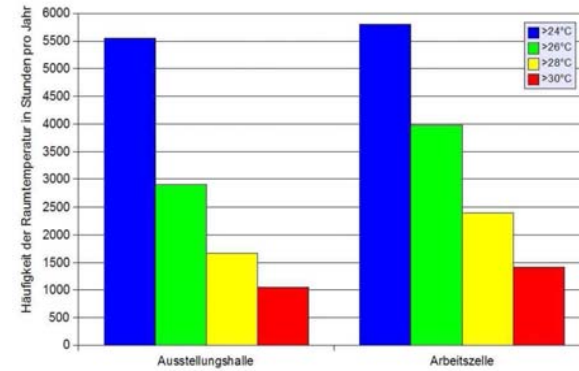
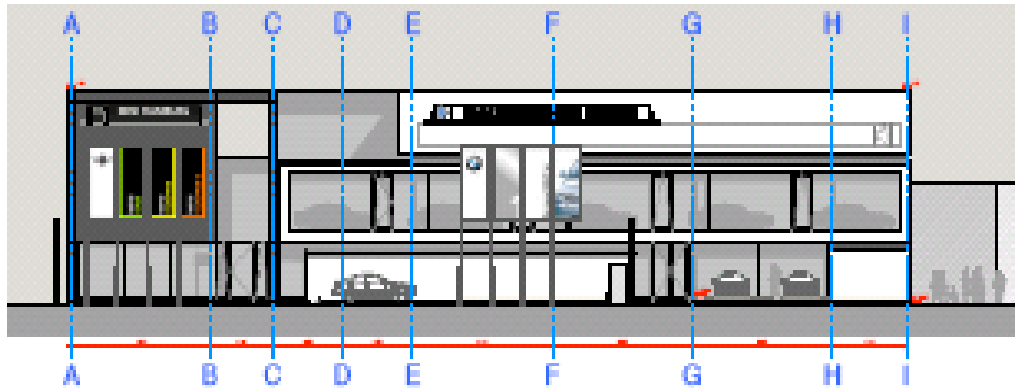


BMW Factory Hamburg

→ Building simulation

→ Flow simulation

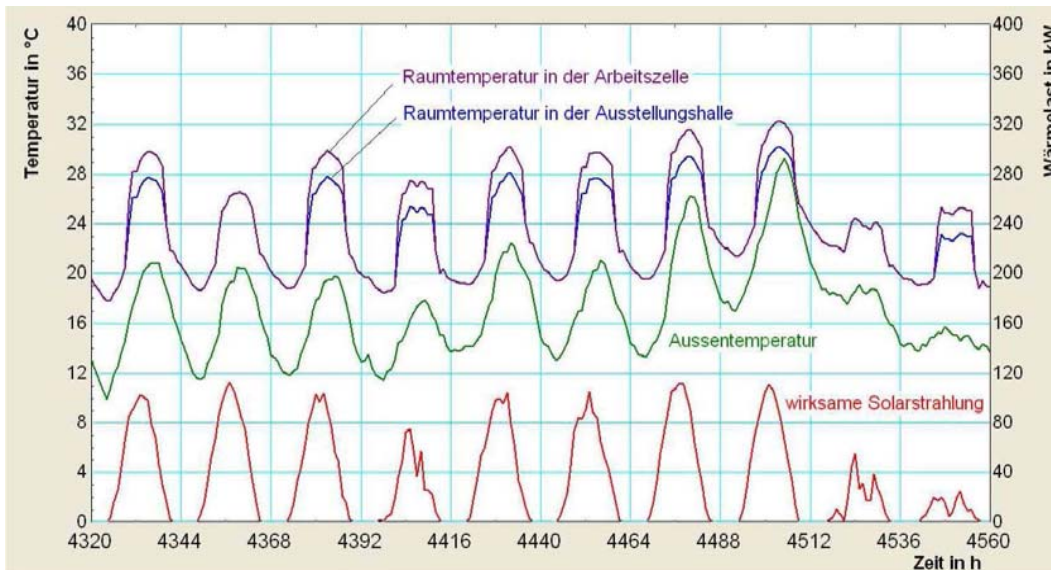


Parameter study to the cumulative frequency of the ambient temperatures as a function of the following structural-physical and building service parameters:

