



**FLUXTROL®**



Advanced Induction Materials and Technology



A D V A N C I N G   I N D U C T I O N   T E C H N O L O G Y

# We are Fluxtrol

A world leader in induction heating solutions  
since 1981.



# Our Mission

To provide superior electromagnetic induction technologies, products and services that implement successful induction solutions

[LEARN MORE](#)

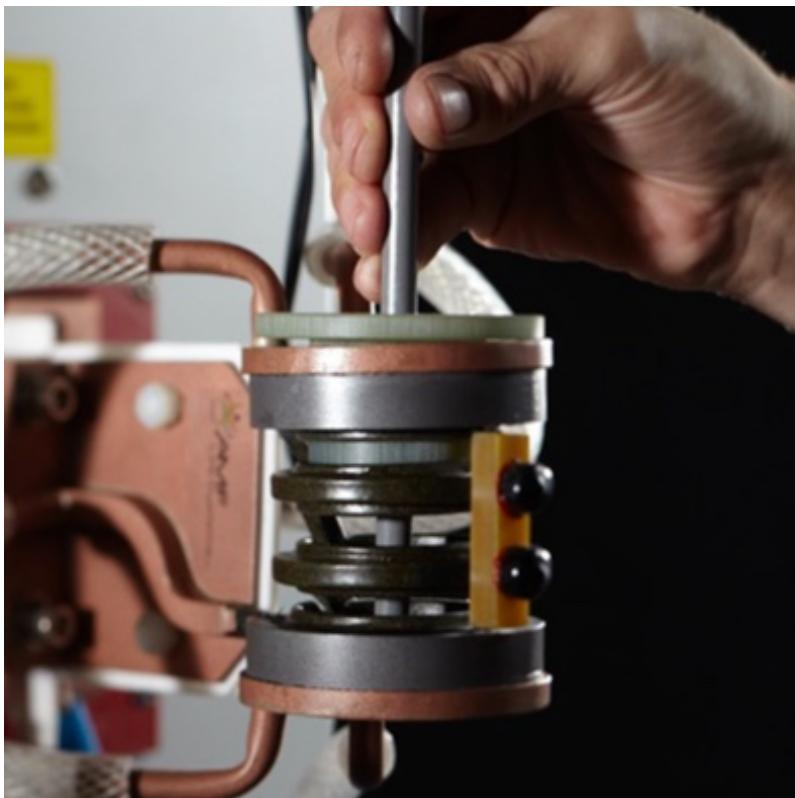




W H A T   W E   D O

# Value Driven Induction Technologies

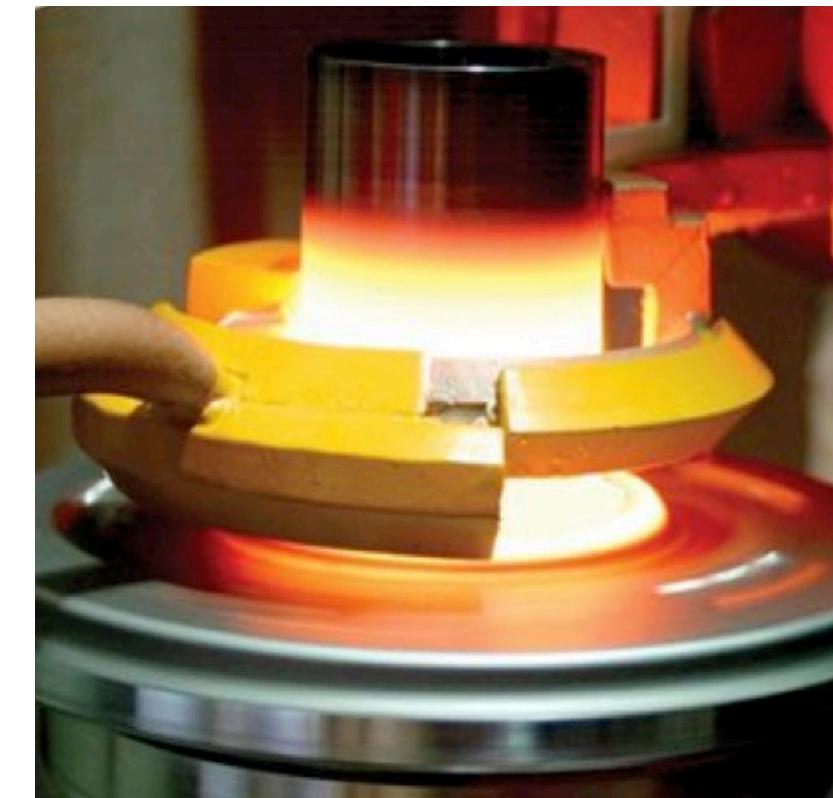
Fluxtrol Inc. has not only been advancing induction technologies for almost four decades, but also has become a world leader in the manufacture and supply of soft magnetic composites (SMC). Additionally, we provide a wide range of electromagnetic induction technology solutions to a multitude of global industries.



