

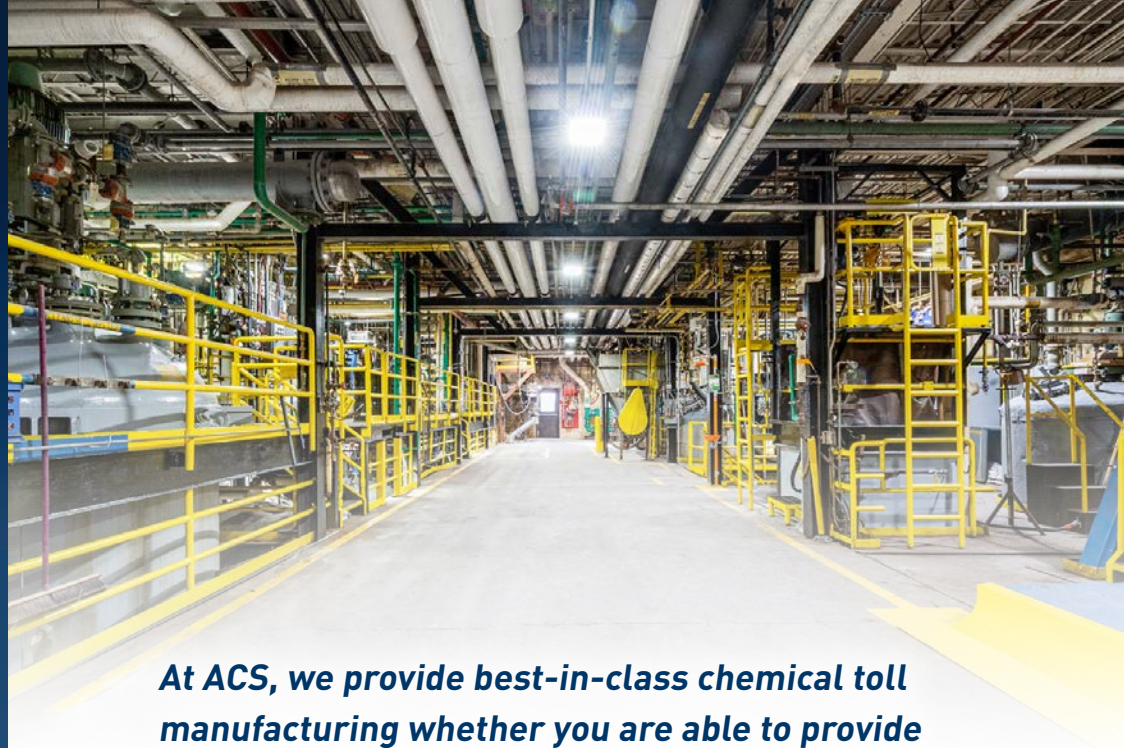


**AMERICAN
CHEMICAL
SOLUTIONS**

**A Global Partner in
Custom Chemical Toll Manufacturing**

Chemistries

- › Acetals
- › Acid Catalysis
- › Aldehydes
- › Aldol Condensation
- › Alkenes
- › Alkylations
- › Aminations
- › Borohydride reductions
- › Borylations
- › Carbonylations
- › Carboxylations
- › Claisen Condensation
- › Cross Coupling Reactions
- › Cycloadditions
- › Decarboxylations
- › Diels Alder
- › Eliminations
- › Epoxidations
- › Esterifications
- › Etherification
- › Friedel-Crafts alkylation
- › Ketals
- › Grignards
- › Halogenations
 - Bromination
 - Chlorination
 - Iodination
 - Selective Fluorination
- › Isomerization
- › Metathesis
- › Oxidations
- › Polymerization
- › Reductions
- › Ring Formation
- › Sulfonation
- › Wittig Rearrangements
- › Ziegler-Natta Catalysis



At ACS, we provide best-in-class chemical toll manufacturing whether you are able to provide a technical package or are looking for a partner to develop your process.

ACS offers a number of reactors which include Stainless Steel, Glass-Lined up to 300° C and Alloy 20. We also have blend tanks, bulk storage tanks as well as drying, filtering and packaging capabilities.

We are able to provide an easy platform for companies seeking unique specifications and requirements for their products and/or production needs. ACS meets the following ISO guidelines:

- ISO 9001:2015 Quality
- ISO 14001:2015 Environmental
- ISO 45001:2018 Occupational Health & Safety

Whether you are able to provide a process, need one developed, are looking for additional capacity or looking to defer capital expenditures – our experienced team is ready to meet your needs.

No matter the industry, our strength is our ability to meet and exceed your company's needs.



SPECIALIZED EQUIPMENT

Agitated and Jacketed Reactors

Stainless Steel and Alloy 20

- 18 reactors ranging in size from 2,000 – 7,000 gal
- Pressure rated up to 100 PSI and full vacuum up to 300° C
- Utility temperature range from -15 to 165° C
- Liquid nitrogen and chilled methanol systems supporting cryogenic temperatures down to -150° C

Glass-Lined

- 10 reactors ranging in size from 500 to 4,000 gal
- Pressure up to 100 PSI and full vacuum up to 150° C

Blending Tanks

- 30 In-process and blending tanks with over 40,000 gal of capacity

Bulk Storage Tanks (finished goods, raw material storage, or both)

- 6 carbon steel tanks ranging in size from 9,700 to 15,000 gal
- 2 each 8,500 gal cross linked polyethylene tanks insulated and heat traced
- 3 each SS tanks ranging in size from 8,500 to 11,500 gal

Drying, Filtering and Packaging Capabilities

- 3 x 4' bottom drop centrifuges (Hastelloy and SS)
- 2 ea 800 gal SS conical Nauta vacuum dryers
- 1 ea 1,600 gal SS conical Nauta vacuum dryers
- 320 cu ft SS agitated filter
- 86 sq ft SS Rosenmund filter dryer
- 136 cu ft SS Ribbon blender
- 49 sq ft belt filter
- 2 ea vibrating counter-weight Shaking Sifters
- 2 ea Pin Mills
- 2 ea Kason flow through sifters
- Ability to package in drums, totes, tank wagons, 50 lb bags up to 2,200 lb FIBC sacks



AMERICAN CHEMICAL SOLUTIONS

OUR STORY

In April 2019, American Chemical Solutions (ACS) reopened a shuttered chemical manufacturing facility in Muskegon, Michigan. With an experienced team and a collective vision to revitalize the chemical manufacturing site, ACS was launched. We focused our efforts on bringing jobs back to our community, hiring great people with decades of experience in the chemical manufacturing industry. We understood a strong team was necessary to support a broad customer base eager to secure their chemical supply chains.

In just one year, the ACS team achieved the unexpected and re-started the manufacturing facility. Our facility was originally designed to efficiently manufacture specialty chemicals and through our investment to renovate and modernize the site, ACS is an efficient, reliable value added source for your external chemical toll manufacturing needs.



Todd J. Zahn
President & CEO



Josef M. Haak
CFO



Robert Brenton
Regulatory Affairs
Director



Terry Chomniak
Director of Business
Development

WE ARE READY TO PARTNER WITH YOU



AmericanChemicalSolutions.com



231-655-5864



2406 Roberts Street, Muskegon, MI 49444