

ELECTROIMPACT

Electroimpact is a world leader in the design, manufacture and support of aerospace automation and tooling.


Electroimpact is an “Engineer’s Company”:

- 75% of Electroimpact Worldwide Staff are degreed engineers (including the ownership)
- All decisions are made based on sound engineering principles



Recent Customer Awards

Boeing - Performance Excellence Award



February 19, 2018

Electroimpact, Inc.
Peter Zieve and John Hartmann
4413 Chennault Beach Rd.
Mukilteo, WA 98275


Dear Peter and John,


Spar Assembly Line Phase 1 (SAL1) has been one of the most successful automation projects in recent Boeing history. This is thanks in large part to the joint efforts of the Boeing and Electroimpact teams. Electroimpact put together a strong team of engineers and that team was well led by an excellent leadership trio.

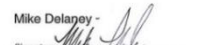
The willingness to partner with Boeing, reviewing our plans and trusting us to do our part while executing on yours, was a testament to the strength of our integrated team. EI engineers demonstrated a knack for both accepting and challenging Boeing ideas at all the right times. The willingness to take on new technical challenges and prove feasibility of solutions through testing and demonstrations was evidence of the passion these great engineers have. The ingenuity and perseverance of the EI team was a key enabler for the success of this project.


It was a pleasure working with this team and we look forward to working with them in the future as we refine SAL1 reliability and maintainability and push the system to higher rates.

Sincerely,

Marty Chamberlin

737 Vice President of Operations

Barry Lewis

737 Former Wings Manufacturing Director

Mike Delaney

737 Wings Manufacturing Director

Bruce Morayec


"Spar Assembly Line Phase 1 (SAL1) has been one of the most successful automation projects in recent Boeing history"

Embraer Indirect Supplier of the Year – Product Development



Northrop Grumman Supplier of the Year (2x)



Airbus Best Performer Award - For Top Level Industrial Performance

General Procurement
2018 Global Supplier Conference
24-26 October 2018
Montreal, Canada

