

A LEADER IN FUNCTIONAL COATINGS AND COLOR SOLUTIONS

FOUNDED

In 1919 as Ferro Enameling Company
in Cleveland, Ohio

OPERATIONS

In 30 countries around the world.
Production facilities in 23 countries and supporting
commercial/technical support across the globe.

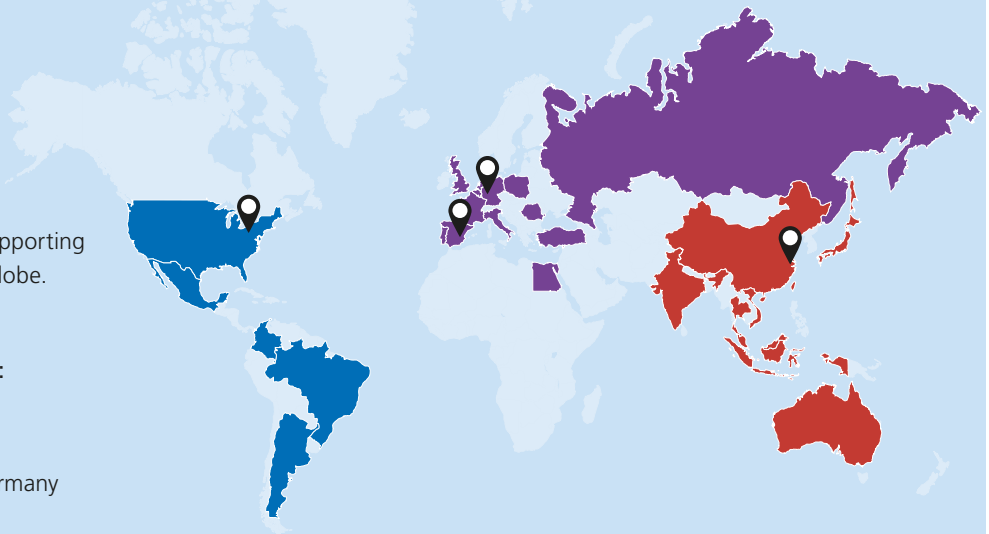
HEADQUARTERS

Corporate and Americas headquarters:
Mayfield Heights (Cleveland), Ohio

Regional headquarters:

EMEA: Almazora, Spain and Frankfurt, Germany

Asia Pacific: Suzhou, China



ANNUAL SALES

\$1.6 billion (2018)

PUBLIC SHARES

Traded on the New York Stock
Exchange, symbol "FOE"

ASSOCIATES

Approximately 6,100 globally

COMPANY OVERVIEW

We are a leading global supplier of technology-based functional coatings and color solutions. Ferro supplies functional coatings for glass, metal, ceramic and other substrates and color solutions in the form of specialty pigments and colorants.

REPORTING SEGMENTS

- PERFORMANCE COATINGS – Metal and ceramic coatings
- PERFORMANCE COLORS AND GLASS – Glass coatings
- COLOR SOLUTIONS – Pigments, dispersions and colorations, precision surface finishing materials

MARKETS SERVED

We sell our products and related services (design, application and technical support, product development support, color matching, custom formulation and production) into the building and construction, automotive, electronics, industrial products, household furnishings, and appliance markets.

WHERE YOU'LL FIND FERRO'S TECHNOLOGY-BASED MATERIALS

- CERAMIC COLORS AND COATINGS – floor, wall and roof tiles, dinnerware, sanitaryware
- GLASS COLORS AND COATINGS – architectural, auto and appliance glass, spirits and beverage bottles, perfume bottles, holloware and kitchen glassware
- ELECTRONIC MATERIALS – within electronic components in aerospace, military, telecom, appliances, automotive, solar energy applications
- PORCELAIN ENAMEL COATINGS – ovens, water tanks, cookware, chemical vessels
- LASER MARKING – promotional premiums, sanitaryware, advanced technology
- SPECIALTY GLASSES – electronic components for appliance, auto, aerospace, military and medical/dental equipment
- SPECIALTY CERAMICS – refractory, industrial, dental applications
- PIGMENTS – within Ferro coatings, and in merchant market goods such as plastics, paints, concrete, roofing and siding, industrial coatings, cosmetics, leather
- PRECISION POLISHING MATERIALS – advanced electronics, ophthalmic and specialty lenses, automobile polishes

CORE TECHNOLOGIES

- **COLOR AND GLASS SCIENCE** – The chemistries required to develop and produce pigments that provide color characteristics ideally suited to customers' applications. Ferro provides glass-based coatings with properties that meet customers' needs in a broad variety of applications
- **PARTICLE ENGINEERING** – Ferro designs and produces very small particles made of a broad variety of materials, with precisely controlled characteristics of shape, size and size distribution. We understand how to disperse these particles within liquid, paste and gel formulations.
- **SURFACE CHEMISTRY AND SURFACE APPLICATION TECHNOLOGY** – We understand the chemicals and materials used to develop products and processes that involve the interface between layers and the surface properties of materials.
- **PRODUCT FORMULATION** – We have the ability to develop and manufacture combinations of materials that deliver specific performance characteristics designed to work within Ferro customers' manufacturing processes.



LEADERSHIP TEAM (left to right)

Julio Garcia

Vice President
Europe & Performance Coatings

Joseph Vitale

Vice President
Corporate Development

Lori P. Saviers

Vice President
Sourcing and Supply Chain

Pepe Tortajada

Vice President
Human Resources

Mark H. Duesenberg

Vice President
General Counsel and Secretary

Dieter Binder

Vice President
Europe & Performance Colors
and Glass

Peter T. Thomas

Chairman, President and
Chief Executive Officer

Matthias Bell

Group Vice President
Global Operations

Benjamin Schlater

Group Vice President and
Chief Financial Officer

Barry Misquitta

Vice President
Americas & Color Solutions;
Innovation and Strategic Marketing

NOT PICTURED:

Luca Pecorara

Vice President
Asia Pacific