Research & Development



SMC Material



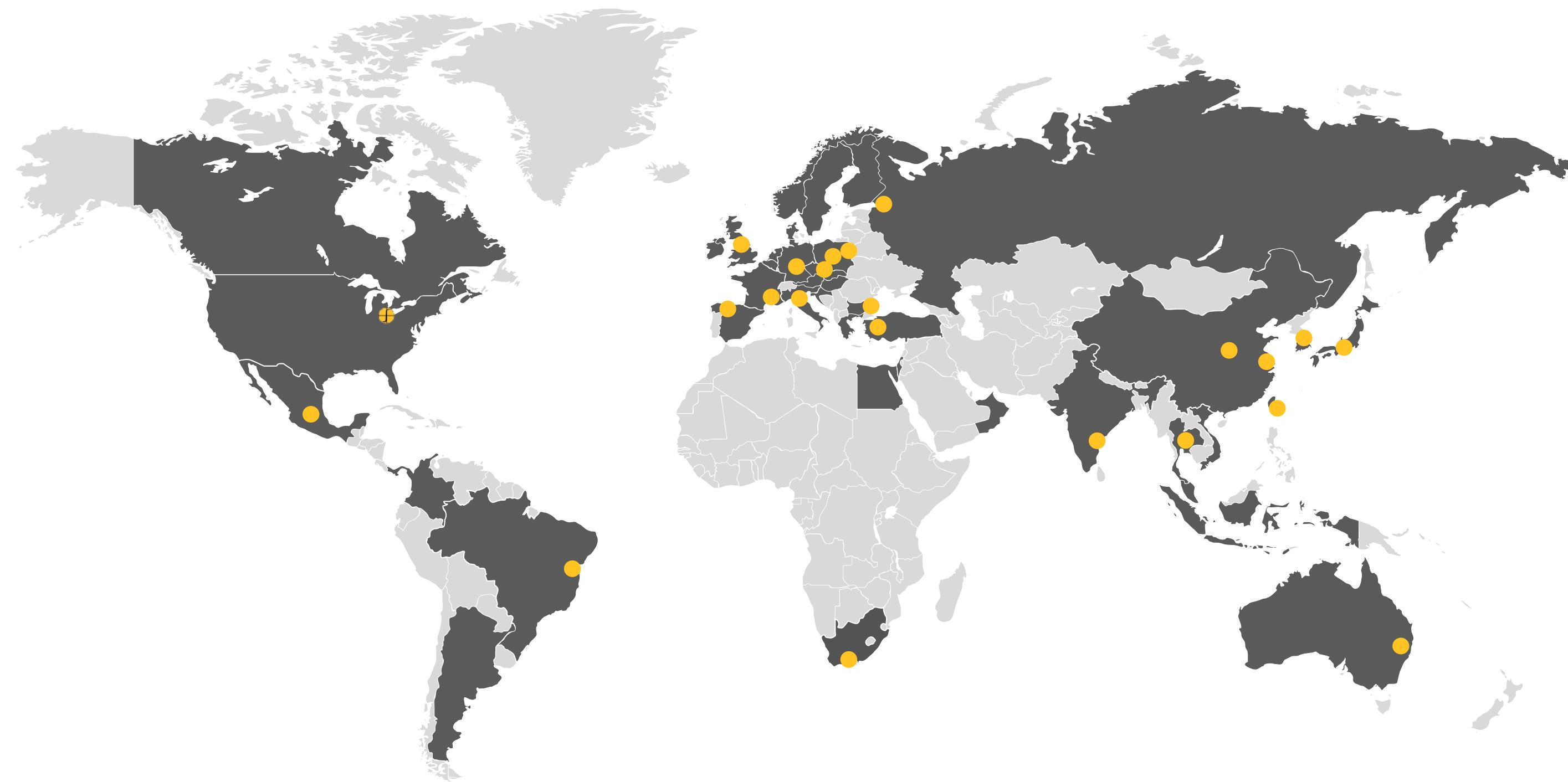
Engineering Services



WE ARE THE

# World Leader in Induction Heating Solutions

We have a team of induction heating experts with a wealth of real industry experience that service a global distribution network covering more than 50 countries.



● partners

● clients



WORLD CLASS

# Magnetic Flux Control for Variety of Applications

Fluxtrol is actively working not only in traditional induction heating areas such as heat treating, joining, and melting, but also in many other specialty areas ranging from antennas to biomedical.

## HEATING TREATING

- Hardening
- Tempering
- Annealing
- Stress Control

## SURFACE ENGINEERING

- Curing
