



Nuremberg, 09–11 November

Brau Beviale 2011

Hall 7 – GEA Group Stand No. 602

GEA Process Engineering
GEA Mechanical Equipment
GEA Heat Exchangers



Get what you want

Whether you are looking for a reliable aseptic valve, a sensible blending station or your own pilot plant, you will get a matching solution.

Convincing performance

We are leaders at all stages from the initial planning to the after-sale service. Our concepts, designs and constructions concentrate on cost efficiency – concerning ingredients, energy and manpower.

Profit

Expect everything from our customized engineering and process equipment competence, because we are consistently working consequently on optimal answers to your demands.

Make your choice

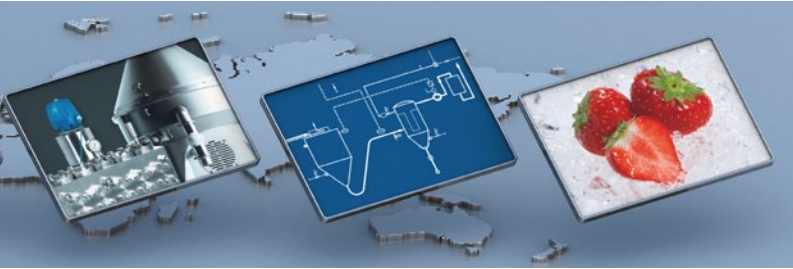
On the following pages we introduce all GEA brewery, beverage and liquid specialists to you. Make your choice and see for yourself. We look forward to meeting you.



Contents

Welcome to GEA	4 5
GEA Brewery Systems	6 7
GEA Diessel	8 9
GEA PHE Systems	10 11
GEA Procomac	12 13
GEA TDS	14 15
GEA Tuchenhagen	16 17
GEA Westfalia Separator Group	18 19
GEA Wiegand / GEA Filtration	20 21
Stand Directions	22 23





Welcome to GEA

GEA Group Aktiengesellschaft is one of the largest suppliers of process technology and components for the food and energy industries. As an international technology group, the company focuses on sophisticated production processes. In 2010, GEA generated consolidated revenues in excess of EUR 4.4 billion, 70 percent of which came from the food and energy sectors, which are long-term growth industries. The group employed about 23,000 people worldwide as of June 30, 2011. GEA Group is a market and technology leader in its business areas. It is listed in Germany's MDAX stock index (G1A, WKN 660 200). In addition GEA Group has a sponsored level I ADR program in the USA.

Origin of great beers.™



Delivery programme and services:

- System solutions for craft brewers up to international brewery groups
- Brewhouse and cold process area technologies
- Solutions for flavoured alcoholic and clear malt beverages
- Utilities, refrigeration plants and CO₂ recovery plants
- Process control and automation systems
- Complete greenfield projects
- Power upgrade and Service ^{next level}
- Innovative in R&D

GEA Process Engineering

GEA Brewery Systems GmbH

Huppmann Tuchenhagen

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The competence centre for breweries all over the world

GEA Brewery Systems combines the hot and cold process technology in one company and is the globally unique competence centre for sustainable brewery equipment.

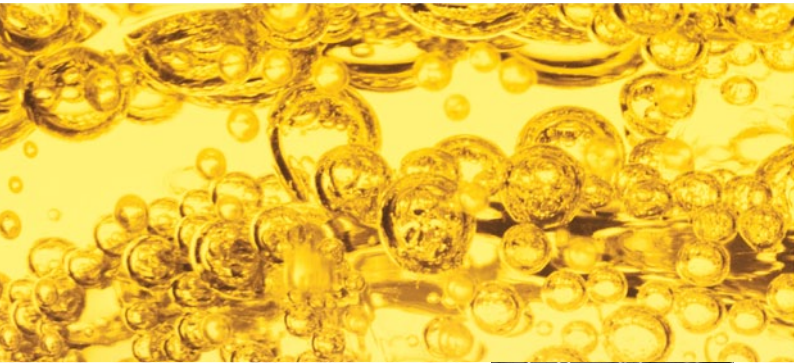
Our range of services includes everything from engineering, delivery and installation up to the servicing of plants and components. Upon request, we realize complete greenfield projects for you.

