



## Construction and Reconstruction

Construction project for a new sterile plant ("Pharma 2020"), floor space 14.000 square meters with an investment volume of approx. € 23m. Execution of the project within time line and budget. Production of commercial products 18 months after completion of foundation.

Development of a production site as competence centre for pharmaceutical packaging including full QC service and with sales releases for pharmaceutical products.  
Annual volume of 100m. Blister.

Member of project team "New development Oranienburg Pharma Works" (€75m), planning and layout of the new factory, GMP certification of the old building substance.

Project management for the reconstruction and upgrade of a pharmaceutical manufacturing plant of



a subsidiary in Sao Paulo / Brazil (€12m).

Development of a long term site strategy resulting in a GMP- upgrade construction project with improved product and personnel flow.  
Total Investment app. € 3.5m. .

Project management for 2 new building and reconstruction projects (planning and execution) for the expansion and GMP-upgrade of manufacturing, completed on schedule and within budget with an investment volume of approx. € 6m.

## Optimization of economics

Consolidation of several rationalisation measures (re-engineering, redesign, group production, lead-time reduction) into a lean manufacturing concept, achieving > 10 % cost savings.

Development and implementation of a comprehensive Business Excellence Programme (balanced scorecard) with KPI's for Operations.

Consolidation of several rationalisation measures resulting in cost reductions of appr. € 8 m.

Development and implementation of a flexible working time model for production, based on annual working time accounts, reduction of variations in capacity utilisation and personnel costs for temporary employees.



Rationalisation of a medical product manufacture (injection moulding and extrusion components) of a producing subsidiary in Saarbrücken, reduction of manufacturing costs by > 10 %.

## Capital expenditures of manufacturing equipment

Development and implementation of PLC process automation for fluid bed coating, reduction of manufacturing costs by more than 80%.

Reduction of manufacturing costs by instalment of a new fully automated 15.000 L reactor for sterile pharmaceutical and medicinal products.

Development and installation (DQ/IQ/OQ/PQ) of fully automated in Line CIP equipment for the Blow Fill Seal technology.

Setup of a new production technology for sustained release products (pellets) as strategic activity for a location.



Introduction of an innovative air cleaning system (bio filtration of halogenated solvents).

## Change Management

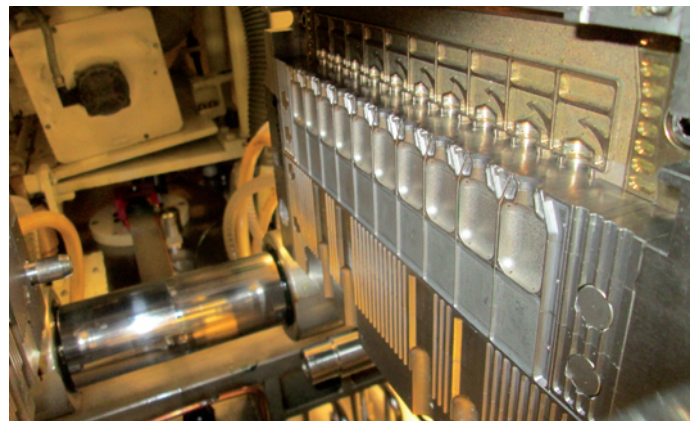
Project management for a production relocation of "Blow-Fill-Seal" equipment (Bottelpack®-technology).

Successful integration of two assembly lines following closure of two manufacturing locations in England and Germany, despite limiting cost and time factors.

Insourcing of European shipping activities, rental and renovation of a 10 000 m<sup>2</sup> distribution area, reduction of distribution costs and error rate by a factor of five.

Entwickeln und Umsetzen eines europäischen Servicecenterkonzepts für zahnärztliche Geräte. Auswahl geeigneter Kooperationspartner im In- und Ausland einschließlich Vertragsabschluss.

Set-up of a Service Centre for dental equipment in Konstanz into a profit centre with seven employees,



350 repairs/month, reduction of repair time by a factor of six, and guaranteed 48-hour service.

Development of an European strategy including the new manufacturing location "Oranienburg Pharma Works", consolidation of eight European locations into two locations in Germany.

## cGMP

Accompany 3 Quality System FDA Audits without #483 deviations for 3 manufacturing locations. Audit duration: 1-2 weeks/ inspection  
No # 483 report.

Yearly renewals of the manufacturing authorization after governmental audits

Anvisa Audit ( Brazil) without deviations.