- Plasma Coating
- Hard Facing
- PVD CVD

## JOINING

- Brazing Soldering
- Welding
- Sealing
- Adhesive Bonding

## MELT & MASS HEATING

- Melting
- Forging
- Forming
- Cold Crucible Melting



## SPECIAL APPLICATIONS

- Crystal Growth
- NMR Antennas
- Biomedical
- Inductive Power Transfer

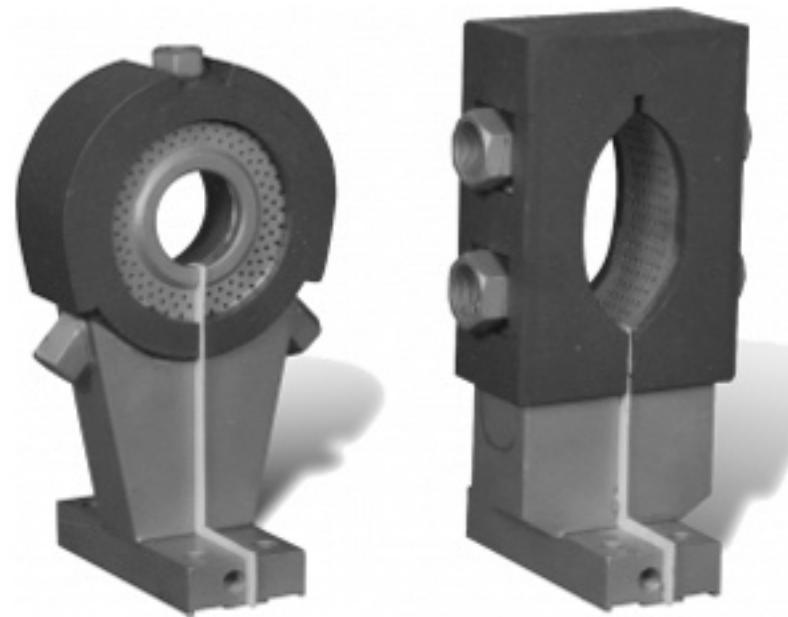


C O M M I T T E D

# Trusted by Every Industry Around the World

Our engineering and research team along with the combined efforts of our customers' specialists has brought forth a wide variety of innovative solutions being used in thousands of applications ranging from automotive, alternative energy, aerospace, oil and gas, special metallurgy, biomedical, the food industry, and many more.