- Facade construction (glass quality)
- Floor construction (insulation, location)
- Roof structure (green covering of roofs, insulation)
- Lighting system, control
- Ventilation system (mechanical ventilation)
- Cooling system (underfloor cooling)

Benefit:

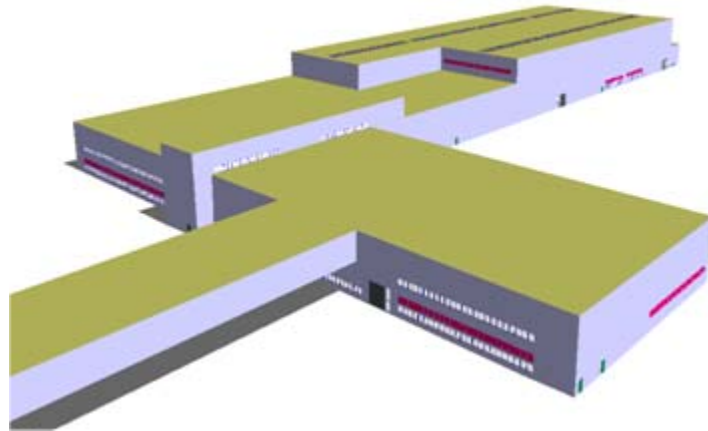
Solution with optimal cost / benefit ratio by holistic view of all the variable parameters.



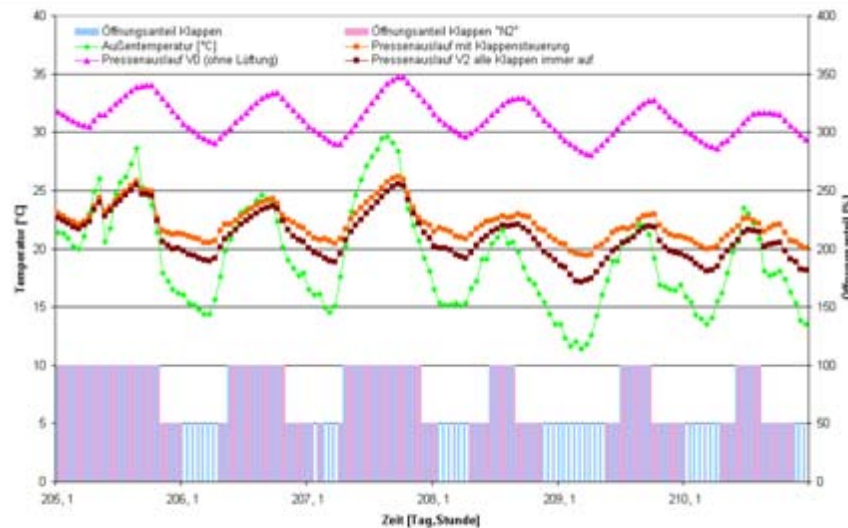
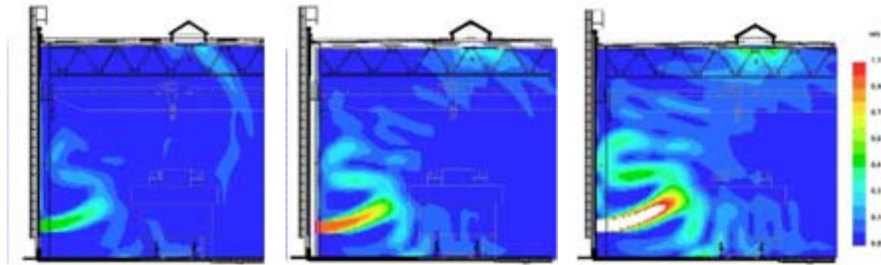
BMW Press Plant, Factory Leipzig

→ Building simulation

→ Flow simulation



Concept of a free press hall ventilation, taking into account the thermal and wind induced flows.



