

***IN THE BEGINNING...***

HAILING FROM THE PLANET  
FLUXTROL, ***FLUXTROL MAN*** CAME  
TO EARTH IN 1981 TO HELP ALL OF  
HUMANKIND FIND A BETTER WAY TO  
ADAPT, INNOVATE AND GROW INTO  
THE 21ST CENTURY.



WITH HIS ***ELECTRO-MAGNETIC INDUCTION***  
POWERS AND SOFT MAGNETIC COMPOSITE  
(SMC) MATERIALS, ***FLUXTROL MAN*** BATTLES  
THE FORCES OF EVIL ACROSS THE GLOBE,  
ENCOURAGING INNOVATION AND SAFETY  
WHEREVER HE GOES!



FLUXTROL  MAN  
IN...

**Episode 5:**

***SERVICES -***  
**INDUCTION COIL DESIGN**

**FLUXTROL MAN** IS IN HIS LAB, TINKERING ON A NEW PROJECT WHEN HIS **PHONE** RINGS...

HEY  
COMMISSIONER RUFFINI,  
WHAT CAN I **HELP**  
YOU WITH?

**FLUXTROL MAN**,  
WE'RE HAVING PROBLEMS WITH  
OUR NEW CRIME FIGHTING VEHICLES  
HERE IN MEGATOWN! WE KEEP HAVING AXLE  
PARTS **FRACTURE** AND THE CRACKS ARE  
INITIATING FROM THE MARTENSITIC CASE  
CORE INTERFACE RIGHT IN THE  
HEAT OF THE CHASE! WE  
NEED YOUR HELP!

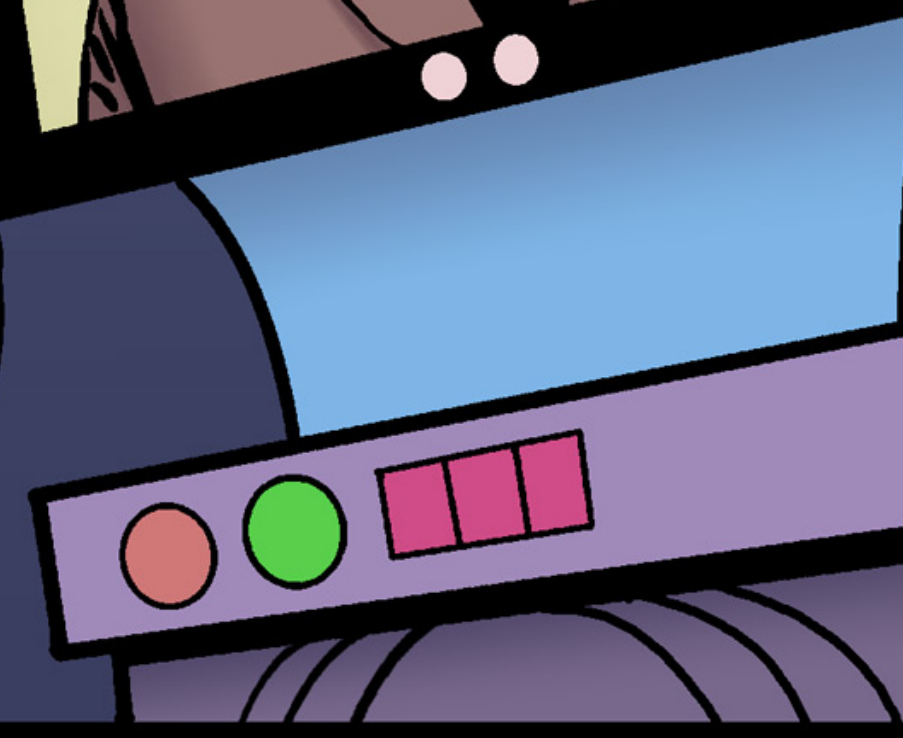
SOUNDS LIKE  
THESE PARTS WERE  
**IMPROPERLY** HEAT TREATED,  
RESULTING IN HIGH TENSILE  
STRESSES AT THE CASE  
CORE INTERFACE!