[WATCH VIDEO](#)



S M C   F O R   A L L   I N D U C T I O N   C O I L   S T Y L E S   &   S I Z E S

## Fluxtrol Soft Magnetic Composite (SMC)

Fluxtrol Inc. is the world leader in magnetic flux control in induction heating systems and other applications. Fluxtrol does research, develops and manufactures magnetic flux controllers using propriety soft magnetic composites (a.k.a. MagnetoDielectric Materials) produced in both machinable and moldable (formable) varieties. The properties and characteristics of these materials allow for effective use in a wide range of applications with frequencies from 50 Hz to 13.56 MHz. Fluxtrol, Inc. welcomes collaboration with customers and research groups for the advancement of new ideas and special applications.



F L E X I B I L I T Y

# Properties of Magnetic Field Concentrators

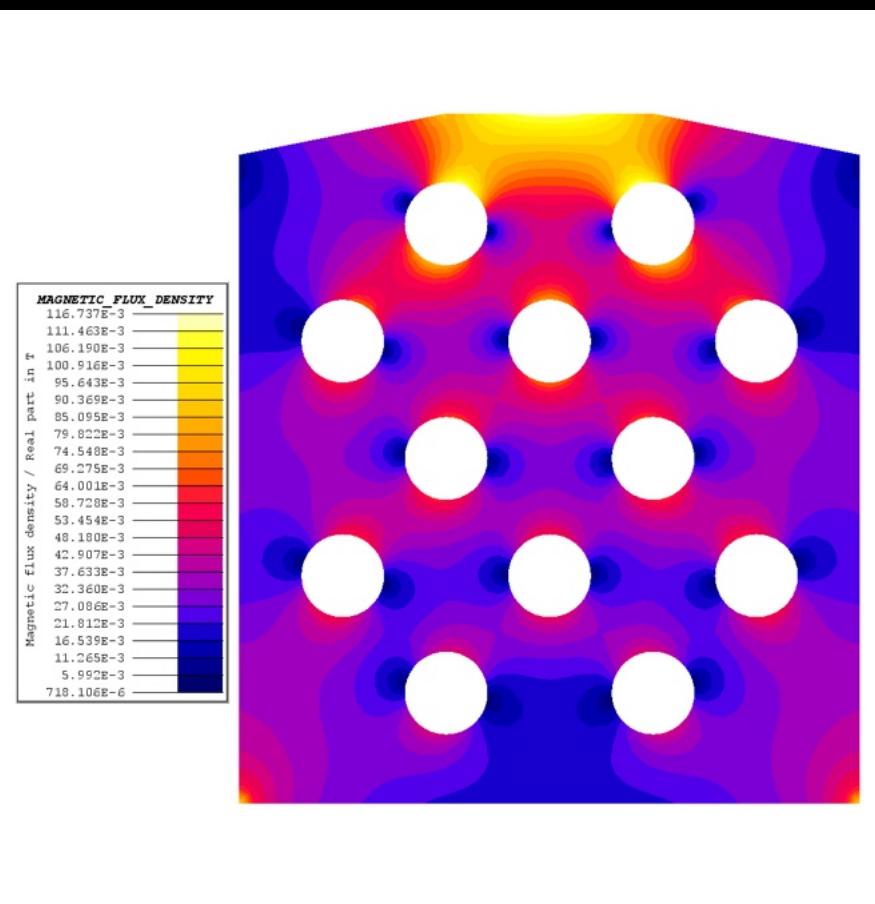
Properties	Units	Machinable				Formable		
		Fluxtrol 100	Fluxtrol A	Fluxtrol 50	Ferrotron 559H	Alphaform LF	Alphform MF	
Product Identifier Color								
Density ( $\pm 2\%$ )	g/cm <sup>3</sup>	6.8	6.6	6.1	5.9	4.1	4.0	
Operating Frequency Range	kHz	Up to 50	Up to 50	10-1000	10-3000	1-80	10-1000	
Maximum Relative Permeability	None	130	120	55	18	13	10	
Saturation Flux Density	T	1.7	1.6	1.5	1.0	1.0	0.9	
Temperature Resistance	°C	225 Long Term 300 Short Term	250 Long Term 300 Short Term	250 Long Term 300 Short Term	250 Long Term 300 Short Term	225 Long Term 300 Short Term	225 Long Term 300 Short Term	
Thermal Conductivity	W/cm·°C	0.23	0.20	0.06	0.04	0.02	0.02	
Resistivity	kΩcm	12.5	0.5	0.5	>15	>15	>15	