BEST PERFORMER AWARD

ELECTROIMPACT
For top level industrial performance


Klaus RICHTER
Chief Procurement Officer


Olivier CAUQUIL
Senior Vice President
Airbus General Procurement

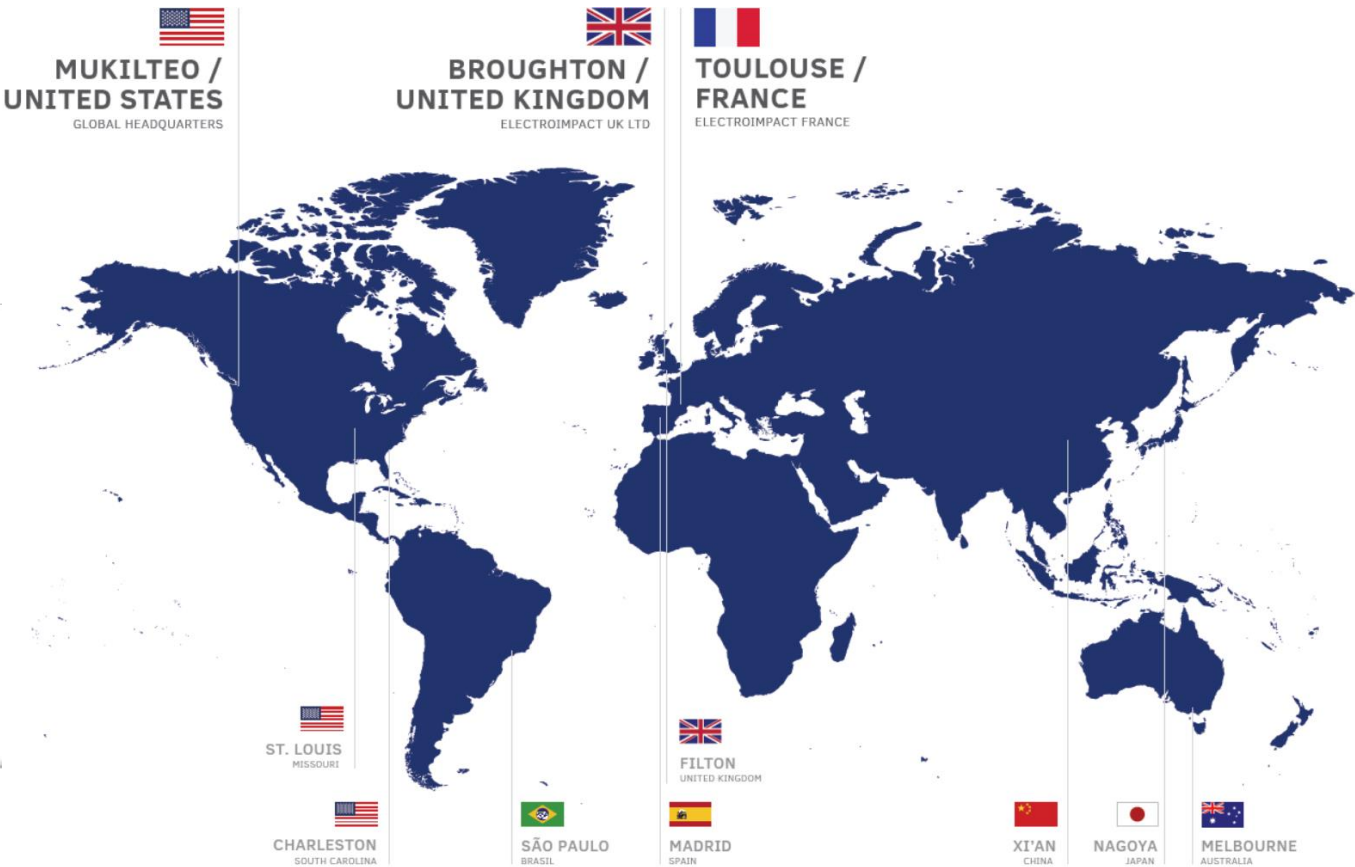
AIRBUS
ELECTROIMPACT

Electroimpact Global Presence

Global Headquarters in Mukilteo, Washington USA