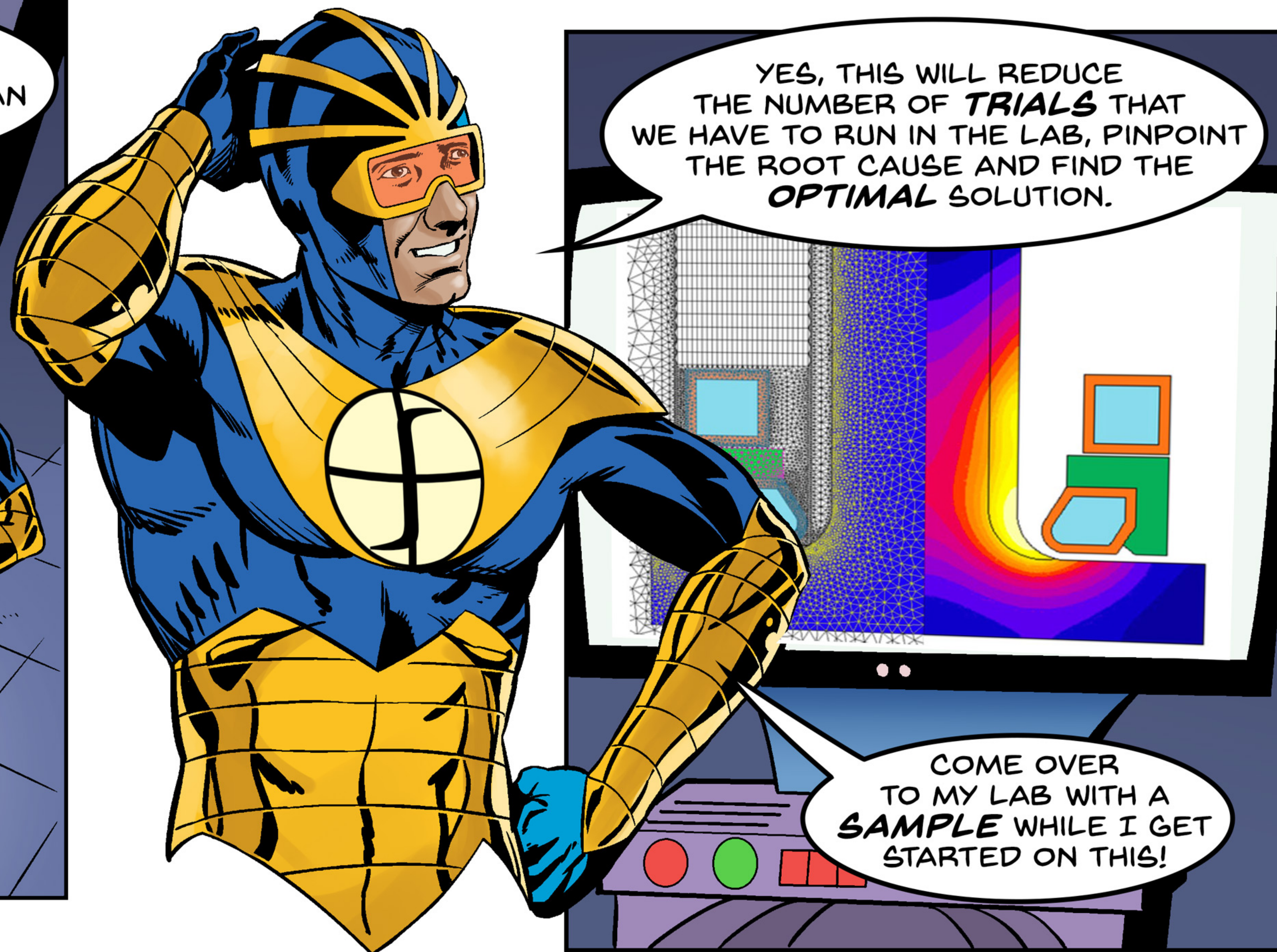


I CAN USE MY  
COMPUTER SIMULATION  
OF THE INDUCTION HARDENING  
PROCESS TO HELP ACHIEVE OPTIMAL  
RESULTS THAT ARE FASTER AND  
MORE SECURE THAN  
TRIAL-AND-TEST  
METHODS!



