



A DRIVE TO SUCCEED

Core Systems, LLC was founded on a simple principle – provide the highest quality solutions at the best total cost. For more than 50 years, Core has earned a reputation for excellence in the design and manufacture of highly engineered plastic products that have tight tolerances, require sophisticated tool designs and mandate efficient manufacturing.



CORE SYSTEMS' COMBINATION OF PROGRAM MANAGEMENT, ENGINEERING RESOURCES, AND ADVANCED CAPABILITIES HAS PLACED IT AT THE FOREFRONT OF THE INJECTION MOLDING INDUSTRY.



TOTAL SOLUTIONS PROVIDER

Core specializes in serving a number of key industries including automotive, appliance, medical, electronics, and high-end consumer goods.

Core's engineering talent, part and mold design capabilities, tool building, manufacturing expertise, and focus on quality combine to make Core a total solutions provider. So whether your production requirements are for a precision Kevlar®-filled gear, an insert molded filtration product, or a consumer product with exquisite surface finish and color, Core Systems is your innovative molding expert.



Core, certified to ISO 9002, continues to invest in new technologies and resources to support each customer's unique molding requirements. Core Systems is dedicated to several key business practices – provide the highest level of engineering service and support, work with a small group of OEM customers, and offer a true expertise in hard-to-mold parts and assemblies. Combining this business philosophy with the highest level of customer support is what sets Core apart from other manufacturers.



CAPABILITIES

- Certified to ISO 9002 and operate to QS 9000 quality standards
- 2 facilities with more than 175,000 sq. ft. of manufacturing space
- Dedicated mold and tooling facility
- Injection and insert molding expertise
- Extensive and sophisticated design services and support
- Development of new parts and assemblies
- Rapid tooling and prototyping
- All-electric injection presses
- Extensive use of robotics
- Total project management and turnkey programs
- Complete secondary and value-added services
- Best total value cost approach



ENGINEERING AND DESIGN EXPERTISE

Core's engineering staff has the experience to design parts and tools, and to assist with reverse engineering and product development programs. Core's Program Management approach focuses the necessary resources on your project by managing the design, tooling and production stages to deliver the best possible product.

Core's engineering staff utilizes industry leading CAD systems software (Pro/ENGINEER®, Unigraphics, Catia and SolidWorks) and rapid prototyping to accelerate your product's development. This capability allows customers to get their products to market more quickly and efficiently by solving the most challenging problems early in the design process.





CORE'S PROJECT AND DESIGN ENGINEERS HAVE THE EXPERTISE TO MEET THE HIGH STANDARDS OF SERVICE DEMANDED BY OUR WORLD-CLASS CUSTOMER BASE.



ENGINEERING RESOURCES

With a full staff of engineers, tool designers, and tool makers, Core has more than 200 years of aggregate engineering experience. Core has broader and deeper design and engineering skills than many large molders, as well as the capability of designing parts and assemblies from a basic concept to full, detailed CAD drawings.



The strength of Core's engineering group supports its ability to be a total solutions provider, creating a competitive advantage over most molders who cannot offer this level of engineering depth and sophistication.

- CAD/CAM and 3D to support customer needs
- Total team approach to project management
- Product development capabilities
- Rapid prototyping expertise and experience
- Moldflow® software to validate design
- Extensive engineering services and support

TOOLING CAPABILITIES

Core Systems' ability to offer full-service program management is facilitated through an extensive Tool Design and Tool Building Program. This program enables Core to produce highly complex and difficult to manufacture parts.

Given that Core produces parts that are far more complex than most molders, its tool designers must work closely with the engineering staff to insure ease of manufacturability and designs that extend the life of the tool. It's all part of Core's commitment to quality.





IN-HOUSE TOOLING

Core's two Ohio manufacturing facilities are supported by a dedicated Tool Building facility in Painesville, Ohio. Each is staffed with trained personnel capable of producing new tools and rapid prototype construction. Most of Core's tools are designed internally and each is validated by design engineers to guarantee the highest quality part possible.

ENGINEERED PLASTIC PRODUCTS THAT HAVE TIGHT TOLERANCES AND HIGHLY COSMETIC SURFACE FINISHES REQUIRE ADVANCED TOOLING DESIGN – ALL OF WHICH CORE SYSTEMS CAN OFFER CUSTOMERS.