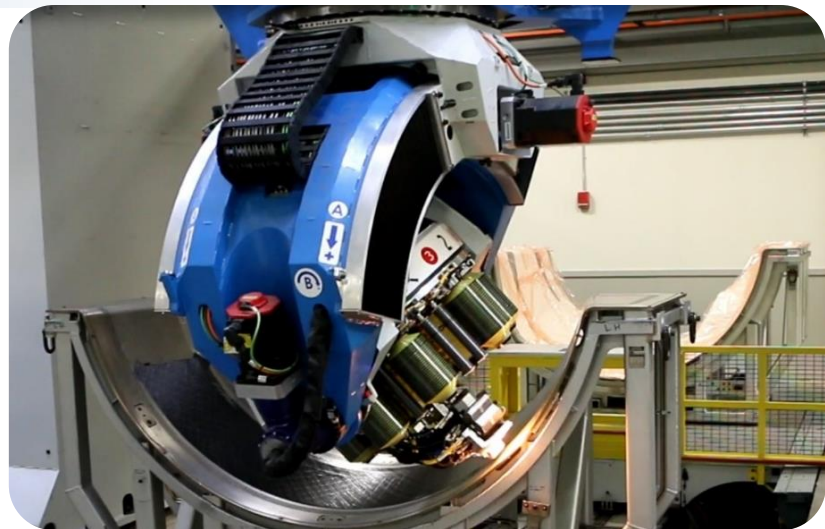


Founded in 1986 in Seattle, WA USA





AFP Machine Tool Motion Platforms



AFP ROBOTIC MOTION PLATFORMS

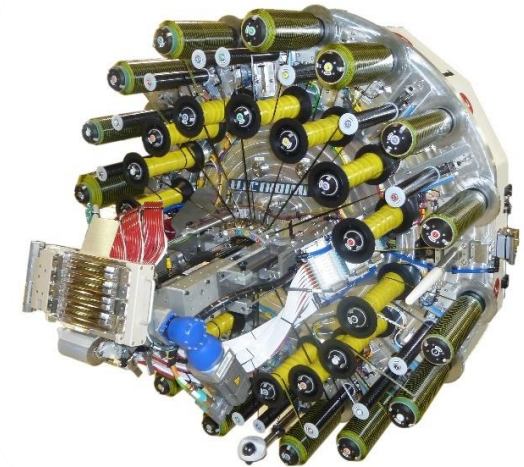
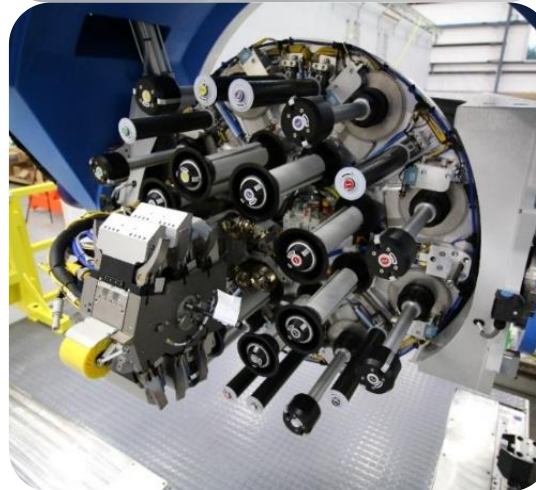
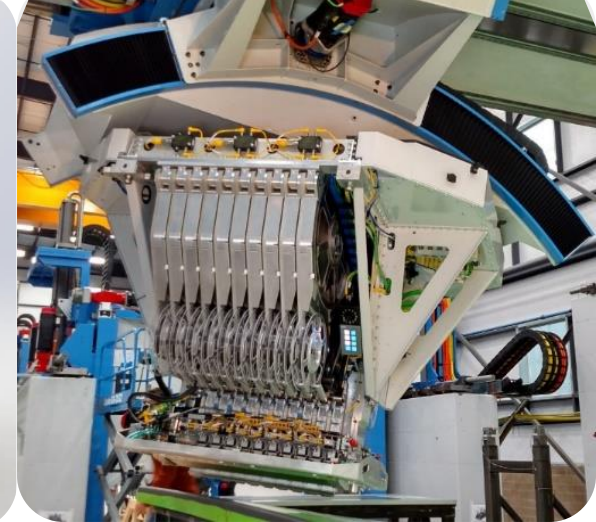
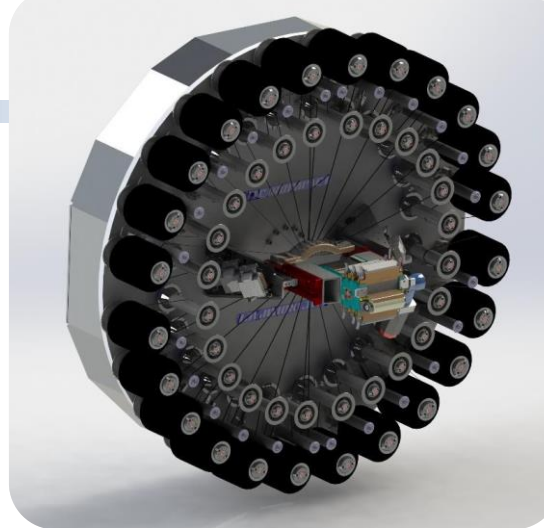