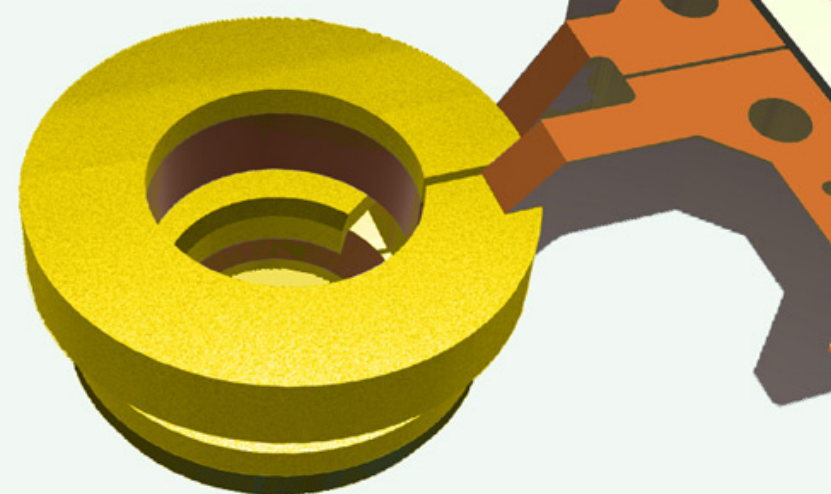
THAT SOUNDS  
GREAT, **FLUXTROL**  
**MAN**, BUT HOW WILL  
IT HELP?





**FLUXTROL MAN** USES THE SIMULATION SOFTWARE TO DESIGN AN INDUCTION COIL AND CALCULATE THE NECESSARY SYSTEM PARAMETERS.

DESIGNING COIL



HE THEN USES HIS AMAZING COIL FABRICATOR TO CREATE THE COIL OF THE EXACT SPECIFICATIONS DESIGNED!

HELLO, **FLUXTROL MAN**!  
I BROUGHT A SAMPLE PART WITH ME.

COIL FABRICATOR

ALRIGHT COMMISSIONER,  
THEN WE'RE READY TO **VALIDATE** THE PROCESS!



COMPLETE

FLUXTROL MAN  
ATTACHES FLUXTROL  
MATERIAL TO THE OD  
OF THE COIL...



... AND HOOKS THE COIL  
UP TO A POWER SUPPLY.