PROFESSIONAL

# Research & Development

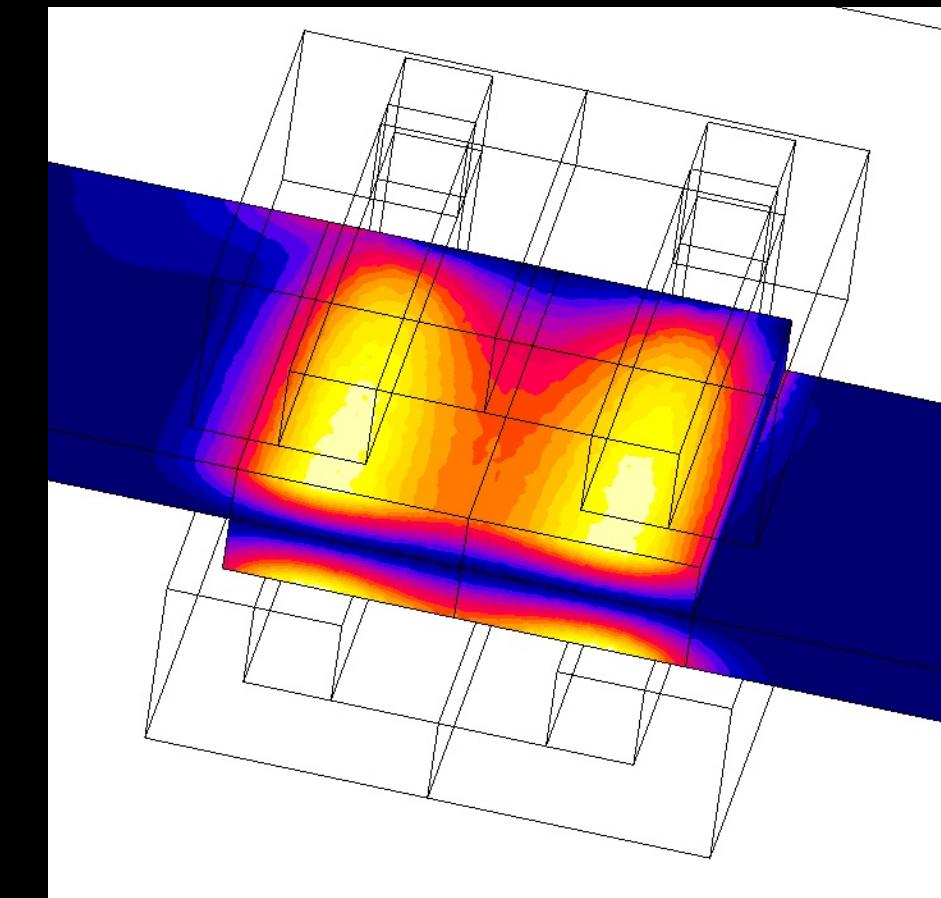
Research and development is one of the core competencies of Fluxtrol, Inc. The three cornerstones of our R&D are the control of magnetic fields, fundamental understanding of induction technique, and computer modeling and process optimization.



