

PRESSURE[®] ACHEMICAL

Est. 1964



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A
CHEMICAL

Showcase Presentation Exhibition Booth 204

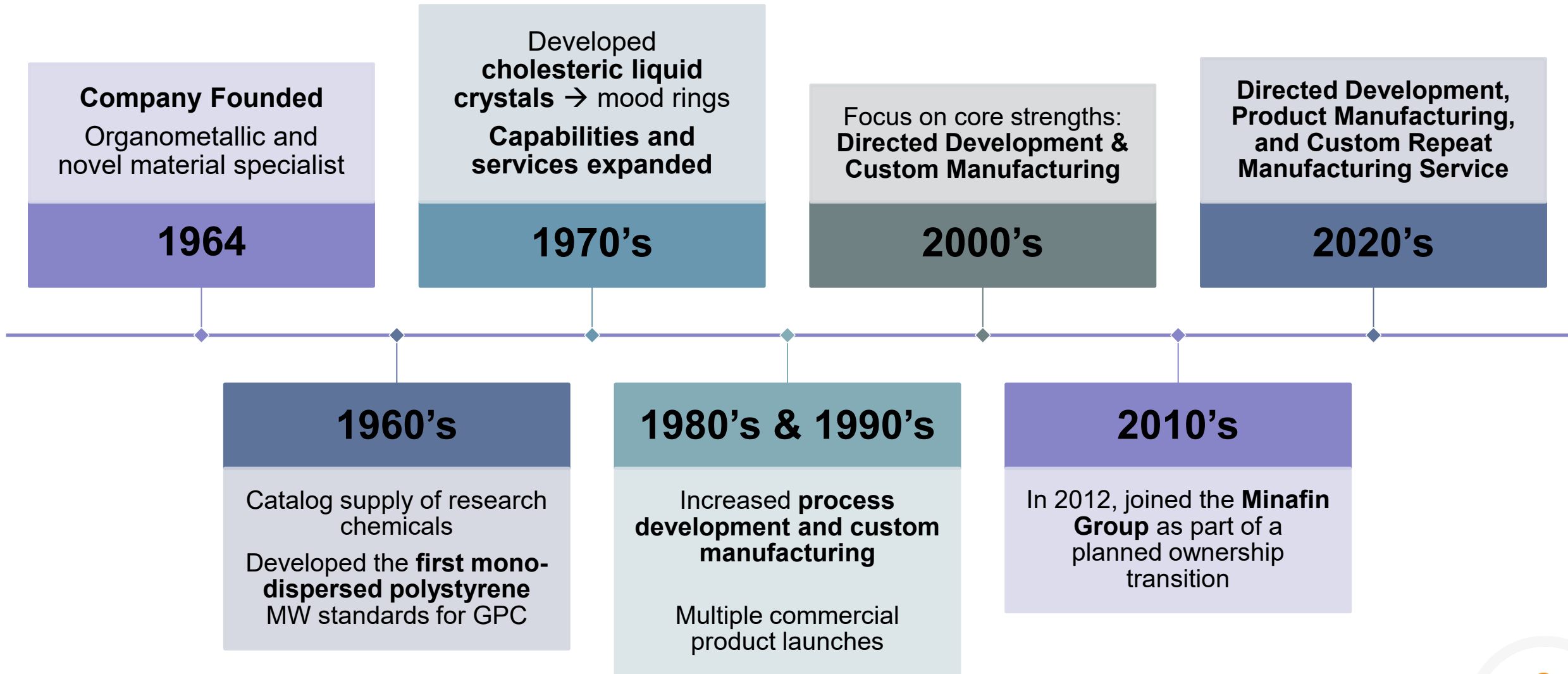
February 19, 2025

SOCMA Show

Nashville, TN



Celebrating 60 Years of Specialty and Fine Chemical Manufacturing



Industries



Experience in supporting many markets

Additives

Adhesives

Aerospace

Agrochemical

Bio/Renewables

Coatings

Cosmetics

Electronics

Excipients

Fragrance

Lubricants

Material Science

Paints & Coatings

Personal Care

Petrochemical

Pharmaceutical

Plastics

Polymers

Resins

Thermochromics



Experience in practicing a wide array of chemistries

Aldol Condensations

Alkoxylation

Alkylation

Amination

Carbonylation

Condensations

Diels Alder Condensations

Esterification

Hydroformylation

Hydrogenations

Polymerizations

Phosgenations (limiting reagent)

