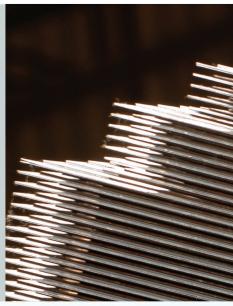
cogent



Dear valued customer,

We have made dramatic changes at Cogent that have elevated us to new heights. We have become an invaluable supplier to our partners in the electrical power generation, transmission, and distribution industries and intend to remain so for the foreseeable future.

Cogent has adopted an enterprise-wide LEAN business model which places you — the customer — at the core of our business. We have made advances in new product development and have increased technical support while driving ahead with advancements in productivity, quality and service. This has all been accomplished within a business culture that recognizes the importance of our people, our suppliers, and our environment — while maintaining a strong commitment to long term sustainable growth for both our business and our customer. We wouldn't have it any other way.

We would like to thank our existing customers for your continued loyalty. We strive to earn your trust and respect each and every day. For those who are new to Cogent, we invite you to explore how Cogent can help make improvements that are crucial to your business.

Best regards,

Ron Harper, President | Chris Brown, Commercial Director





Cogent Power. Delivering Energy Efficiently.

Cogent Power Inc., is a customer-focused business that provides a complete package of goods and services to the transformer industry. You're welcome to learn about us, what we do, and how we can serve your specific needs.

Since its inception in 1970, Cogent Power — formerly known as CorMag — has made several crucial investments that have broadened the scope and reach of the company.

The year 2003 saw the commissioning of our new purpose-built core-making facility in Burlington, Ontario. We now offer the most comprehensive solutions in electrical steel, transformer components, design consultation and delivery.

Cogent is an international leader with a truly global reach. This includes a strong North American presence with facilities located in Canada, along with silicon steel-producing mills in the UK and Sweden.

This means that our impact on the market for transformer, motor, and generator components is truly international. If there's a demand in some part of the world, we like to think we can meet it. That's just part of our global market outlook.

There's a small company feel to our supply and service which works towards personalizing each unique relationship we build. Yet we still maintain the ability to meet the demands for new investment, supported by our parent, Tata Steel — the sixth largest steel producer in the world — with assets exceeding \$29 Billion.



YESTERDAY CORMAG. TODAY COGENT.



Cogent (formerly CorMag) is a wholly owned subsidiary of Cogent Power Ltd. which is part of the Tata Steel family of leading global manufacturers.

This structure puts us at a unique and competitive global advantage, since the owners are also the suppliers. We get secure supply from quality producers in a timely fashion, which includes grain-oriented electrical steel from Orb Works in Newport, South Wales, as well as non-oriented electrical steel from Surahammer Bruks in Sweden.

In partnership with our customers, Cogent offers a comprehensive set of solutions to develop new and improved products. We do this by using the best quality feedstock while tapping unrivalled expertise in materials, production, and applications technology.



Quality standards are incorporated into all our feedstock supply. This guarantees a predictable loss curve by given grade.

Few companies can make this guarantee. Cogent can!

Culture and Environment

Cogent's workplace culture encourages contributions at all levels — from employees to management. We believe that this ensures the success of the company.

We place the highest value on the health and safety of our people. We help to protect the environment. We foster teamwork. We exhibit values of mutual trust and respect. All these principles are deeply imbedded in the philosophy of the company. We believe they are crucial not only to our success, but to yours as well. It's what we have done until now. It's what we will keep on doing to maintain excellence in everything we do.

Customer Service

We have a motto at Cogent: "Ease of Doing Business".

Our mandate is to deliver "on-time and in-full" every time. We offer direct and accurate, order processing and tracking with our Enterprise System via an MRP link. Our staff is involved in continuous improvement programs ranging from "lunch-andlearn" activities to formal lean events in order to ensure we provide our customers with a high level of technical support on the front lines. All members of our team receive crosstraining to instill a sense of ownership throughout the company.