Magnetic Flux Control



Emerging Technologies



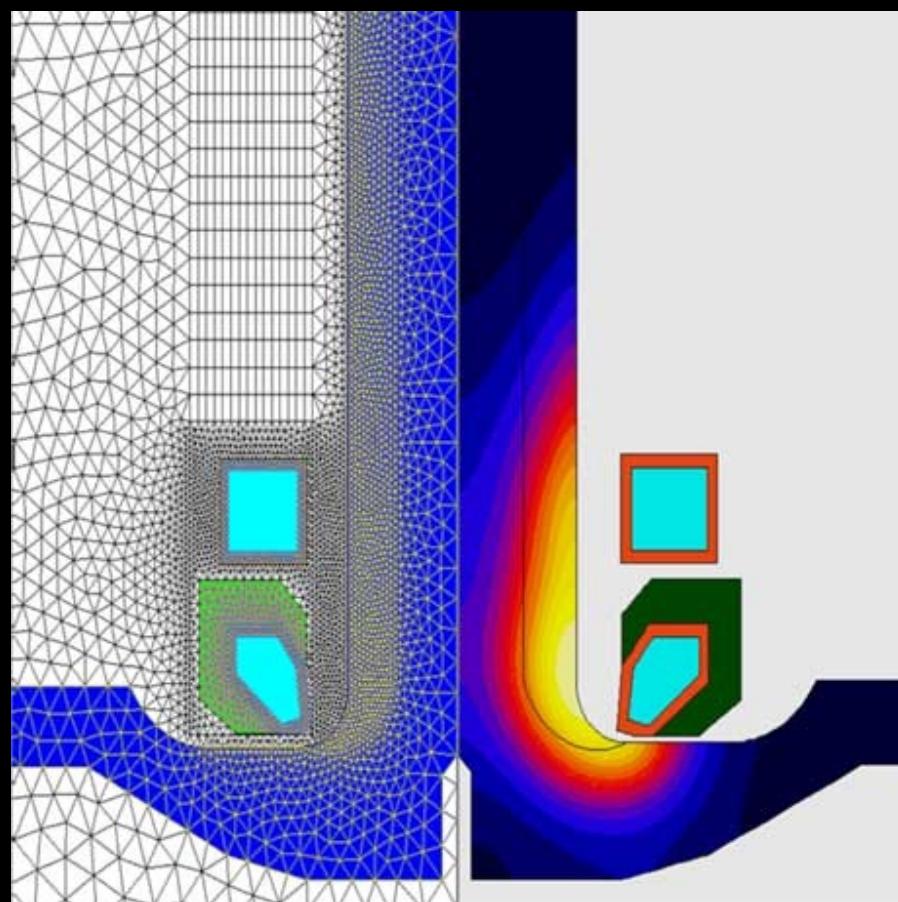
Modeling and Optimization



PROFESSIONAL

# Engineering Services

We provide a wide range of engineering services; computer simulation, optimal design of induction coils and related processes, prototyping and validation, on-site set-up, operating training, and on-going technical support.



