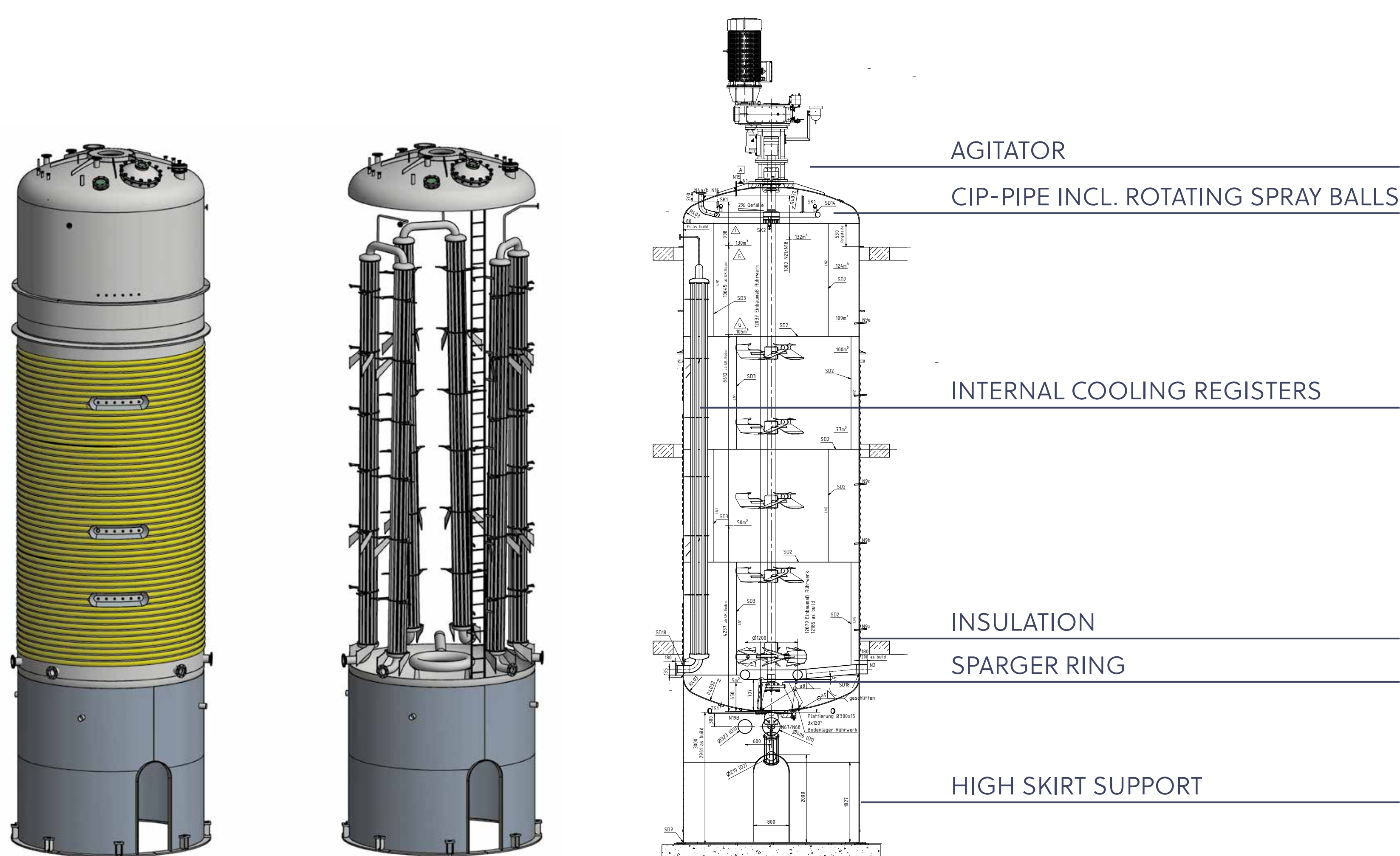


**Ziemann Holvrieka** is a leading manufacturer of state of the art fermenters and bioreactors, supplier and integrator of custom solutions for large-scale fermentation processes of various nutritious new foods.

Our precision fermentation technology includes fermenters that operate under full vacuum, equipped with agitators, gas sparging solutions and heating/cooling capabilities to withstand high alternating stresses. Our production capabilities allow us to produce even the largest fermenters up to 300m<sup>3</sup> in one piece. With more than 170 years of experience in the fermentation industry and own production of fermenter and bioreactors made in Bürgstadt, Germany. Ziemann Holvrieka is a global supplier of tanks and process technologies for liquid food industries, including beer fermentation and vitamin production.

## Standardized & customized fermenters and bioreactors



- Production of fermenters and bioreactors
- More than 170 years' experience
- More than 1250 employees worldwide
- Over 300 dedicated engineers
- Production area of 128.000 square meters
- Hall space 25.000 m<sup>2</sup>
- Own loading dock at the river
- One-piece tanks up to 7.5 meters in diameter
- Outstanding production capacity with up to 400 tanks per year
- Highly automated and efficient production process
- Approx. 10.000 tons of stainless steel are processed per year
- Service hubs around the globe
- Inhouse engineering, stress calculation and design capacities
- Highest standards in quality assurance and documentation
- Fast supply and short processing times

## Extract of fermenter projects for various industries

Novel food (plant based products & vitamins)

-  Fats/oils
-  Eggs
-  Meat/sea food
-  Dairy
-  Colours/vitamins/flavours
-  Other



Insulin production process



Vitamin production



Yeast fermentation

## Features & Benefits

- Our standardized bioreactors and experienced teams take out the complexity for you and make things more simple
- Our standardized bioreactor manufactured in Germany to the highest quality standards generates maximum process safety, low TCO & low CAPEX costs and increase your plants uptime
- Our standardized bioreactors provide the bases for tailored individual bioreactor features that will increase your flexibility in production processes
- We are capable to build large bioreactors up to 300 m<sup>3</sup> enhancing your production capacity and cost per product unit
- We can be your reliable single point of contact from inquiry to installation
- Quick lead times result in tremendous time and cost savings during project realization
- Deliveries of bioreactors in one piece lead to less installation time on-site, your plant is in operation more quickly