

Carbo-blending/Dosing

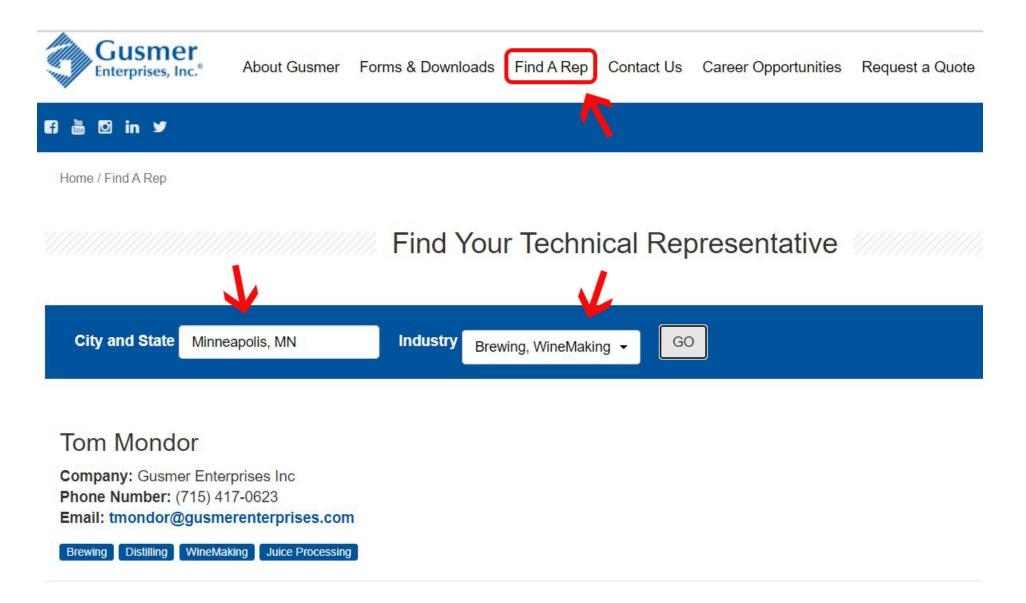
Denwel Series #3



Agenda

- Gusmer & Denwel Overview
- Blending/Carbo-blending/Dosing Overview
- General Tips
- System Options
- Q & A Type questions in the Q/A box

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Service with Knowledge ® since 1924

Application Support

Santa Rosa



Founded in 1918

Management and Ownership currently in 3rd generation

FERMENTATION & FILTRATION PRODUCTS AND SERVICES for FOOD, BEVERAGE & BIOTECH/PHARMACEUTICAL APPLICATIONS

Manufactured and Resale Products

15 Direct Technical Sales Representatives

4 Product Managers &

3 Application Specialists

16 Research & Development Scientists



Direct Sales Resources Spread Throughout the US.





Overview:

Founded in 1997, DENWEL is a privately owned, independent company with headquarters in Prague and manufacturing facilities in Havlickuv Brod, Czech Republic. The owners and founders are still involved in the day-to-day operations of the company and oversee sales development and technical development/engineering, respectively. Although the core focus of the company remains in the brewing industry, DENWEL has been a respected global supplier to the beverage, pharmaceutical, chemical and energy industries for over two decades.

Although the company's capabilities are vast and include the ability to custom engineer many types of equipment, DENWEL specializes in the following types of standardized, skid mounted equipment:

- Inline gas injection
- Water Deaeration
- Blending and additive dosing equipment
- Flash Pasteurization
- CIP skids and systems





Inline Carboblending & Dosing Overview

Inline Blending/Carboblending

- Industry standard
- Inline alcohol and CO2 analyzers
- Controlled via PLC and easy to use HMI
- Requires de-aerated water
- Blending/CO2 injection occurs immediately

Inline Dosing

- Great for dosing of flavors or stabilizing agents
- Powders or liquids
- Controlled via PLC and easy to use HMI
- Utilize drums, storage vessels or mixing tanks







Application Tips

- Maximize Tank Space
- No Batching
- Quality, Consistency and Compliance
- Versatility
- Easy CIP
- Save Time/Labor/Ingredients





System Options

- Blending-high gravity/alcohol product with deaerated water
- Carbo-blending-high gravity/alcohol product with deaerated water, carbonated in-line
- Ingredient/Additive Dosing-flavors, process aids, etc., added in-line
- Custom combination skids-multiple in-line functions grouped together in one unit