- Full tool design and tool building capabilities
- New tools and rapid prototype construction
- Advanced CNC and EDM tool building equipment
- In-house tool repairs
- Extensive tool sourcing experience

INJECTION MOLDING EXPERTISE

Core Systems' engineering strength is backed by technologically advanced production capabilities at two plants in Ohio, all operated to QS 9000 quality standards. With more than 90 injection molding presses ranging in size from 60 to 1,000 tons, Core can manufacture parts that range broadly in size and complexity. So whether your requirements are for large part molding or high cavity/high volume production, Core can accommodate your requirements.



CORE HAS INVESTED IN THE PEOPLE, THE EQUIPMENT AND THE SYSTEMS NEEDED TO PROVIDE ITS CUSTOMERS WITH COMPREHENSIVE, RELIABLE, HIGH QUALITY PRODUCTS AT THE LOWEST TOTAL COST.



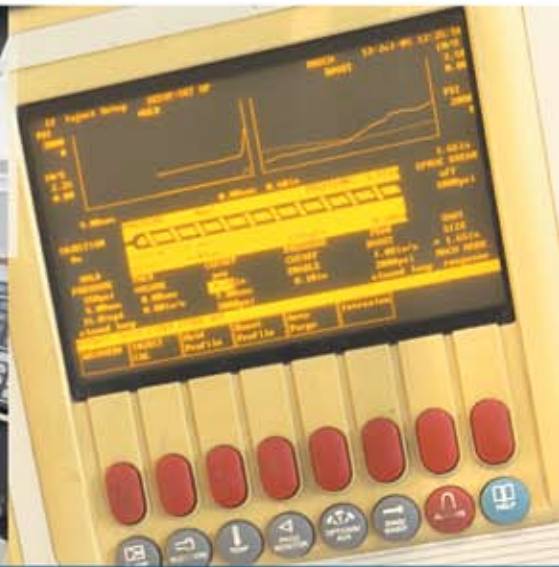
Core Systems is known for excellence in the design and manufacture of highly engineered plastic products that have tight tolerances, require sophisticated tool designs and mandate efficient manufacturing. Core is a high-end molder of choice for value-added insert molding, filtration products, highly cosmetic parts, tight tolerance parts and complex assemblies.





STRATEGICALLY LOCATED

Due to Core's high volume of production work in several targeted markets, each production facility is strategically located near key OEMs, which provides Core with the ability to quickly and inexpensively deliver parts to support customers' JIT manufacturing platforms. Core's facilities are located near major interstate routes and airports for ease of access.



KEY MANUFACTURING CAPABILITIES

- High-end injection molding and insert molding expertise
- Gas assist and over molding of multiple components
- State-of-the-art equipment and facilities
- Ability to work with specialty, custom compounded, and engineering resin grades
- Exceptional quality for highly cosmetic products
- Robotics, automation and assembly expertise for production efficiencies
- Responsive and aggressive focus on customer service
- Lowest total cost approach to program management
- More than 50 years in business



SPECIALTY RESINS

- Polycarbonates
- Acetals
- Nylons
- Santoprene®
- Valox®
- Fortron®
- Ultem®
- LCPs
- Polysulfones
- Rynite®
- Teflon®
- Structural Resins

EXPERTS IN INSERT MOLDING

Nobody competes with Core when it comes to insert molding. Core pioneered the process and still holds patents covering insert molded products. Core utilizes a wide range of components for insert molding and specializes in filtration products.

This high level of insert molding experience requires technical engineering and advanced manufacturing capabilities. Customers rely on Core's expertise to provide the best insert molding solution to meet their unique applications.



COMPONENTS FOR INSERT MOLDING

- Precision die cast inserts
- Polymesh
- Stainless mesh
- Machined aluminum
- Powdered metal parts
- Stamped metal components
- Rubber components
- Galvanized screen
- Filtration media
- Specialty metals
- Brass inserts



SECONDARY SERVICES AND ASSEMBLIES

Core doesn't just mold parts – it delivers components and assemblies.