Our VOC (Voice of the Customer) program provides us with valuable feedback from the customer, allowing us to understand and integrate what you — the customer — truly wants. This kind of commitment and leadership ensures that we provide the absolute best in customer care and satisfaction.



Health and Safety

Cogent's historical safety performance — always ranked among the top in corporate standards — proves that we just won't compromise when it comes to the health and safety of our employees, contractors, or visitors.

We have established preventive policies and standards that are enforced in collaboration with statutory and regulatory mandates, IAPA and our Joint Health and Safety Committee.

Our dynamic approach to risk/hazard identification and mitigation is fundamental to ensuring a safe work environment. This involves our people at all levels and extends to the training and qualification of employees and designated contractors. It requires that they safely perform assigned tasks. We also demand prerequisite certification (OHSA, ESA, TSSA, etc.) of all manufacturing equipment.

Through the direction of our Health and Safety Steering Committee, as well as the commitment of our people, Cogent will continuously strive to set the bar as high as humanly possible. We expect no less when it

comes to the health and safety of everyone who comes into contact with what we do.

Environmental Sustainability

We believe that respect for the environment is critical to the success of our business. To that end, Cogent Power is playing a leading role in the reduction of greenhouse gas emissions and waste in general. We also make internal waste reductions one of our greatest priorities, with a raw material recycling rate of 99.99%, and a landfill waste reduction initiative that has achieved a 70% reduction since 2006. Cogent has employed customized packaging and skid recycling programs to help reduce waste passed on to our customers. The elimination of heavier steel bands in our slit steel coils has also resulted in reduced waste, less unpacking time, and lower shipping costs. This just proves that going green is about providing value, too.

We are extremely proud of our highly energy efficient transformer cores that serve to reduce overall energy consumption and energy loss. In fact, we often play a central role in assisting our customers in the pursuit of TP1/CS802.2 compliance and the recent enacted DOE legislation of Oct 12, 2007. All of which is about the efficient use of silicon steel in transformers.

We not only provide our customers with a wide variety of electrical steels to meet their environmental and performance requirements, but we also provide them with the design and technical support they need to ensure minimal energy waste. That's the Cogent difference!



LEAN CULTURE — DRIVEN & FOCUSED





Lean Thinking

Extended ENTERPRISE thinking...At Cogent Power, everything starts and ends with the customer! We can better serve their needs by knowing and understanding what it is that our customers truly value. Doing this allows us to seek out innovative, value generating, and cost competitive solutions — both at Cogent and beyond — through our supply-chain partners.

An integral part of our long-term sustainable vision is measurable success for each stakeholder. We pursue this through a dynamic and strategic

lean platform that's propelling us toward a self-empowered, value-focused business. Our engaged and motivated people lead the way through a culture where Kaizen (continuous improvement) and problem solving is a way of life; a culture that incorporates the doctrine of the 'Toyota Production System'. We even pioneer our own ideas, such as the Lean Apprentice Program, where shop floor operators — on a full-time rotating basis — learn and apply lean skill-sets in the company-wide elimination of waste.

Along the way, Cogent has rapidly gained standing as a benchmark organization for many customers and outside interests, such as the joint CME (Canadian Manufacturers and Exporters), Canada National Research Council 'Innovation Insights Program' and AME (Association for Manufacturing Excellence).







The Cogent Difference

What sets Cogent apart from other more conventional electrical steel suppliers? It's simple: We engage in technical partnerships, supported by an integrated supply chain, in order to deliver the best in customer service.

We don't engage in "mill speak". We speak your language to meet your specific needs. It's what has worked with our partners in the past. It's how we'll work with you now.

Transformer Component Products

Cogent is the leading North American supplier of cores for distribution transformers and specialty products. Simply stated, no competitor can match our diverse offerings in transformer component products. It's just one big part of the Cogent advantage.

Electrical Steel Products

Cogent's mills are strategically dedicated to the manufacture of electrical steel grades. We also ensure steel availability for new product applications.

Distribution centres in Canada and Europe provide a full range of electrical steels for global markets.