Electroimpact Proprietary

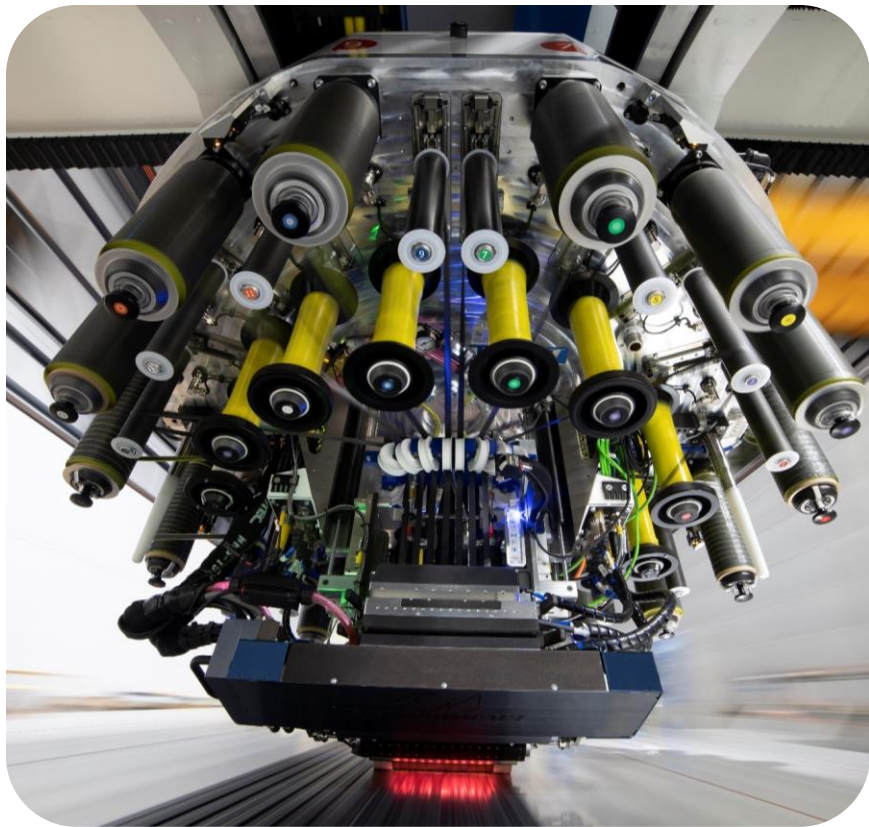


AFP Modular Head

- 8, 16, 20, 24 tows in 1/8", 1/4", 1/2", 1.5" material widths
- Heads for custom material widths available
- Shortest tow path in the industry
- Tool-less disassembly for ease of maintenance
- IR or Laser heater assembly
- Chilled feed rollers - reduce resin buildup
- Standard ATI quick-disconnect
- Reliable head change