The competence and technology of GEA Brewery Systems have always been the basis for many great beers. In our projects, competent engineers and project managers ensure that your brewery will look and operate as you imagined it and that it will go on-line in due time.

Focus on green breweries

Reduce your environmental footprint and go green – our equipment and processes are optimized for long-term sustainability and designed for your successful economic future. We develop innovative solutions considering your local conditions and your economic and ecological requirements.

- Minimized consumption of natural resources like water, energy and raw materials
- Making the brewing process as efficient and predictable as possible
- Reduced odour emissions by up to 100 %
- Recycling of by-products or waste products
- Tailored energy management



**Process plant
and units**
for the production
of food and beverages



GEA Process Engineering
GEA Dessel GmbH

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As one of the leading companies in the field of measurement and process technology we have specialized in metering liquids in flow. Our core competence is metering, capturing, analysing, mixing, controlling, monitoring, distributing, and cleaning. This specialized know-how can be found in the process systems which offer to the customer individual, tailor-made problem solutions.

We are your strong partner with our complete package of offered performances ranging from advisory service via planning, designing and manufacturing tasks up to the commissioning, documentation, and after sales service. Complete new processing lines for the manufacture of finished beverages and spirituous liquors are realized just from one supplier – from planning up to commissioning. For modernization purposes of sections only, preassembled and tested “process units” are offered which can be easily integrated into the existing production process.

Delivery programme:

- Soft drink process plant
- Spirits process plant
- Process units
- Batch mixing
- Continuous blending
- Mixing & carbonation
- Aseptic mixing & carbonation
- Water deaeration
- Sugar dissolving
- Intake or delivery of product
- Cleaning
- In-line analysing
- Flow measurement
- Sampling
- Sugar dissolving and inversion
- Mobile metering systems



GEA Heat Exchangers
GEA PHE Systems

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Plate Heat Exchangers in the Brewing industry

To subject wort, yeast, green beer and mash to thermal treatment, GEA PHE Systems offers you optimized plate heat exchangers which allow the passage of products containing solids. For the heating of carbonated beverages we also have apparatus with higher pressure resistance. And the maximum heat recovery of up to 96 percent is an achievement to put a smile on every brewer's face!

GEA EcoServe – the GEA PHE Systems service organization – is the leading service specialist for all types of plate heat exchangers and from all manufacturers. Our service is backed up by more than 20 years of experience in after-sales & service and by the competence of GEA PHE Systems as an internationally renowned manufacturer of high-performance plate heat exchangers.

With a global network of locations and round-the-clock service availability GEA EcoServe is at your disposal anytime, anywhere.

Delivery programme:

- Gasketed plate heat exchangers
 - Varitherm
 - LWC
 - NT
 - Free Flow
 - Concitherm
- Brazed plate heat exchangers
- Fully welded plate heat exchangers
- After-Sales & Service for all brands of plate heat exchangers

The Aseptic Way



GEA Process Engineering
GEA Procomac S.p.A.

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GEA Procomac S.p.A. designs and manufactures complete aseptic filling lines for **sensitive products** such as juices, isotonic drinks, tea, milk-based beverages with and without particulates.

Leader company in the sensitive beverage filling field with more than 130 installed aseptic lines, GEA Procomac has recently introduced **ABF (Aseptic Blow Fill) System**, the world's first **rotary aseptic blow moulding machine (Airstar)** with an integrated aseptic filler and capper.

ABF decontaminates the preforms with H₂O₂ dry process, and maintains this sterility when blow moulding the PET bottles and throughout the entire filling and capping process.

The GEA Procomac range of volumetric electronic fillers with magnetic flow meters can be integrated in the ABF System. The range includes **Fillstar CX** for still and carbonated products with and without pulps and fibres, and **Fillstar FX** series for any still product, including high acid, low acid, limpid, with pulps, fibres and pieces, and viscous products.