Finite Element Analysis - Simulation



Induction Coil Design

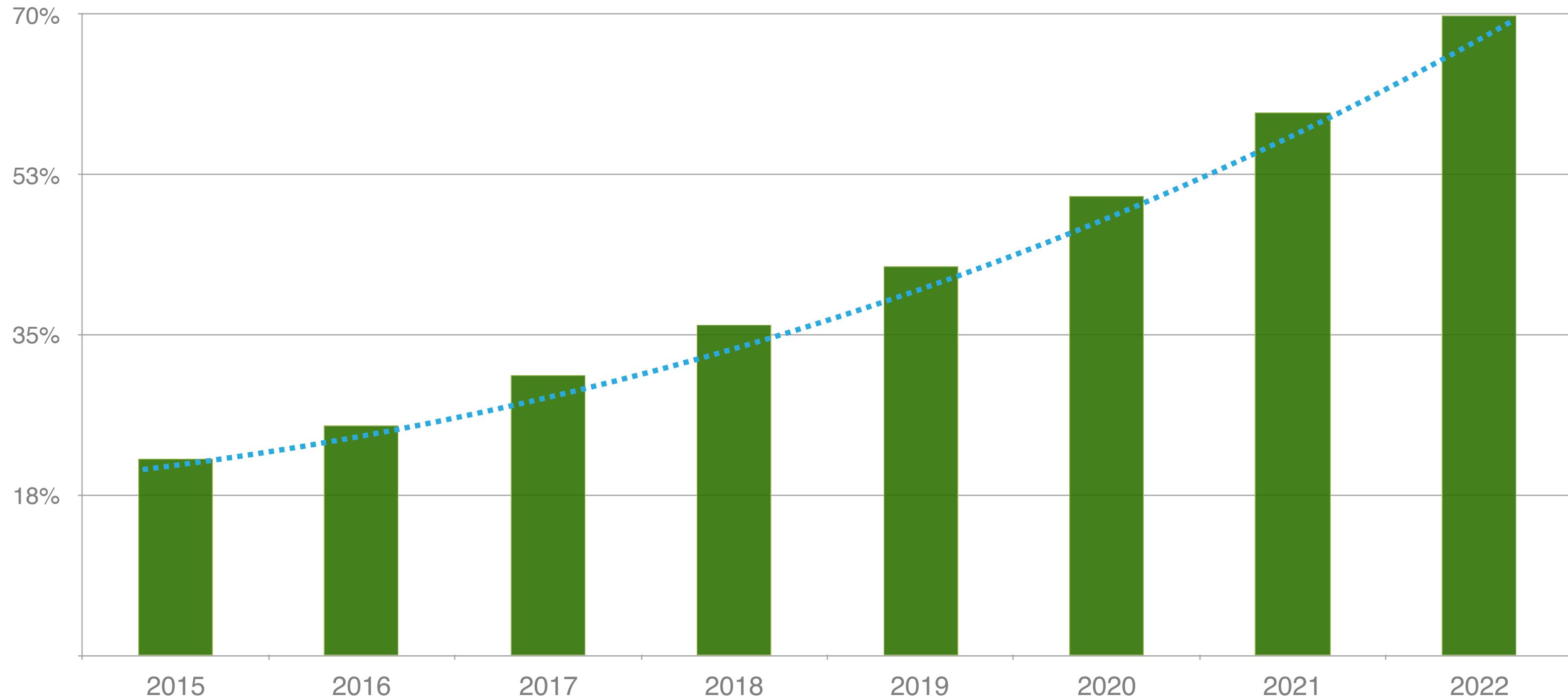


Prototype & Validation



C O N S I S T A N T

# Annual Sales Growth





CENTRE FOR INDUCTION TECHNOLOGY

# Fluxtrol.com Website & Links

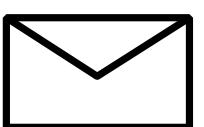
Our updated website, [www.fluxtrol.com](https://www.fluxtrol.com), is your portal to discover more about Fluxtrol, Inc. and to engage our friendly and helpful staff.

Fluxtrol.com offers training on the basics of induction heating, product selection assistance, and even real time access to news about Fluxtrol's products and services.



## TELEPHONE

[1-248-393-2000](tel:1-248-393-2000)