Highly responsive slitting services are used with the most demanding of applications.

We supply the highest quality of electrical steel products and distribute them in the most timely and efficient manner. It's how we meet the high standards we set for ourselves, as well as the high expectations our customers have of us. It's the only way we know how to make product and deliver it to our customers, time and again.

Technical Research and Development

Through Cogent's TR&D team, our transformer engineering expertise is used to apply magnetic materials to a variety of transformer applications. This is an invaluable resource to customers in reducing costs and delivering solutions. It's technical research and development at the leading edge, and it's how Cogent approaches this most critical component of our business.

Focused on Customer Service, Driven by Value

Cogent delivers the highest of customer service to its value-driven clients. We do this, in part, through highly flexible operations that meet the changing needs of our demanding customers. Our many clients benefit from our product/process engineering expertise in transformer design. It's what we believe we do better than anyone else.

Global Leader, Local Expert

For over 30 years, Cogent Power has been a leading supplier of transformer components for the North American market. Our focus and expertise in specialty core components and electrical steels continues to set the standard on a global scale.

Simply stated, Cogent is the largest and most diverse electrical steel and components supplier in the world.

A strong focus on service, technical leadership and exceptional product quality — built on a lean enterprise model — has made Cogent the exclusive supplier to clients around the world



A LEADER IN INNOVATIVE R&D

Research & Development/ Product Engineering

The lifeblood of our manufacturing business is Research and Development. At Cogent, we recognize that innovation is crucial in maintaining technical leadership. We are firmly committed to quality product driven by technical advancement and process development. It's part of our formula for success.

Cogent has established itself as a leader in Technical Research & Development (TR&D). We use, harness, and coordinate significant technical resources across our entire company.

Cogent has created essential synergies that are crucial to developing technical innovations. We utilize a rich knowledge in the fields of

material properties and processing, transformer design, heat treatment, wound core production and stamping, tooling design, product applications, and more.

Our transformer engineering expertise translates into an effective use of magnetic materials with an abundance of transformer applications. This expertise is an invaluable resource to customers that seek cost-reduced solutions for their technological needs.

The Cogent TR&D team is equipped and dedicated to developing new and improved magnetic materials and components. With the support of TR&D and its product application experts, Cogent leads the way in offering wide-ranging technical support

to our customers. We determine the most cost-effective magnetic material and design solutions for our clients.

We stop at nothing to deliver the technical solutions that provide quality and value to those we do business with. It's part of the Cogent guarantee.

The Cogent Research Laboratory in Newport, South Wales, has a nationally accredited magnetic testing laboratory that underpins all magnetic measurements on materials. It also provides application design and research to all worldwide business units.



SIMPLY THE BEST VALUE SOLUTION

Product Quality and Performance Testing

At Cogent, we place top priority on product quality and performance measurement techniques. Our TR&D team has designed state-of-the-art performance testing equipment that is manufactured to capture power loss measurements for power supply applications as well as permeability measurements for high accuracy current transformer applications.

Cogent also performs statistical analysis to thoroughly understand the capabilities and opportunities that exist within different electrical steels and transformer designs. This guarantees consistency in our materials and meets the high expectations demanded by our customers.

Cogent also employs a quality management system that is certified by QMI to the ISO 9002 quality standard. This complements our philosophy of guaranteeing high standards in making, delivering, and following-up on our products and services. We demand no less of ourselves. It's what we provide to all our customers.

Outsourcing Component Manufacture

Unmatched in the industry is Cogent's combined technical expertise in:

- Transformer consultation
- Electrical steel supply
- Fully assembled step lap cores
- Core production

We simply offer the best value solutions to our clients' transformer needs.

Coupled with our manufacturing facilities in Canada, the Cogent advantage lies in providing our customers comfort and security when outsourcing core production.

For as long as we've been in business, we have excelled in servicing exclusive core supply agreements with a variety of major transformer makers across North America.

