The Dow Stade Site
A location overview

The Dow Chemical Company

Facts*
Sales: 60 billion US$
Employees: 52,000 globally
197 production sites in 36 countries
Approximately 5,000 products
Customers in 160 countries
* Figures rounded, status: year end 2011

Markets:
Agriculture
Automotive & Transportation
Building & Construction
Electronics & Entertainment
Food Packaging
Furniture & Furnishings
Health & Medicine
Home Care & Improvement
Paper & Publishing
Water Purification

The Dow Stade Site

The Dow Stade Site
Rotary Kiln

Dow Stade Site
Biox Waste Water Treatment

Dow Stade Site
Kiel Canal

Economic Environment
Find more: www.stade.de

Other large companies in Stade:
▪ AirBUS Deutschland GmbH (Aircrafts)
▪ AOS Aluminium Oxid Stade GmbH
▪ N.prior energy GmbH (Power supply)
▪ E.ON (Power supply)
▪ AREVA (Wind energy supply)

Epoxy-Products and Applications (finished products)
Epoxy Resins: Boat bodies, carbon fiber compounds
prime coating for car bodies, adhesives
Glycerin, synthetic:
cosmetics, soaps, paint, medicine, shoe polish
MDI:
automotive interior, mattresses, sporting shoes, insulations
TYRIN™:
window and door profiles, rubber hoses, cable coatings
Propylene Oxide:
automotive interior, shoe soles, oil additives, foams
Propylene Glycols:
pharmaceuticals, shampoo, cleaners, air craft de-icing
METHOCHEL™:
pharmaceuticals, food additives, cosmetics, ceramics, building industry
DOWANOL™:
Glycol Ethers, cleaners, coating
DOWEX™:
ion exchange resins

Chlorinated Organic Products™:
cleaners (textile, metal), Teflon*

* Trademark – The Dow Chemical Company

Environmental, Health & Safety
Safety
Accidents per 1000 employees:
German chem. industry
Dow contractors
Dow employees

Environmental Operations
Waste Treatment Technologies:
➢ Thermal Treatment Units
  Incinerator for solids (Rotary Kiln), liquids and gases
➢ Waste Water Treatment Units

Facts*
Foundation: 1969
Start-up of first plant: 1972
Size of the site: 5.5 km²
Employees: 1,500
Apprentices: 120
Production (net): 2.6 mill. mt/year
Installed capital: 4 bill. Euro
Power consumption: 570 MW (30 % own production, co-generation)

Logistics
▪ Sea harbor on river Elbe (between Hamburg and North Sea),
  next to Kiel canal
▪ Railroad connection / loading & unloading facilities
▪ Container terminal
▪ Road system access, highway A26
▪ Pipelines/ caverns for gas storage

Products leaving Stade Site (excl. brine), distribution
by mode of transport*:

Product Integration

Power
Brine
Hydrocarbons
Chlorine (as intermediate) and Caustic
Hydrogen
Performance
Chemicals
Basic
Chemicals
The Dow Stade Site 
I - Park - Concept

The Concept

Dow Stade’s I-Park concept focuses on the creation of synergies between a potential investor and the Dow Stade Site, utilizing existing or creating new economical relations.

The Stade location offers a variety of opportunities to potential investors. An investment gives access to a state-of-the-art, highly integrated chemical site infrastructure and to efficient shared services creating a solid base for a long term cost efficient operation.

Synergies:
- Joint utilization of services and infrastructure
- Raw materials (backwards integration)
- Use and/or finishing of Dow products (product line extension)
- Integration into production envelope (partial integration)

Integration:
- Direct physical connection to an existing production unit and integration into existing raw material and product envelopes
- Allocation of a dedicated area on the Stade Site
- Allocation of a dedicated area outside the fence

Opportunities for Investors

- State-of-the-art infrastructure of a chemical site location with competitive cost of all related services
- Cooperation with Dow as a strong global partner
- Competitive cost for available raw materials
- Fast track permitting of new plants
- Excellent relations to community and authorities
- Power generation on site plus supply from public grid
- Broad technical expertise and engineering on site:
  - Vessel - Civil
  - Piping - Construction
  - Plastics, FRP - Process and Design Engineering
  - E & I - Process Safety
  - Mechanical - Maintenance
- Logistics by ship, rail, road, pipeline
- Highly qualified and motivated personnel for plant operations and maintenance
- Close contacts to various universities
- Other companies close to the Stade Site
  … and for the employees :
- Excellent place to live
  - Stade (pop. 45,000) offers perfect expat facilities
  - Located on the river Elbe, close to North and Baltic Sea
  - City of Hamburg nearby
  …more : www.stade.de

Successfully Integrated Investors

On the Dow Site Stade (I-Park):
- Styron (Polycarbonate Plant)
- Air Liquide (CO Plant, technical gases)
- Air Products (Hydrogen Finishing Plant)
- Evides (Water Treatment Plant)
- Talke (Central Warehouse)

Next to the Dow Site Stade:
- Harbor
- Industry Rail Station, Container-Terminal
- Contractor Park (Maintenance Services)
- Various international shipping companies for logistics and transport of hazardous materials

Available Products & Utilities

- Acetone *
- Allylchloride
- Bisphenol A
- Butanol *
- Caustic
- Cellulose Ether
- Chlorine
- Chloroform
- Epichlorohydrin
- Epoxy Resin
- Ethylene
- Glycerin
- Hydrochloric Acid
- Methanol *
- Methylchloride
- Methylenechloride
- Paraldehyde
- Phenol *
- Polycarbonate *
- Polyethylene (powder)
- Propylene
- Propylene Oxide
- Propylene Glycol
- Propylene glycol Ether
- Sodium Chloride
- Sulfuric Acid *
  * purchased

Available Services

- Operation and maintenance of production plants
- Processing or heat treatment of liquid, solid and gaseous by-products
- Waste water treatment
- Environmental, Health & Safety
  - Plant integrity
  - Site safety
  - Site security
  - Emergency response
  - Work place safety
- Fire brigade
- Ecology services
- Consulting regarding
  - Design & Construction
  - Regulatory Affairs
  - Procurement
  - Public Affairs
  - Work Process Management
  - Mining, Storage and Pipelines

Deep sea harbor on river Elbe
- Drumming
- Tank car loading/unloading
- Rail car loading/unloading
- Long and short sea shipping
- Container terminal
- Gas storage caverns
- Analytical Services
- Apprenticeship Program
- Human Resources Development
- Community Advisory Panel
- Community Newspaper
- Local industry fair

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Potential Investors

- Finisher of products produced at the Stade Site
- Producer of specialty chemicals
- Supplier of raw materials and utilities
- Consumer of utilities and by-products
- Producer needing special infrastructure for waste treatment or recycling
- Service provider for the location
- …more on request

* Ethers