In today's market, the demand for assemblies is growing and Core is well positioned with its full service approach and wide range of value added secondary services.

By utilizing robotics, assembly stations and specialized equipment, Core can accommodate any customer custom requirement.



WHEN IT COMES TO INSERT MOLDING, CORE IS THE RECOGNIZED LEADER IN THE DEVELOPMENT AND PRODUCTION OF COMPLEX, SOPHISTICATED INSERT MOLDED PARTS AND ASSEMBLIES.



- Component assembly
- Sonic welding
- Heat staking
- Pad printing
- Hot stamp decoration
- Overlay decoration
- Over molding
- Full range of insert molding
- Customized packaging

TOTAL PROJECT MANAGEMENT

Core Systems has the resources to do complete turnkey program management from concept ideation to full part design and prototyping, to production tooling, to molding and assembly. Core's detailed program management approach insures the efficient transition of customer's products from development to full production.



CORE'S PROJECT MANAGEMENT APPROACH CAN HELP CUSTOMERS IN PRODUCT DEVELOPMENT EFFORTS, AS WELL AS IN INCREASED QUALITY AND MANUFACTURING EFFICIENCIES AT THE BEST POSSIBLE COST.



TOTAL PROJECT MANAGEMENT

- Team approach to design, tooling and production
- Extensive engineering service and support
- Formal tool and process validation procedures
- Priority on customer communication
- On-site field support and evaluation



CUSTOMER INTERFACE

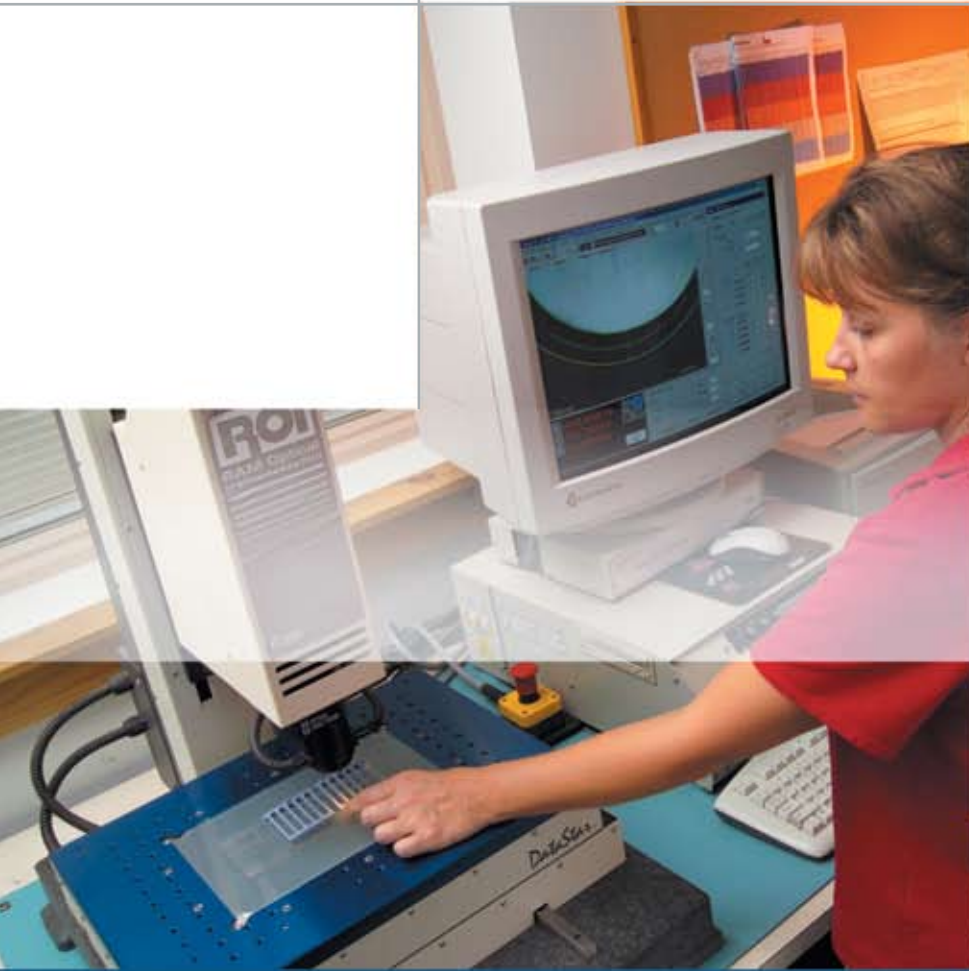
Total project management requires a high level of detailed and regular customer interface and communication in order to facilitate a successful project. To underscore Core's commitment as a total solutions provider, many of its engineers spend time on-site with customers, specifically focused on addressing customer needs regarding current and planned programs. Core employs Six Sigma Black Belts to assist customers in design and manufacturing challenges. Core is currently working on multiple Lean initiatives in partnership with major customers to increase efficiency in the supply chain and allow their customers to be more competitive in the marketplace.