System Options

- Semi-Auto: automated/ratio controlled for greater precision-enter parameters and system sets up automatically
- Automatic: automated/analyzer control for greatest level of precision-enter parameters and system sets up automatically, visual feedback shows precision
- Combination skids



Blending

- DBSXXXS-semi-automatic blending system
- DBSXXXA-automatic blending system
- Gravity measurement range:0-20 °P
- Alcohol measurement range:0-10% abv
- DBSXXXS/DBSXXXA range of sizes from 1.5"-6" (DN 40-DN150)
- Size range can handle flow from 9-852 bbl/h (10-1000hl/h)
- DBSXXXS- ratio control valves for proportionate blending
- DBSXXXA- analyzer control for greatest precision
- Blending ratio up to 100%
- Skid dimensions from: h=6.2' x w=6.5' x d=2.0'



Carbo-blending

- DBCXXXS-semi-automatic Carboblending system
- DBCXXXA-automatic Carboblending system
- Addition rates: CO₂-up to 3v/v (6g/l) (P&T dependent)
- DBCXXXS/DBCXXXA range of sizes from 1"-6" (DN 25-DN 150)
- DBCXXXA/DBCXXXS range can handle flow from 9-852 bbl/h (10-1000hl/h)
- Analyzer controlled via PLC to give the highest degree of precision
- Programmable by brand to allow for individual carbonation/blending concentration
- Free-standing or Wall Mount from*: h=6.2', w=6.5', d=2'





Dosing

- DDSXXXC-semi-automatic dosing unit-compact
- Customizable-variable number of dosing streams (1+)
- Customizable-liquid or dry additives/ingredients possible
- Range of sizes from 1.5"-4" (DN 25-DN 100)
- Range handles flow rate from 26-426 bbl/h (30-500hl/h)
- Applications include:



- Process aid dosing in product stream
- Dosing of CIP chemicals inline







- Combination equipment skid for production of ready-to-drink beverages
- Included technology:
 - Water Deaeration Column-Cold with Pre-carbonation
 - Dosing Unit-Compact
 - Carboblender Semi-Automatic
- Not yet standardized → custom sizing from 30hl/h
- "A business plan that arrives in a sea container..."

-Tom Mondor, Regional Sales Manager







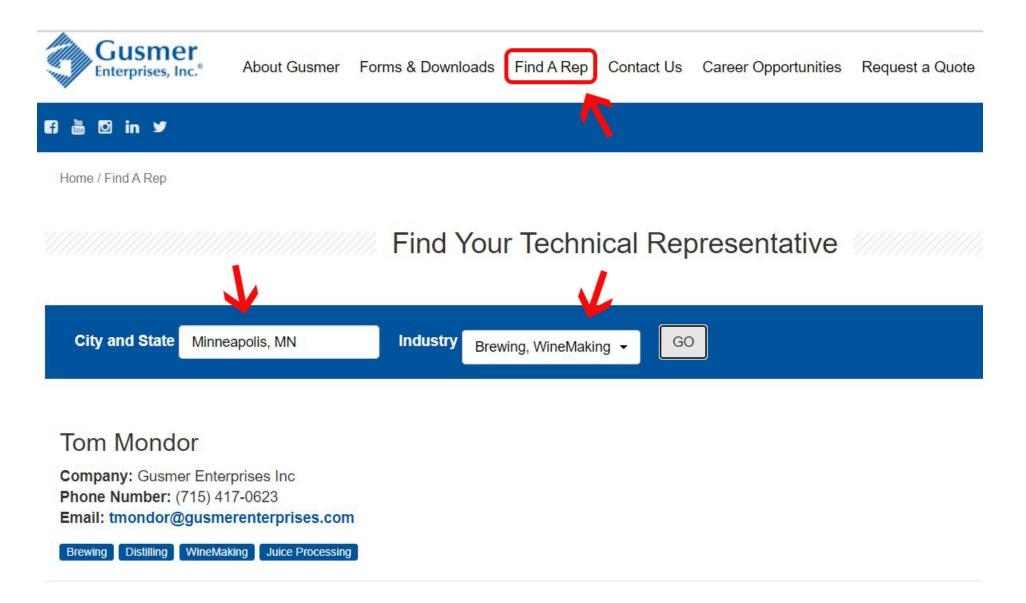


Questions?

www.GusmerBeer.com/denwel-webinars

- Tuesday, July 27th, 1pm EST
 Water Deaeration: Why You Needed This Yesterday
- Tuesday, August 10th, 1pm EST
 CIP: Make Your Life Easier

www.GusmerEnterprises.com



Thank You!