GEA Procomac offers also **ECOSpin**, 5th generation of wet PAA based aseptic filling bloc for high speed lines, and **Modulbloc** for low/medium speed aseptic lines, a compact solution with ancillaries units and caps sterilization on the same frame.

Delivery programme:

- Complete HA and LA aseptic filling lines
- Complete filling lines for water, soft drinks, milk
- Hot filling lines
- Rinsers, fillers, process units, conveyors
- Palletizer and depalletizer, robotized palletizers



Innovative Engineering –
Quality in Line.

GEA Process Engineering
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Dialogue – the key to success

GEA TDS' success – as one of the world's leading suppliers of process technology for pumpable food – is a result of working closely with customers to develop efficient plants for every application.

Our company brings together wide-ranging expertise in engineering, technology and automation. GEA TDS has 300 employees in total, among them about 160 process engineers – they are specialists in specific industries and are experienced consultants for individual plant concepts or detailed projects.

Whether in the dairy, fruit juice or food processing industry, their comprehensive know-how ensures that the customer's individual needs are met in the best possible way.

We encourage intensive communication with our partners from production and product development, as part of the professional consultation process, to achieve the optimum result. This is achieved through direct contact with the local site to obtain accurate information about the units, process lines or systems required.

Delivery programme for the dairy, food and fruit juice industries:

- Turnkey plants
- Process lines and process units
- Heat exchanger solutions
- Pasteurization units
- Aseptic processing
- Engineering, assembling and service
- Process automation and integration

**We keep more than
liquids in motion!**



Liquids to Value

GEA Mechanical Equipment
GEA Tuchenhagen GmbH

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Components for liquid processing

In the last 80 years our success has been no accident. We have worked hand-in-hand with our customers to maintain continuous product development that matches process needs and our customers' requirements. This investment has enabled us to produce technically advanced process components and services for smooth production. Whether you are processing milk, beer, beverages, pasty food or fine chemical products, what counts is the quality of the final product and the efficiency of the production line.

Our components are flexible so they can be adjusted to optimize process parameters and enable high productivity, efficient operation and a constantly high product quality. This is why we are one of the world's leading manufacturers of process components.

Throughout our history we have introduced well-engineered and technically mature product innovations to the market. Our research and development facility works in close cooperation with our product management people and our customers to create individual application solutions to meet specific needs.

Delivery programme:

- VARIVENT[®] valves
- ECOVENT[®] valves
- T-smart valves
- STERICOM[®] valves
- VESTA[®] sterile valves
- GEA Tuchenhagen[®]-VARIFLOW centrifugal pumps
- VARINLINE[®] process connections
- VARIPURE cleaning technology
- VARICOVER[®] product recovery systems
- VARITOP[®] tank safety systems
- CIP systems



Liquids to Value

GEA Mechanical Equipment

GEA Westfalia Separator Group GmbH

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GEA Westfalia Separator Group is the world leader in the field of centrifugal technology. Based on the experience gained with more than 3000 process applications with the efficient processing of liquids and liquid mixtures, this technology ensures considerable added value. The centrifuges and process lines from GEA Westfalia Separator Group cover the entire range of mechanical separation. Since the construction of the first milk centrifuge in 1893, the company has evolved and developed new processes and products to boost the added value for customers. GEA Westfalia Separator Group stands for high economic benefit, innovative engineering and processing of small, medium and large capacities. Our centrifuges and process lines also help to preserve resources and the environment by reducing energy and disposal costs while providing reliable service and durability. The company is present all over the world, with more than 50 sales and service companies and over 20 authorized workshops.