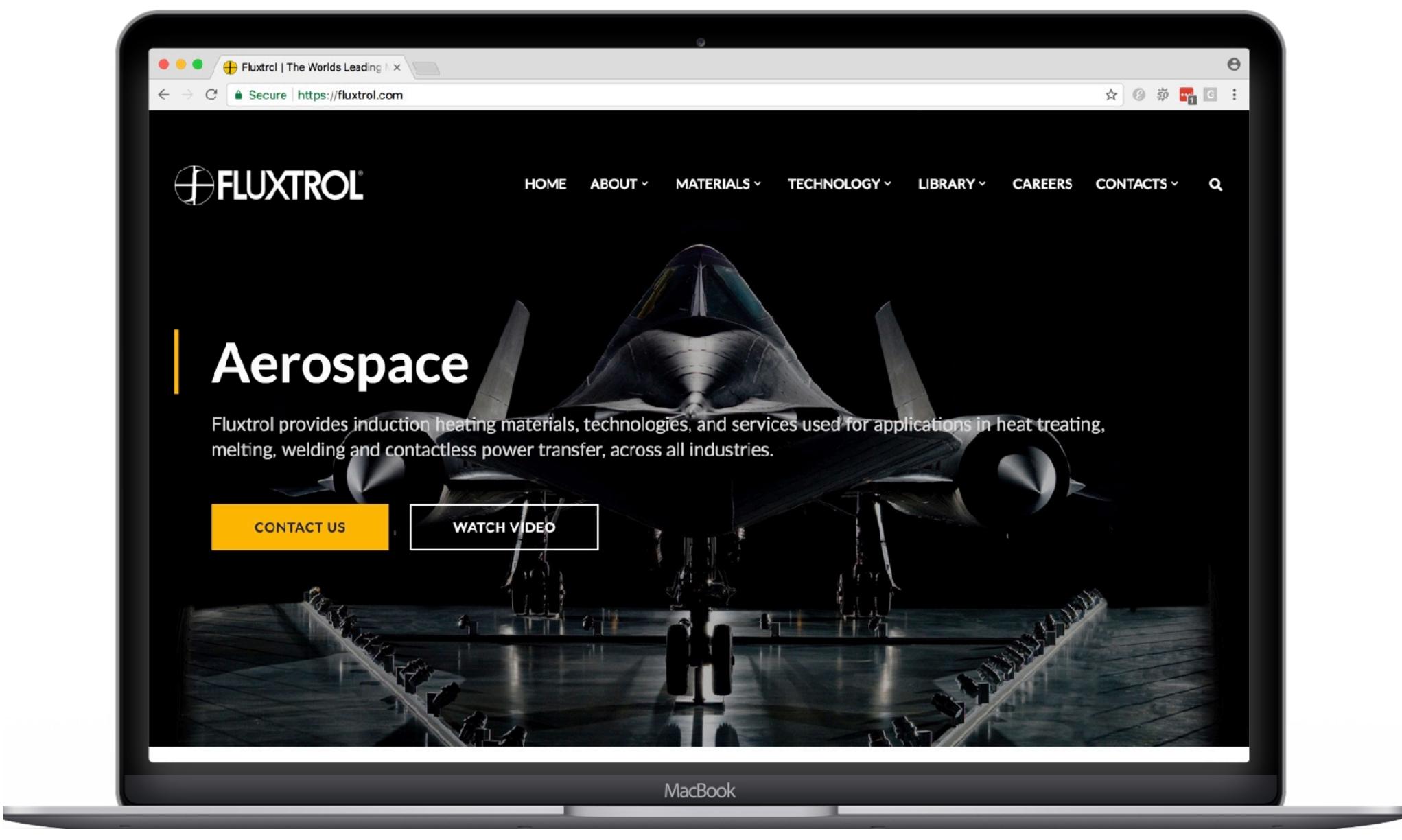
## EMAIL HERE

[sales@fluxtrol.com](mailto:sales@fluxtrol.com)



## WATCH HERE

<https://www.youtube.com/user/Fluxtrol>



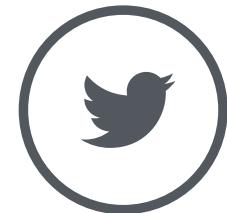
## LINKEDIN

<https://www.linkedin.com/company/fluxtrol/>



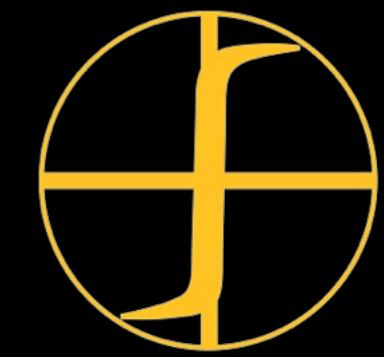
## FACEBOOK

<https://www.facebook.com/Fluxtrol/>



## TWITTER

<http://twitter.com/fluxtrol>



**FLUXTROL<sup>®</sup>**