# ENGINEERING SERVICES

### **FOR PLANT MODERNISATION**





### SHORT DOWNTIME

### **HIGH EFFICIENCY**

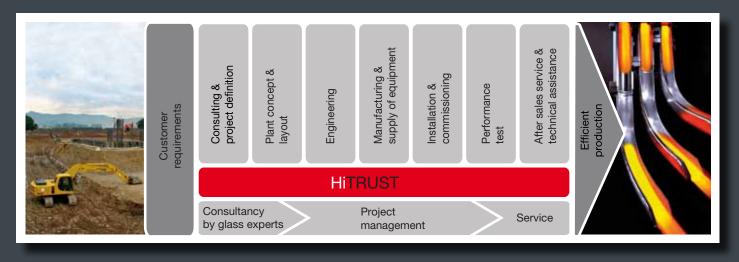


The modernization of a existing glass plant is an organisational masterstroke. The goal is a modern, high efficient production, with minimal production downtime during the realisation. Heye International is synonymous with quality and innovation in planning, realisation and construction of glass plants.

#### **HITRUST**

Our experience of every conceivable type of container glass project, gained from projects all over the world. We call this knowledge HiTRUST and through this initiative we can manage any and every aspect of your project.

All our competences are brought together in the HiTRUST process chain as seen below. The global in-house competence from Heye International and our long-standing know-how, covering all project stages and processes with our large pool of experts in each field of knowledge.



#### ENGINEERING COMPETENCE

Our engineering team has the competence for all glass specific areas of a glass plant and offers with a basic design all necessary informations for more detailed budget estimation for the whole project.

The experts from Heye International are not only focused on the scope of our own equipment, we are also taking care for all the surroundings in the Hot End area.

Our Hot End detail engineering ensures that the focus of your operators is the manufacturing of bottles, with easy access to the equipment in the Hot End area and ergonomic arrangement of control element equipment and tools.

Especially our deep production background in the Hot End area offers a detail engineering package with manufacturing drawings for the surroundings like:

- Complete Hot End layout
- Glass collecting funnel and chutes
- Intermediate platform with stairs
- Load distribution plate with support steel structure and oil collecting device
- Compressed air and vacuum connections with pipe routing in the Hot End area
- Pipe routing for central lubrication
- Water connections with pipe routing in the Hot End area
- Cooling air supply with ducting and layout of the blower positions
- Layout of machine control room with cable routing
- Risk analysis (e.g. noise analysis, fire fighting, safety arrangements)

A very important part is the definition and description of the interfaces in the Hot End area. A clear definition of the interfaces with Hot End layout, drawings with pipe and cable routing and manufacturing drawings for the surroundings in the Hot End area, like intermediate platform, gob funnel etc. the time for the procurement and installation will be reduced and the works well organized.

Another important detail is the cable routing to protect cables against hot glass and cullet. Heye International is taking care for the water distribution at the IS-Machine to make sure that the hot glass can be cooled every time. Also important is the protection of the equipment and control systems against water to avoid malfunctions.

We are using our know-how and our experience to design user-friendly working conditions for the operators, so they can set their focus in quality and efficient production of glass containers.

The Heye International Hot End detail engineering is proven in a plenty of glass plants worldwide.

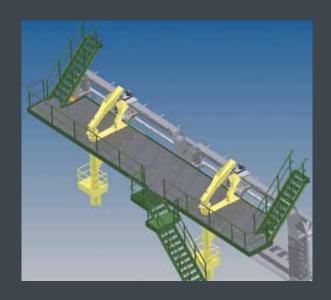
#### INSTALLATION AND COMMISSIONING

The Heye International service department is prepared to take care for the installation of the Heye International equipment and the corresponding surroundings. This can be done with local contractors under the supervision of Heye International experts or as our approved turn-key installation.

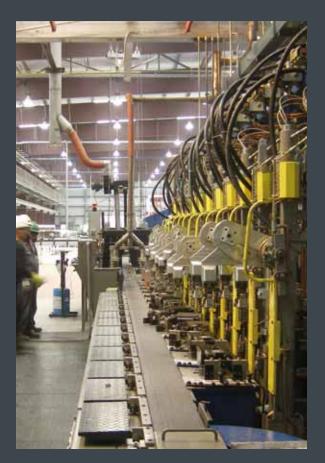
The experienced production specialists from Heye International will train the machine operators in their daily work, maintenance, trouble-shooting and will start the production.

If required, Heye International is able to provide a performance test for equipment or a defined production area.

Depending on the scope of the project Heye International will provide a site manager who will support the customer in the coordination of the works to finalize the project in time and quality.







#### STRUCTURED PROJECT MANAGEMENT

Each project has his own professional, highly experienced project manager, who leads every step and is the consultant for the customer. Therefore Heye International developed their own Project Management Handbook, called PM@Heye, which is based on the international PMI rules. With PM@Heye both project partners have a structured project programm with:

- Milestones
- Work packages
- Responsibilities
- Project organigram with contact person

The Heye International project managers will give continuous progress reports and are responsible for making sure the project is finalized up to quality standard, on budget and on time.

### KNOW-HOW TRANSFER WITH OUR TECHNICAL ASSISTANCE AGREEMENT

Modern glass container production is more than just using modern forming equipment.

The larger portion is determined by the methods and procedures and the way how all the stages of the process work and fit together.

Highly skilled employees are expensive and are becoming more and more difficult to find. In the day-to-day workings of a glass plant, special expertise is often necessary, not only when production is interrupted, but also when new technologies are being implemented or plant performance is being pushed to the next level.

A bespoke technical assistance service, where supplier and customer become true partners, is the answer.

## HEYE INTERNATIONAL SOLUTION PORTFOLIO

Hot End production equipment

Cold End inspection solutions

Project management

Plant engineering

Hot End detail engineering

**Technical Assistance Agreement** 

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