

How do some of the leading authorities in building, using and inspecting hygienic processing systems view the challenges to improving hygienic design?



GEA – “engineering for a better world”



GEA is one of the largest technology suppliers for food processing and a wide range of other industries.



18,642

employees (FTEs)



4,828

EUR million revenue

The company is listed on the German MDAX (G1A, WKN 660 200), the STOXX® Europe 600 Index and selected MSCI Global Sustainability Indexes.



518

EUR million operating EBITDA



4,918

EUR million order intake

The global group specializes in machinery, plants, as well as process technology and components. GEA provides sustainable solutions for sophisticated production processes in diverse end-user markets and offers a comprehensive service portfolio.



10.7

% operating EBITDA margin



0.85

EUR per share dividend proposal

Fiscal year 2018

Our applications – in touch with GEA every day



Dairy Farming and Processing



Approx. one quarter of processed milk comes from GEA production systems

Food



Every third chicken nugget is produced using GEA technology

Beverages



Approx. every third process line for instant coffee was installed by GEA

Pharma



Approx. every second liter of beer is brewed with the aid of systems and process solutions from GEA

Chemical



Every fourth liter of human blood for making plasma-derived products is processed using GEA equipment

Utilities

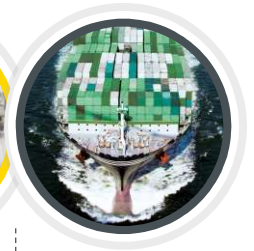


More than one third of all polymer producers are using GEA drying technology

Marine



Each industry we serve utilizes industrial refrigeration technology from GEA



Every second container ship in the world sails with GEA marine equipment on board

Classic approach

3-A Sanitary Standards, Inc.



- Define standard design criteria for
 - Materials
 - Design
 - Fabrication

Symbol Holder



- Responsible for
 - Design & compliance documentation
 - Cleaning validation

Food Producer



- Responsible for
 - System maintenance
 - System operation

Transition Food Safety Modernization Act

3-A Sanitary Standards, Inc.

- Define standard design criteria for
 - Materials
 - Design
 - Fabrication

- Validation
- Requirements of operation and use

Symbol Holder

- Responsible for
 - Design & compliance documentation
 - Cleaning validation

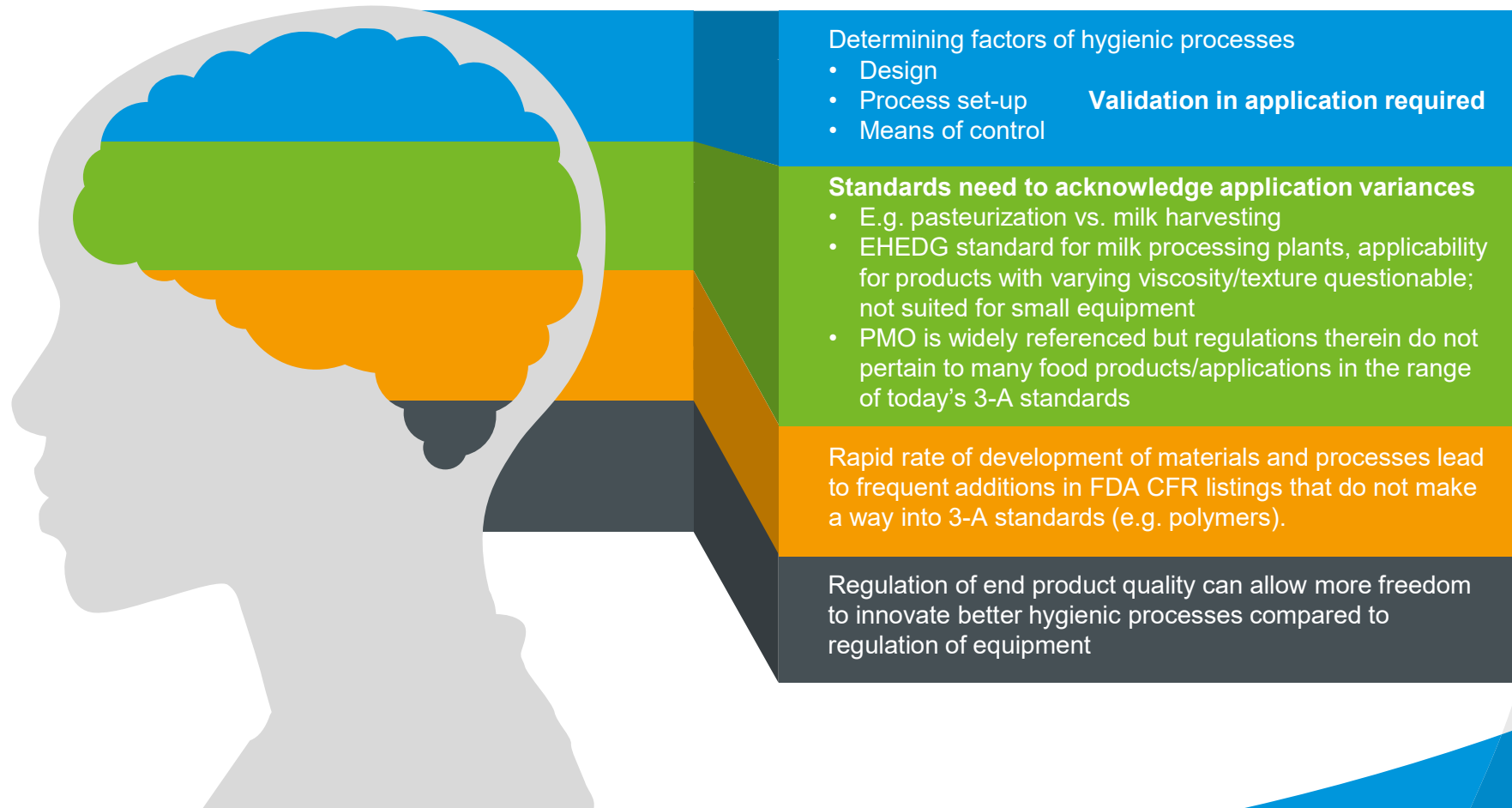
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Food Producer

- Responsible for
 - System maintenance
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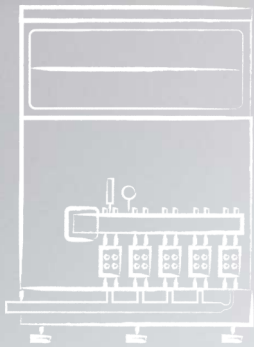
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Thoughts on challenges



Transformation is ongoing...

- Application focus mirrored in joined effort for standard B-102-00-A
- Let's keep up shaping





engineering for
a better world