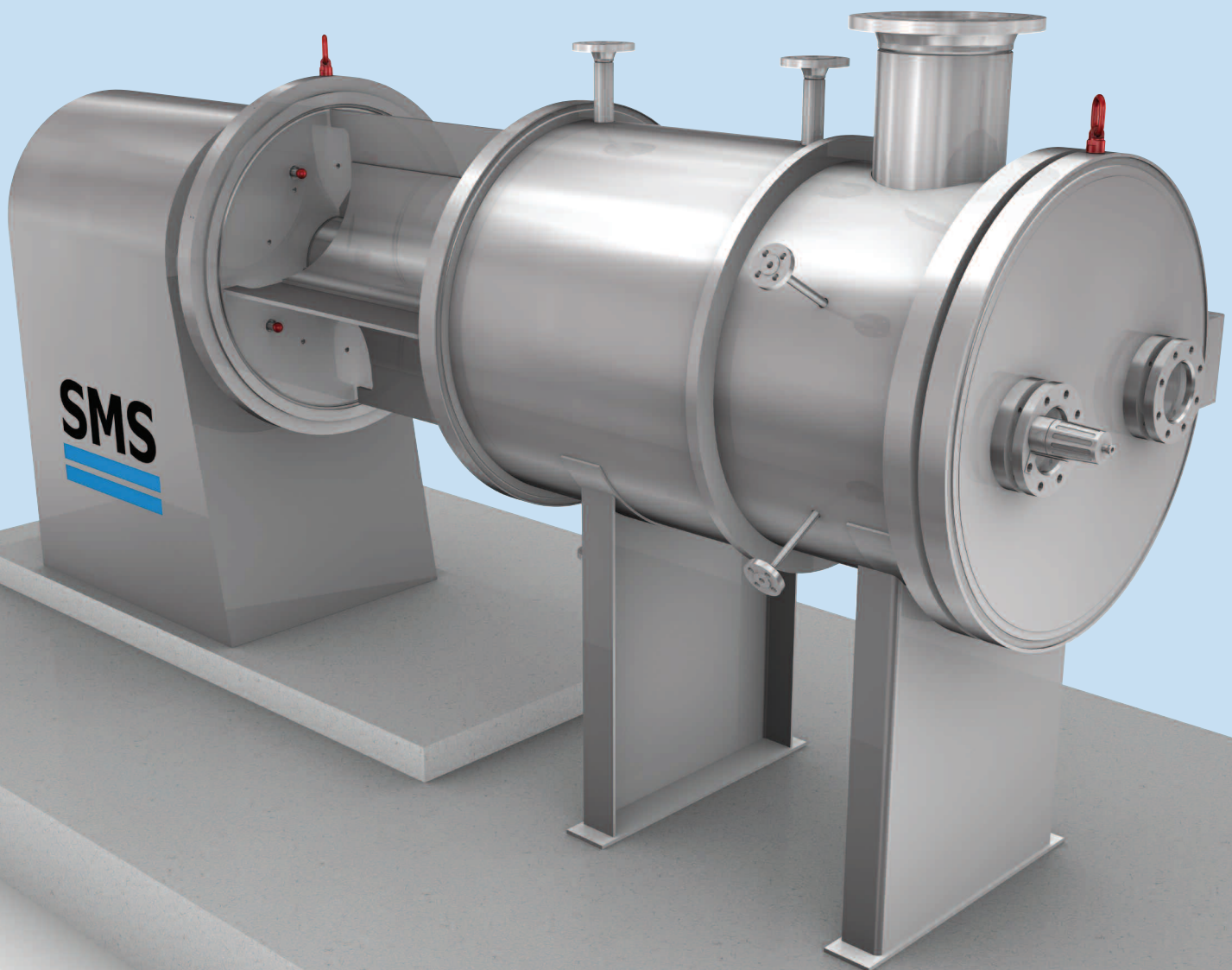


HYVAP DZH

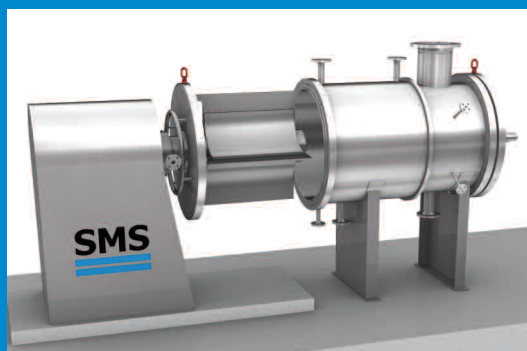
Horizontal Thin Film Evaporator for the pharmaceutical,
cosmetics and food industry



SMS

Specialist in thermal separation
and membrane technology

Buss-SMS-Canzler



HYVAP - Rear view with pulled out rotor

Typical applications:

- API and intermediates
- Antibiotics, enzymes, proteins
- Phyto-extracts
- Spices, flavours
- Oils, vitamins
- Natural pigments
- Cosmetic intermediates

Horizontal Thin Film Evaporator for the pharmaceutical, cosmetics and food industry

The new Buss-SMS-Canzler thin film evaporator type **HYVAP DZH** serves the increasing demand of the pharmaceutical, cosmetics and food industry for continuous concentration of heat sensitive, viscous and fouling products.

The **HYVAP DZH** is a horizontal thin film evaporator allowing easy access and inspection of the interior as well as controlled and reliable CIP cleaning.

The technology of the **HYVAP DZH** combines the proven advantages of our conventional horizontal thin film evaporator DKH with the following new features:

- Cantilever rotor design
- Comfortable rotor pull-out
- No bearing in product space
- Mechanical seal in hygienic design
- Electro-polished surfaces
- Sight glasses for inspection during operation
- Quick connection flanges

The new **HYVAP DZH** offers the hygienic design that meets all current GMP requirements.

Evaporator sizes range from 0.2 m² for laboratory to 6 m² for industrial applications. LP steam as well as hot water can be used as heating media.

Buss-SMS-Canzler provides design and engineering for evaporation stages and systems with the **HYVAP DZH** as the key component.

On demand Buss-SMS-Canzler will work within the framework of the customer's URS (User Requirement Specification) and in accordance with the applicable standards and regulations (cGMP, FDA, ISPE) to provide the following services:

DQ Design Qualification:

Basic Engineering and risk analysis with specification of the quality of critical parts

FAT Factory Acceptance Test:

Evaluation and acceptance against DQ documents at manufacturer's facility

SAT Site Acceptance Test:

Evaluation of equipment on arrival at customer site

IQ Installation Qualification:

Mechanical Completion and Inspection

OQ Operation Qualification:

Functional test

PQ Production Qualification:

Start-up with product (in co-operation with client)