Examples of delivery programme:

Centrifuges, decanters, process lines and equipment for:

- Beer filtration with PROFI
- Beer recovery from tank bottoms
- Clarification of beer prior to kieselguhr filtration
- Cold wort and hot wort clarification
- Green beer clarification
- Non-alcoholic beer
- Trub wort clarification
- Turbidity adjustment with centrifuges e.g. in wheat beer
- Production of Kwass and Sorghum beer
- Wine, sparkling wine and Champagne
- Premium juice from fruits, berries, vegetables and herbs
- Citrus processing
- Production of instant coffee, tea beverages and soy milk
- Centrifuges for dairy technology



Competencies in Brewing Processes



GEA Process Engineering

GEA Wiegand GmbH / GEA Filtration

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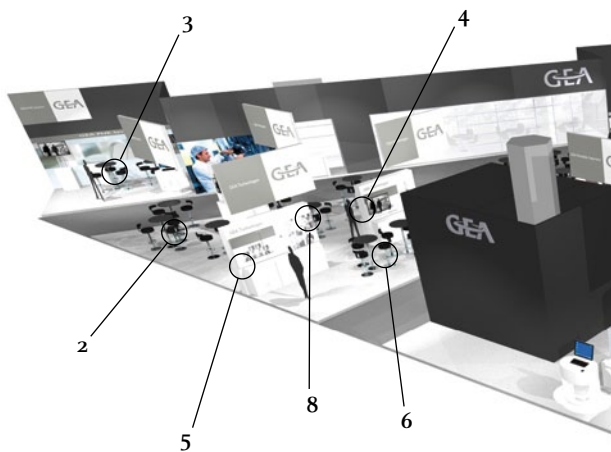
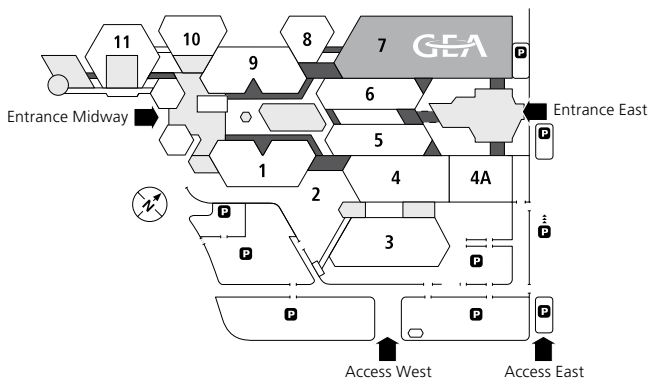
GEA Wiegand is a worldwide leading company for process technology. We are specialized in the concentration and separation of all types of liquids in evaporation, distillation and membrane filtration plants (GEA Filtration). Moreover we deliver complete processing plants for ethanol as well as vacuum systems and gas cleaning plants based on jet pump technology.

In our R&D centre, laboratory facilities and pilot plants for fermentation, evaporation and distillation are available for testing and analyses. Steam jet pumps are checked on a separate test bench.

You may contact us through our sales network with specialized engineers in more than 80 countries on every continent worldwide.

Delivery programme:

- Beer dealcoholization plants
- Concentrate plants for malt extract and diastatic malt extract, barley extract, wort and weak wort, spent grains press water, brewer's yeast and yeast autolysate
- Carbonization and mixing units
- Clarification of malt extract
- Plants for the production of malt-based alcoholic beverages
- Beer recovery from tank bottoms
- Brewing water make-up
- Recovery of CIP-solutions



Looking forward to welcoming you for our
 “GEA Night”, 10 November, starting 6pm

Position of companies

1. GEA Brewery Systems – Origin of great beers.™
2. GEA Diessel – Liquid processing
3. GEA PHE Systems – Heat transfer
4. GEA Procomac – Complete aseptic and traditional filling lines
5. GEA TDS – Innovative Engineering, Quality in line
6. GEA Tuchenhagen – Flow components
7. GEA Westfalia Separator Group – Mechanical separation
8. GEA Wiegand / GEA Filtration – Evaporation, distillation, membrane filtration, jet pumps and mixers





To find out more about the companies of GEA Group, see www.geagroup.com.



**BEST
INNOVATOR
2010/11**

Winner leading innovation management within engineering industry