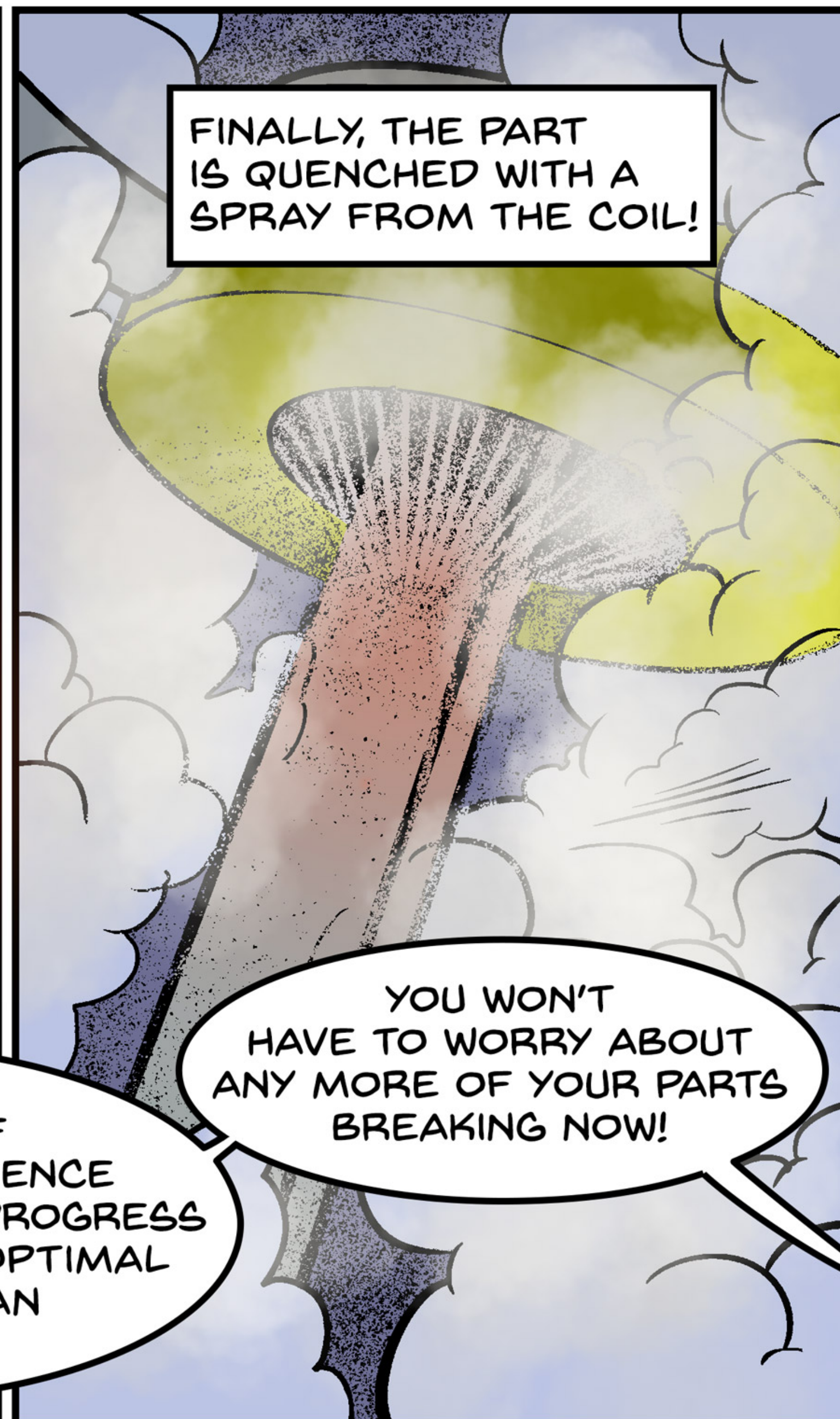
THERE,  
THAT SHOULD DO  
THE TRICK!

WITH THE AXLE  
INSIDE THE COIL, AND  
THE POWER SUPPLY  
TURNED ON, THE PART  
BEGINS TO EFFICIENTLY  
HEAT UP!