AMORPHOUS CORES

More than ever, electrical utilities and industries today are searching for technologies that will reduce their operating costs and improve energy savings throughout their system. New transmission and distribution (T&D) technologies are now available to help utilities reduce their demand for new power generation. Compared with conventional transformer cores, amorphous metal distribution transformer cores (AMDTs) boast 70% lower noload losses. These efficient cores help electrical utilities worldwide achieve their efficiency objectives.

Metglas™ amorphous metals are a combination of iron and cobalt-based alloys with nanocrystalline atomic structures. The metal is cooled and cast quickly in order to produce this unique atomic structure. The net result is an ultra efficient amorphous ribbon that is only .001″ thick, wound with distributed gaps on the end. This structure is key to the incredibly low power losses.

Ultra efficient single-phase and three-phase transformers made with amorphous metal alloy make lower no-load losses possible. Amorphous metal distribution transformers are the key to improving utility economics and enhancing energy conservation efforts worldwide. That's where Cogent comes in.

Cogent now manufactures a complete line of amorphous cores from concept to completion. Our proprietary design and built unwind, shearing and annealing equipment assures repeatable and consistent quality every time.

In addition to having ultra low, 60Hz, transformer no-load (core) loss properties, amorphous also performs exceptionally well at very high frequencies. As a result, it is used in specialty transformers in electronics applications etc.

A summary of the specific core loss at a flux density of 1.0 tesla, and various frequencies is tabulated below.

Frequency	w/lb	
60 Hz	0.036	
400 Hz	0.7	
1 kHz	2.5	
5 kHz	28.0	
10 kHz	90.0	

For further information and full curves, contact your Cogent Power representative.



DISTRIBUTED GAP CORE PRODUCTS

Cogent is the leading supplier of outsourced distributed gap core products in North America. We produce the widest range and types of distributed gap cores for transformers, with almost unlimited capabilities for a large variety of core designs.

Cores produced by Cogent vary in size from 2 lbs to well over one tonne. These include standard end We also provide a full range of conventional grain-oriented steels or Hi-B grades.

Furthermore, Cogent supplies DG core products for dry and oil-filled distribution transformers, gapped core reactors, metering units, potential transformers and a wide variety of other small power transformer applications.

Cogent's world-class testing systems, as well as extensive quality control, allow superior conformance for gapped core products. Cogent magnetically tests and grades cores, effectively matching components inside the transformer in order to minimize power losses.



FLAT STACKED SHEET PRODUCTS

At Cogent, we have the capacity to produce a wide range of flat-stacked transformer products for small and medium power transformers. With the capability to produce cores ranging from standard butt cut stacks to scrapless mitre and step lap cores, Cogent can supply un-annealed cores for most transformer applications.

Cogent supplies flat-stacked products in the full range of conventional GO materials and Hi-B steels. Combined with Cogent's diverse steel products and in-depth power transformer application and design, Cogent provides advanced, cost optimized solutions for power transformer core design.

FULLY ASSEMBLED STEP-LAP CORES

In addition to supplying step-lap cores in conventional, "log" form, Cogent can supply fully assembled step-lap cores, complete with custom clamp structure and associated insulation kits. Clamp can be supplied in channel, box, flat plate, or custom-designed. Fully assembled units can also be supplied with vertical tie rods or tie bars. Insulation systems can be made with cellulose based or drytype configurations.

Attention to detail, by Cogent's experienced technical team, ensures that all assembled flat stacked cores meet exacting standards. We pride ourselves in supplying accurately cut and assembled flat stacked cores to the transformer industry. As a final quality check, we perform a 2.5kV test on the core to clamp insulation structure, immediately after the assembly has been completed.

Finally, to ensure that the core arrives at our customer, undamaged, we take precautions to protect it during shipment, including horizontal paletization, and, protection from the environment through the application of rust inhibiting wrapping plastic, and concentrated pad(s), all of which are biodegradable.