Basic AFP Modular Head Architecture



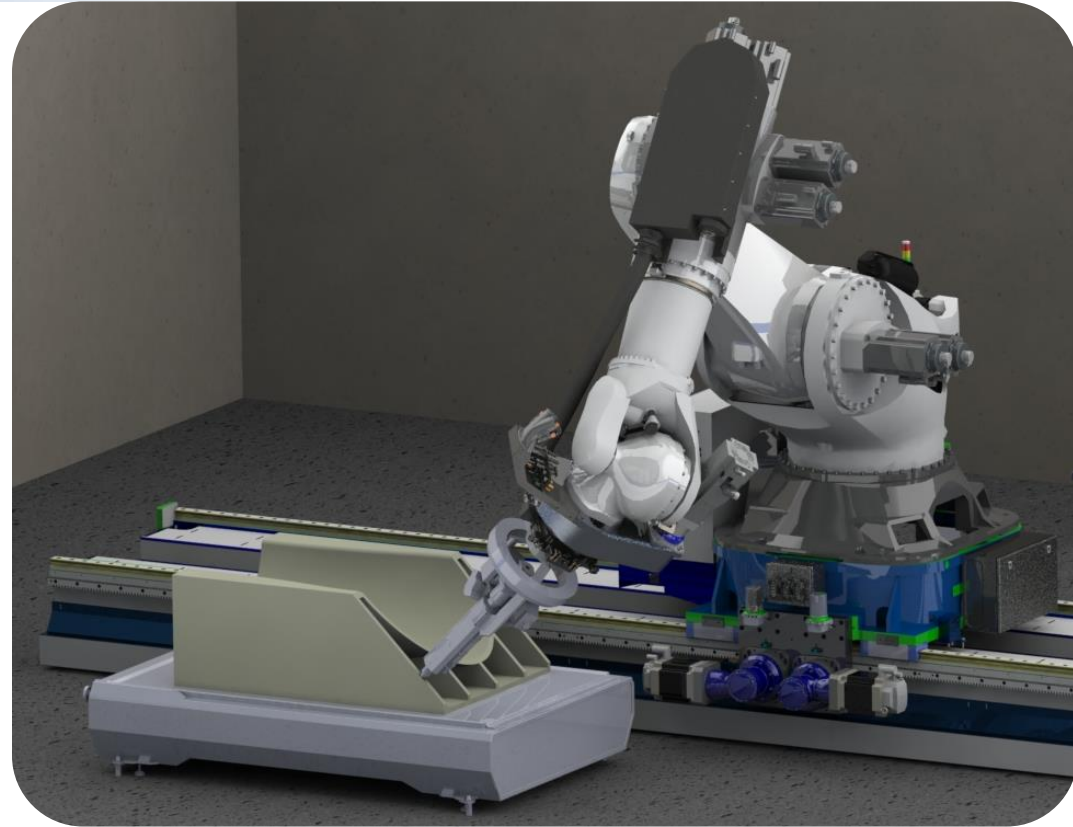
1/2" x 16 tow AFP Head (Q16s w/ VSSL)			
	Qty (standard)	Qty (metric)	Notes
Course Width	8"	203.2mm	
Tow Width	1/2"	12.7mm	
Number of Tows	16 tows	16 tows	
Initial Add	4000"/min	102m/min	+/-0.100"
Refeed Speed	3000"/min	76m/min	+/-0.100"
Cut Speed	3000"/min	76m/min	+/-0.100"
Payout Speed	4000"/min	102m/min	
Minimum Piece	4.5" <= length < 5.4"	114mm <= length < 137mm	@1200"/min (@30.5m/min)
Minimum Gap	.17s Req	.17s Req	Speed calc'd by OLP

1/4" x 16 tow AFP Head (Q16s w/ VSSL)			
	Qty (standard)	Qty (metric)	Notes
Course Width	4"	101.6mm	
Tow Width	1/4"	6.35mm	
Number of Tows	16 tows	16 tows	
Initial Add	4000"/min	102m/min	+/-0.100"
Refeed Speed	3000"/min	76m/min	+/-0.100"
Cut Speed	3000"/min	76m/min	+/-0.100"
Payout Speed	4000"/min	102m/min	
Minimum Piece	4.5" <= length < 5.4"	114mm <= length < 137mm	@1200"/min (@30.5m/min)
Minimum Gap	.25s Req	.25s Req	Speed calc'd by OLP



ELECTROIMPACT LARGE VOLUME MODULAR PRINTING HEAD

- Large layup tool printing modular head option for new and existing composite systems.
- Value added modular process head option for Electroimpact machines
- Competes with big area additive manufacturing systems
- Compatible with all past Electroimpact AFP machines and robotic systems.
- Enables the customer to use their AFP machine as a large tool preform printer



EI4.0 & digital tools

EI4.0 is a next-generation **data collection** and **analytics solution** on production equipment

Collects data from:

- Part programs
- Machine event logs
- Operator inputs

Customized for the audience:

- **Managers**
 - Cell Usage/Shift comparison/...
- **Machine Operators**
 - In-Process Dashboard/Current build rate/...
- **Maintenance**
 - Machine Performance/MSBF/OEE/...
- **Part Programmer**
 - OLP update based on machine feedback