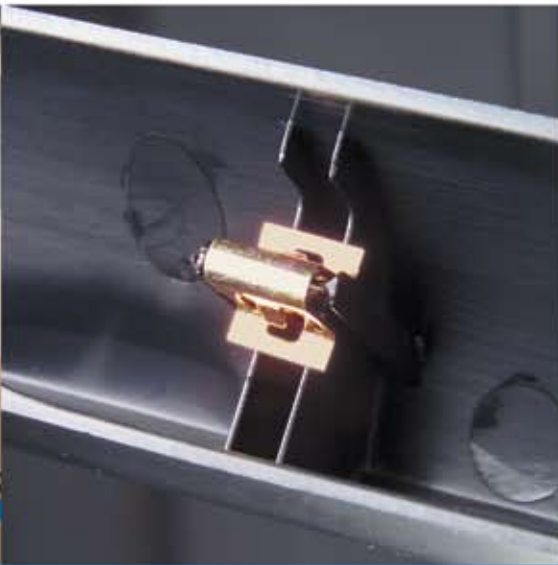


CORE QUALITY

“World-class” is the best way to describe Core’s quality assurance systems. Core Systems is certified to ISO 9002 and operates its manufacturing facilities to QS 9000 quality standards. Core has comprehensive SPC procedures in place and follows a rigorous Advanced Quality Planning Process on all new programs.

Core’s Quality Group includes Certified Quality Engineers, and each manufacturing facility has a complete in-house Quality Assurance Lab with advanced coordinate measuring machines, moisture analysis, color spectrometer capabilities, and a focused Quality Training Program for all associates of Core Systems.

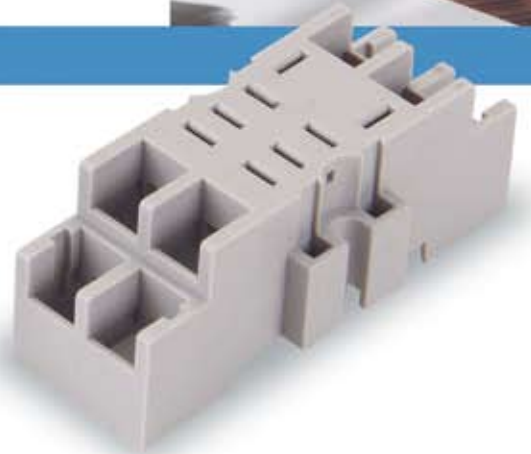




CORE SYSTEMS' COMMITMENT TO QUALITY STARTS AT THE TOP OF THE ORGANIZATION AND EXTENDS DOWN TO EVERY CORE ASSOCIATE, AS ALL EMPLOYEES ARE REQUIRED TO PARTICIPATE IN AN EXTENSIVE QUALITY TRAINING PROGRAM.



The result of Core's commitment to quality is its preferred supplier status with major OEMs, high supplier quality ratings, and low defective parts per million (PPM), internally and with its customers.





CORE SYSTEMS, LLC

Mt. Gilead, Ohio

Manufacturing

Large Part Molding -

Commodity Products



CORE SYSTEMS, LLC -

MOLD SHOP

Manufacturing

Tooling - Mold Design - Mold Production



CORE SYSTEMS, LLC

Painesville, Ohio

Corporate Headquarters/Manufacturing

Tooling - Engineering - Design -

Specialty Products



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