customer need.

Retrofit & Service
Our extensive experience in the industry allows us to provide service, repair and upgrades for all brands and ages of filament winding machines.

R&D Services
We offer a variety of product development services such as composite part design, composite pressure vessel design, finite element analysis (FEA), feasibility studies, prototyping, testing, data acquisition and training. We also offer custom tooling design for composite parts.

FiberGrafiX®
FiberGrafiX® is our own filament winding software developed and improved over the years to provide accurate winding patterns. Simplify your manufacturing process by using FiberGrafiX® simulation and visualization tools as well as its advanced machine motion editor and optional FEA mesh generator.

Auxiliary Equipment
As a global expert in filament winding, we know all about filament winding and provide everything needed to optimize the performance and safety of any filament winding work cell, including ovens, tensioners, extractors, creels, delivery heads and every fiber contact point between.

Automation
As a FANUC Authorized Systems Integrator we offer process automation ranging from simple barcode reading to full scale automated work cells. A large variety of robotic technologies are available to improve manufacturing safety, efficiency and accuracy.

Customer Support
We provide more than machines. Our goal is to achieve customer satisfaction and long-term partnerships through full commitment to the best outcome for each filament winding project. Our highly trained staff is available to solve your technical and production challenges across the globe.
Engineering Technology Corporation has been a worldwide leader in the filament winding and composite manufacturing industry since its founding in 1962. We developed the first CNC filament winder and pattern generating software, FiberGrafiX®, and have installed over 800 filament winders globally. The majority of these winders are still in operation today.

In March 2014 Engineering Technology Corporation was acquired by Toray Group, combining the filament winding experience of Engineering Technology Corporation and the carbon fiber manufacturing capabilities of both Zoltek® and Toray. This partnership allows us to provide customers with comprehensive solutions for manufacturing composite parts.

The evolutionary spirit that began in the ’60s continues today with innovations to stay ahead of industry needs.