TOROIDAL CORE PRODUCTS

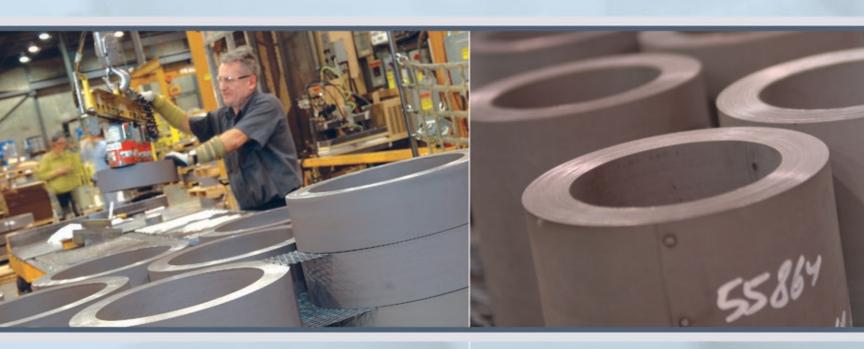
Cogent is one of the largest producers of toroidal cores in North America. We provide toroidal cores in an extraordinarily wide range of product grades and configurations.

Cogent can produce products that constitute a full range of electrical steels, ranging in weight from several ounces to well above 1000 lbs. We produce toroidal core products in bare or coated form, as well as in round or rectangular shapes.

We offer the complete spectrum in toroidal core products. That's why customers across the continent come to us — for our manufacturing quality, product range, and customer follow-up. If it's top-grade, valueadded toroidal cores that you need, that's what we supply.

Cogent also supplies core products for an impressive range of current transformers and other metering applications, as well as cores for uninterruptible power supply units and a large variety of other small power applications.

Toroidal cores are used in many extremely demanding applications that require a highly precise magnetic performance. Cogent's advanced testing and data management system ensures that product quality and consistency is second to none. We use frequently updated data that helps produce top designs that conform to highly specified requirements — all operating at very high or very low induction levels.



SPECIAL PRODUCTS

Cogent produces and supplies a range of special components for the North American and global transformer industry. They include:

Magnetic Shielding

Magnetic steel and tank liners (shunts) for large power transformers that are custom-made to individual design requirements. These shieldings reduce tank stray losses and eliminate tank hot spots by introducing a relatively high permeability shunt path that carries stray flux.

Bonded Reactor Core Blocks

Bonded reactor core blocks maintain the dimensional consistency of components/gaps, as well as facilitate the assembly of gapped core reactors by using premanufactured, epoxybonded, core block kits.

Cruciform DG Cores

Wound cores with more than one strip width. These cores have a cross-section resembling a round or elliptical shape, thus resulting in a higher core fill factor than a single sheet width or rectangular core cross-section of the same area. The winding mean turn can be reduced with accompanying reductions in winding materials and load losses.

Reduced dielectric stresses form another feature of the "smoother" core profile which is a requirement in high voltage instrument transformers.



ELECTRICAL STEEL

Cogent manufactures world-leading grain-oriented and fully processed non-oriented electrical steels. This series of unique materials contains high magnetic permeability and low iron core losses that are forged at the molecular level.

The extraordinary properties of these steels are the result of processing a very pure steel that is smelted by hot rolling, cold rolling, and annealing. The special electro-physical characteristics of these steels, which are perishable, make them ideal for transformers, generators, and motors.

Specializing in electrical steel has allowed Cogent to make the necessary investments in industry leading process equipment. Cogent's slitting capabilities surpass the most rigid industry standards for slit steel. Coupled with tailored handling equipment, Cogent sets the benchmark on how electrical steel is to be processed—without harming its unique and fragile properties.

Cogent customers experience lower in-house inventories, improved cash flow and prompt deliveries. We possess broad inventories, ranging from domain refined Hi-B to conventional grain-oriented steels. We also carry light gauge non-oriented generator grades through to the complete band of fully processed non-oriented motor grades. This breadth of inventory and grade allows customers to meet stringent production schedules — on time, every time!

North America's leading processor of electrical steels, Cogent retains several ongoing and exclusive supply contracts with manufacturers across the continent. Coupled with a trained and informed sales staff, as well as expert technical assistance, Cogent is the preferred supplier of advantageseeking businesses in the industry.

