

Custom Manufacturing

Union Specialties, Inc. provides custom manufacturing of specialty polymers and packaging of materials to customers who do not possess the in-house manufacturing capabilities, or whose volume on certain products would make in-house manufacturing uneconomical. Some highlights of Union's capabilities are:

- Custom waterbased aliphatic polyurethane reactions/dispersions
- Custom blending of waterbased compounds
- Technical staff with over 50 years experience in polymer technologies
- Secrecy guaranteed with confidentiality agreements
- State of the art laboratory and manufacturing process equipment
- Highly experienced manufacturing personnel
- Complete computerized formula generation
- State of the art computerized inventory control and customer service systems to meet the customer's specific needs
- Computerized label printing equipment
- 80,000 square foot manufacturing and warehousing facility (electronic security with fire suppression)
- Commitment to safety, quality and environment
- ISO 9001:2015 Certified
- Thirty years of expertise in Exporting worldwide
- Central location with easy access to major highways

For future details please contact: Joe Marshall, Vice President of Operations
email: joemarshall@unionspecialtiesinc.com

Waterbased Polyurethane Manufacturing Capabilities

Reactors

- Four (4) 1500 gallon Pfaudler stainless steel; equipped with 10 H.P. drives

The reactors can handle products with a viscosity from 1,000 cps to 30,000 cps, and are equipped with the following:

- Unlimited Hot Room storage from 140°F / 60°C to 210°F / 99°C
- Complete modernization in 4th Quarter 2008
- Heating up to 280°F / 138°C
- Cooling down to 50°F / 10°C
- Propeller type agitation
- Load cells on all vessels
- Process accessory equipment
- Variable speed mixing in all reactors
- Automated extender dosing systems (4)

Dispersion

- Four (4) 4000 gallon stainless steel tanks equipped with 25 H.P. lightning drives

Compounding / Packaging Capabilities

Mixers

- Cowles disperser mixers; 25 H.P., 50 H.P.
- 3000 gallon mixers (4)
- 500 gallon mixer
- 250 gallon mixers (2)
- 50 gallon mixer

Tanks

 Bulk raw material and process tanks:

- 2200 gallon Polypropylene mix tanks (3)
- 2000 gallon Stainless steel mix tanks (2)
- 4500 gallon Polypropylene mix tanks (3)
- 1000 gallon Polypropylene tank
- 1000 gallon Stainless Hot Melt tank
- 500 gallon Stainless mix tank
- 250 gallon Stainless mix tanks (2)

Packaging

- Custom designed, automated multi-package dispensing unit
- Cuno filtration system; filter from 1 micron – 500 micron
- Tank wagon
- 250 gallon poly totes
- 57 gallon O/H poly drums
- 35 gallon O/H poly drums

Quality Control / Research & Development

Our laboratories are equipped to perform a multitude of tests including:

- Auto-titrator - % NCO
- Fourier Transform Infrared (FTIR) Spectrometer
- Fourier Transform Infrared (FTIR) with Attenuated Total Reflectance (ATR)
- Gas Chromatography (GC) / Mass Spectrometry (MS) with Headspace
- Gloss Meter - BYK
- Gel Permeation Chromatography (GPC) - Waters
- pH Meters
- Rotovapor - Buchi
- Solids Content – oven and microwave
- Tensile & Elongation – Tinius Olsen H5K-S
- Viscosity – Brookfield and Ford Cup
- Weatherometer - QUV