Quaternizations

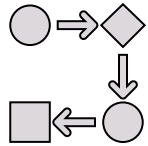
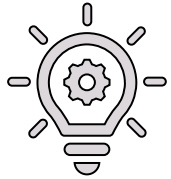
Reductive Aminations

Reactions in Supercritical
Media (CO₂)

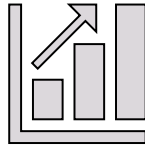
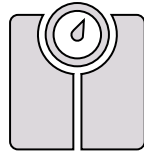


Business Segments

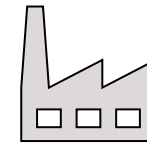
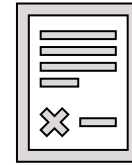
Adaptable and Responsive Facility Ready to Support Project and Product Needs



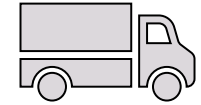
Process Development



Pilot and Scale Up



Contract & Toll



Resale & Made to Order

Directed Development

Custom Repeat Manufacturing

Product Portfolio

- Six decades of collaboration and know-how supporting clients
- Experienced staff
- Flexible facility
- Broad capabilities

- Process validation
- Initial commercial quantities
- Reduced time to market & capital expenses using our infrastructure and staff

- Service repeat manufacturing projects
- Practiced at maintaining operational proficiency
- Protected IP

- Manufactured and Resell Products
- Custom made to order materials developed throughout our history

Pressure Chemical Products

Product Sales

Platinum Group Metal Salts,
Compounds, and Catalysts

Ferrocenes

Ferrocene

N-butyl ferrocene

Polymer Standards

Polystyrene

Polyethylene Fractions

Polyethylene Glycol

Custom Made To Order Products

Liquid Crystals

NPA (Neopentyl Alcohol)

KH (Potassium Hydride) 30 wt.% in mineral oil

PTAC (Phenyltrimethylammonium Chloride)

SCT (Sodium Cyclohexyltaurate)

TREN (Tris(2-aminoethyl)amine -98%+

Synonyms: 2,2',2''-Nitrilotriethylamine, 2,2',2''-
Triaminotriethylamine, TAEA

Tyloxapol

Dirhenium Decacarbonyl

Tungsten Hexacarbonyl



Safety, Experience and Dependability

Everyone Contributes To A Safe Operation

- Health, Safety, and Environmental is a core focus for all products and projects



Recipients of SOCMA's 2023 & 2024
Safety Recognition Program

Participating in



**ChemOps
Training**

Engage higher performance.



Safety, Experience and Dependability

People Driven → Experience and Dependability

- Strong team that is ready to support a project's need
 - Experience Project Leaders – Chemistry & Engineering
 - Highly Trained Operators – 2 year training program – many 2 & 4 year degreed operators
 - Technical Sales Staff – Chemistry & Engineering
- Established record of 60 years of protecting our customers confidential processes and intellectual property



Pilot, Scale Up, & Commercial Processing



Pilot Deck

Glass lab

1L to 200L

Pilot Deck

50, 100, and 200 Gallon



Scale Up

Reactors

50, 100, 200, 500, 600 and 1000 Gallon

Glass lined, Stainless Steel, Nickel Clad

Solids handling for raw and finished goods, columns, filtration, & drying



Commercial

Repeat volumes

pails, cylinders, drums, totes

Low Volumes (1-1,000kg) to drums, totes, and cylinders for 10's of metric tons or more