Benefit:

Ventilation and heat dissipation by free cooling, CO₂ - reduction and reduction of operating costs compared with conventional ventilation systems.

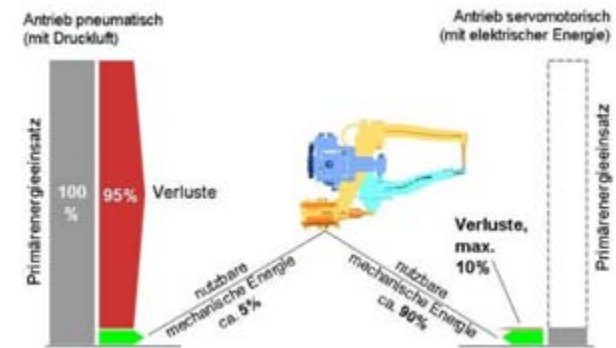
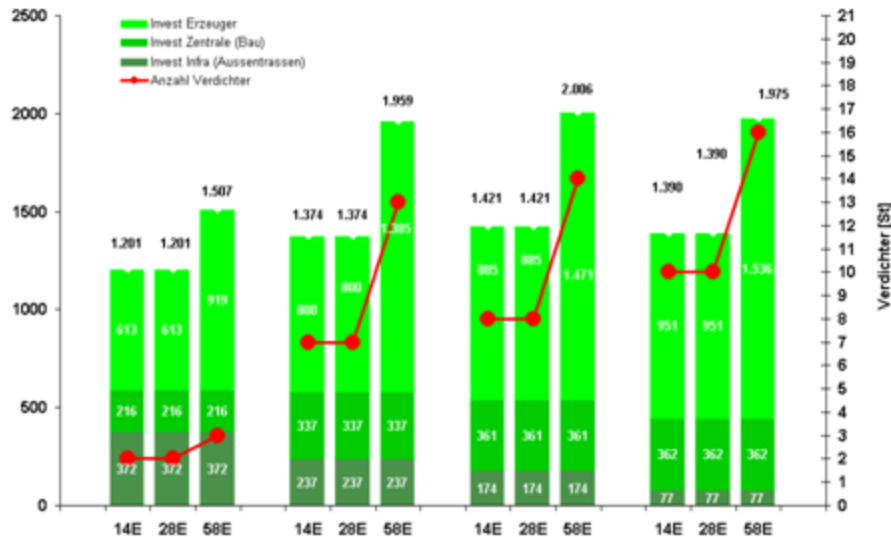
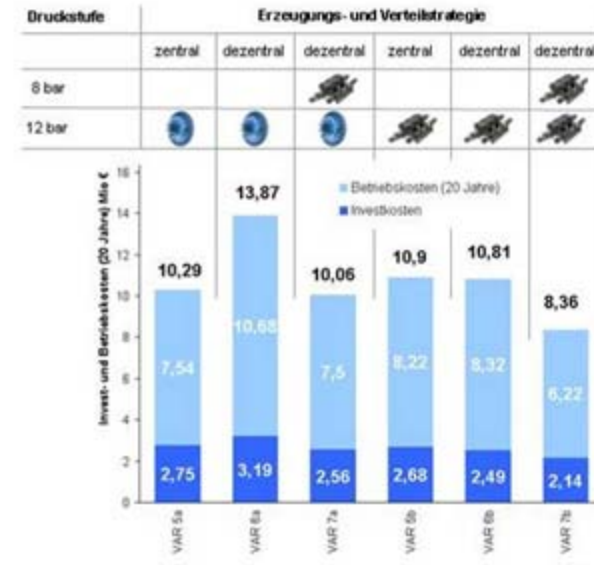
BMW AG, Greenfield

→ Study



Comprehensive Greenfield study for the air supply of an automotive plant with answering several questions

- Compression technology
- Distribution strategy
- Expansion strategy
- Redundancy strategy
- Needed pressure ranges



Benefit:

Overall approach with optimal investment and operating cost ratio, reduction of air requirements.