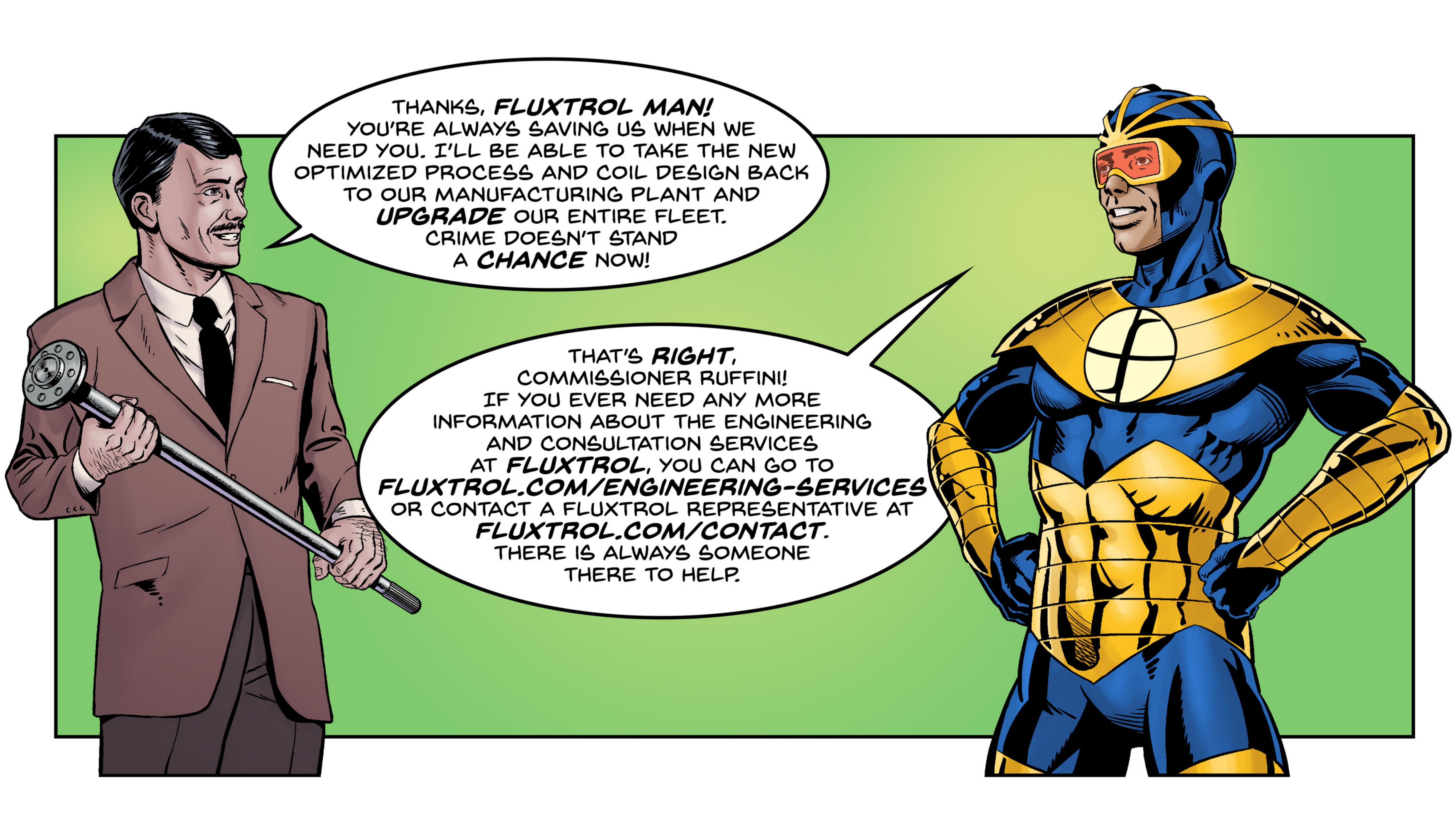


I HAVE  
DECADES OF  
MODELING EXPERIENCE  
AND MADE A LOT OF PROGRESS  
IN UNDERSTANDING OPTIMAL  
INDUCTION SCAN  
HARDENING.

FINALLY, THE PART  
IS QUENCHED WITH A  
SPRAY FROM THE COIL!



YOU WON'T  
HAVE TO WORRY ABOUT  
ANY MORE OF YOUR PARTS  
BREAKING NOW!

A comic book illustration featuring two characters against a green background. On the left, Commissioner Ruffini, a man with a mustache wearing a brown suit and tie, holds a large industrial bolt. On the right, Fluxtrol Man, a superhero in a blue and yellow suit with a yellow 'X' on his chest and a yellow visor, stands with his hands on his hips. Two speech bubbles are present: one from Commissioner Ruffini and one from Fluxtrol Man.

THANKS, **FLUXTROL MAN!**  
YOU'RE ALWAYS SAVING US WHEN WE  
NEED YOU. I'LL BE ABLE TO TAKE THE NEW  
OPTIMIZED PROCESS AND COIL DESIGN BACK  
TO OUR MANUFACTURING PLANT AND  
**UPGRADE** OUR ENTIRE FLEET.  
CRIME DOESN'T STAND  
A **CHANCE** NOW!

THAT'S **RIGHT**,  
COMMISSIONER RUFFINI!  
IF YOU EVER NEED ANY MORE  
INFORMATION ABOUT THE ENGINEERING  
AND CONSULTATION SERVICES  
AT **FLUXTROL**, YOU CAN GO TO  
**FLUXTROL.COM/ENGINEERING-SERVICES**  
OR CONTACT A FLUXTROL REPRESENTATIVE AT  
**FLUXTROL.COM/CONTACT**.  
THERE IS ALWAYS SOMEONE  
THERE TO HELP.



## Helpful Links:

[Fluxtrol Induction Engineering Services](#)

[Fluxtrol Consulting in Induction Heating Technology](#)

[Induction Coil Design](#)

[Induction Heating Computer Simulation](#)

[Prototyping and Validation](#)

[On-Site Support](#)

[Contact Us](#)

## Related FAQs:

[What support does your company provide to customers?](#)

[Is it possible to send you my coil and part to prove how your concentrators improve performance?](#)