Distillation, Filtration, & Drying



Packed Columns

up to 25 HETP and
capable of vacuum as
low as 0.1 mmHg

200L, 50, 100, 200, 500,
600 and 1000 Gallon
Up to 250-300°C



Wiped Film Evaporator

- UIC-KD-30
 - 3.2ft², 0.5 mmHg
- POPE
 - 1.0ft², 0.5 mmHg



Filtration

- Basket centrifuges (3)
up to 48 inch diameter
- Nutsche and Sparkler
pressure filters
- Mott LSI Sintered
Metal Filters

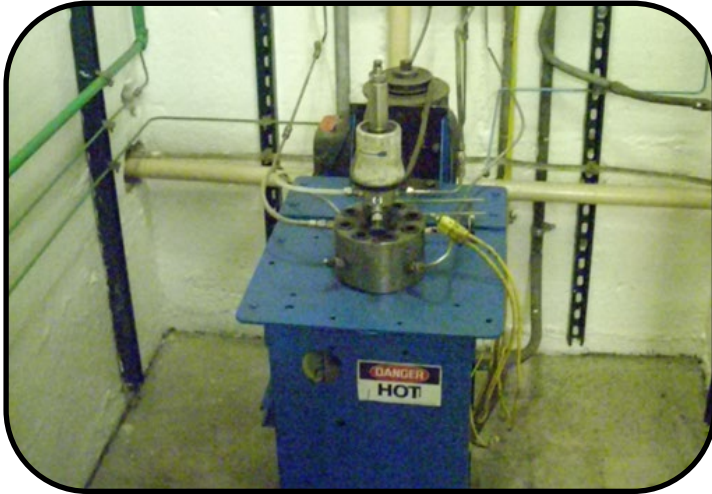


Drying

- Laboratory Vacuum
and hot air ovens
- Double Cone Vacuum
Dryers
- V-Cone
- Tray Dryer/Oven
 - Up to 200°C



High Pressure – Pilot, Scale Up, & Commercial Processing



Scales

300mL to 1 gallon

30 gallon

100 gallon

250 gallon



Pressure & Temperatures

1800 – 4500 psi

Up to ~260°C on hot oil,
reactors rated to ~343°C



Support

High Pressure
Hydrogenations
Hydroformylations
Reductive Aminations
Super Critical Fluids
Reactive Processes
Polymerizations



Polymer Experience

Our skilled team is capable of handling a wide range of polymerization techniques:

- Anionic/cationic polymerizations
- Block Co-polymers
- Condensation Polymerizations
- Emulsion Polymerizations
- Free radical polymerizations
- Polymerizations involving gas-phase monomers



Analytical

Wide range of instrumental methods, equipment and expertise

- 4 GCs
- 3 HPLCs
- GPC
- IR
- UV-VIS
- DSC
- NMR (off-site)
- GC/MS (off-site)

Wet Chemical Methods

- Titrimetric analysis performed using manual and auto-titrators
- Analytical Testing for:
- Loss on Drying
- Viscosity
- Water Content



QMS Programs

- Internal Management System – addresses key items such as:
 - NCR/ Deviations, MOC, Supply Chain, Preventative Maintenance, Group Reviews for inventory approval, training, controlled documentation program, etc.
- Client specific programs to meet/exceed the requirements of:
 - Joint IPEC PQG GMP Guideline – Excipients
 - ISO 9001
 - AS9100
 - Specific components ICH Standards
- Support needs of pharmaceutical, aerospace, automotive, electronics, adhesives, biotech, cosmetics, personal care, and more



Supporting and Servicing through

- Highly Experienced Staff
- Collaborative onboarding/relationships
- Broad Capabilities, Flexible Facility and Unique Assets
- Favorable Air Permit
- Safety Focus
- Supporting Sustainability
- Resolving client needs for Capacity, Speed, & Experience
- Reduced time to market & capital expenses using our infrastructure and staff
- Established partner with 60 Year history supporting the Fine & Specialty Chemicals markets
- Results-Oriented: Focused on delivering successful outcomes for clients



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Or Scan for Contact Page



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