That's what we do at Cogent — we give you the edge.

GRAIN-ORIENTED ELECTRICAL STEEL (Fully Processed)

GRADES

The standard specification for Grain-Oriented Silicon Steel is ASTM A876.

Cogent supplies fully processed (annealed) and grain-oriented (GO) electrical steels in a range of grades and thicknesses, thus exhibiting various performance characteristics.

There are three main types of GO steel:

- (1) Standard GO (good performance)
- (2) Hi-B (better performance, especially at higher flux densities)
- (3) Domain refined Hi-B (best performance, especially at higher flux densities) laser-scribed DR properties are lost with annealing.

Typical Specific Core Loss at 60Hz:

INSULATION COATING

The insulation coating on grain-oriented steels is typically C5 over C2, per ASTM A876.

This insulation, which is inorganic, has a low co-efficient of thermal expansion and is effective in reducing magnetostriction and stress sensitivity.

Range of Slit Coil Sizes (Grain-Oriented & Non-Oriented):

Inside diameter	20"
Maximum outside	48"
Maximum steel width	39"
Min. steel width	0.375"
Maximum burr	0.001"
Maximum pallet weight	6000 lb

GRADE	TYPE	Thickness (inches)	Stacking Factor	Typical Watts/lb at 1.5 Tesla	Typical Watts/lb at 1.7 Tesla
M6	GO	0.014"	0.97	0.56	0.82
M5	GO	0.012"	0.965	0.5	0.73
M4	GO	0.011"	0.96	0.46	0.68
M3	GO	0.009"	0.96	0.395	0.6
MOH-DR	High-B-DR	0.011"	0.96	0.41	0.54
MOH-DR	High-B-DR	0.009"	0.96	0.35	0.47

NON-ORIENTED ELECTRICAL STEEL (Fully Processed)

The standard specification for fully processed, non-oriented, silicon steel is ASTM A677.

Cogent supplies fully processed (annealed), non-oriented electrical steel in a range of grades and thicknesses that exhibit various performance characteristics.

Cogent's non-oriented electrical steels are nearly isotropic. That is, their magnetic and mechanical properties are approximately the same in all directions of the sheet. They are thus suitable for rotating electrical machinery, but are also used for small transformers, reactors, and other applications.

Typical specific core loss at 60Hz (standard thicknesses):

		Maximum	
	Thickness	Watts/lb	
GRADE	(inches)	at 1.5 Tesla	
M15	0.014"	1.68	
M19	0.0185"	1.74	

THIN GAUGE, NON-ORIENTED ELECTRICAL STEEL (Fully Processed)

Special, thin gauge Non-Oriented steel has been developed specifically for medium to high frequency applications (typically 200-3000Hz), such as compact &/or variable speed motors, as used in aircraft, hybrid vehicles, cordless hand tools etc.

It is available in 0.005" and 0.007" nominal thickness, and can be supplied in slit widths up to 43.3", which can be highly beneficial to designers of large, high frequency machines.

A summary of the specific core loss at a flux density of 1.0 tesla, and various frequencies, is tabulated below. For further information and full curves, contact Cogent Power Inc.

INSULATION COATING

The insulation coating on non-oriented steels is normally C3 (organic) or C5 (inorganic), per ASTM A976, Table 1. The most suitable coating for any application is determined by a number of factors but is mainly temperature-related C3 (180C/360F), C5 (850C/1560F) Only C5 is suitable for high temperature, stress relief annealing. Although both are punching quality, C3 has superior lubricating properties.

Thin gauge steel is available in either C5 coating or C0 (surface oxide only).

	Maximum		Typical	
	NO 005	NO 007	NO 005	NO 007
Frequency	w/lb	w/lb	w/lb	w/lb
60 Hz	-	-	0.61	0.6
400 Hz	6.12	6.5	5.35	5.6
2500 Hz	69.0	81.0	60.0	73.0









