TAA - TECHNICAL ASSISTANCE AGREEMENT
BOOSTING EFFICIENCY
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, especially when new technologies are being implemented or plant performance is being pushed to the next level. A bespoke technical assistance service from Heye International, where supplier and customer become true partners, is the answer.

HITRUST - UNIQUE ADVANTAGES

The history of Heye International dates back to 1799. In more than 200 years we have built a unique expertise in container glass production.

The Heye TAA-Team are employees of Heye International which are educated in the Heye glass production. Each of them with more than 20 years of practical experience. They know exactly that an efficient production is not the result of a single person; it is always the result of a production team. Beginning from the batch composition through melting, glass conditioning, Hot End production and inspection quality control to the palletizing. This is how our TAA-Team acts, as a production team which has always the whole production in view. This is what we train to our customers.

We have direct access to production facilities and at the same time we can provide technical equipment. New technical solutions are tested first in our own facilities, using our own staff wherever possible. As result we have a 360-degree view of the world of container glass production, that is unique in the global market.

AIMS OF THE TECHNICAL ASSISTANCE AGREEMENT

The focus of Heye International is on a long term base. Heye International is looking for a sustainable partnership for the improvement of productivity and quality of the customer production. The success is proven by our customers and the results are Technical Assistance Agreements which are existing since 40 years.
A successful production with the NNPB-Process is not only the result of placing the equipment, a wide field of technology is necessary for the whole container glass production. It starts with the glass requirements and glass conditioning, including special equipment in the Hot End production area with the corresponding control technology. Also the mould design, the mould equipment, all the machine settings at the Hot End and the Cold End inspection equipment is important.

From the long term experience of Heye International in implementing the NNPB-Process, one of the major factors beside of the equipment is the education. Know-how and interaction of all production departments is the base of a successful NNPB-Production.

Heye International accompanies their customers for this wide range of areas and activities with long term assistance agreements to achieve their targets.

The Heye International NNPB-Assistance agreement takes a holistic view to all areas of the container glass production.

The wide ranging scope of our expertise covers areas such as:

- Plant audit
- Bench mark
- Glass chemistry optimisation
- Furnace operation and melting assistance
- Forehearth operation support
- Forming - setting up challenging products
- Mould design
- Quality control
- Ware transport and packaging
- Training and skill management in the Heye training centre
- Workshop and plant organisation
- Logistics and spare parts management

Heye prepares always a tailor made concept for the TAA-Activities based on the plant audit.
# Technical Assistance Modules

## Areas of the Glass Plant
- Raw material preparation (Batch Plant)
- Glass melting (Furnace)
- Glass conditioning (Forehearts)
- Glass forming (IS-Machines with ware handling)
- Container inspection and quality standards (Cold End)
- Mould design, repair and maintenance workshops

## Heye Preconditions and Requirements
- Requirements to the glass quality characteristics
- Requirements to the production equipment
- Requirements to the quality standards and inspection equipment
- Requirements to organisation and equipment of the workshops

## Heye NNPB Assistance Modules
- **Coordination and management of the technical assistance modules by periodical plant audits and bench marks based on KPI's**
  - **NNPB-Module 1:** Training of operators in the NNPB-Process, machine settings, gob-forming, correction of container defects
  - **NNPB-Module 2:** Training in organisation and know-how in mould design, mould workshop and maintenance of variables

## Heye Plant Performance Assistance Modules
- **Coordination and management of the technical assistance modules by periodical plant audits and bench marks based on KPI's**
  - **Plant Performance Module 1:** Raw material analysis, support in batch composition
  - **Plant Performance Module 2:** Support in optimisation of energy consumption
  - **Plant Performance Module 3:** Training of operators in optimisation of the production (speed and quality) in the PB- and BB-Process, machine settings, gob forming, correction of container defects, machine start after job change
  - **Plant Performance Module 4:** Training in organisation and know-how of the quality control specialists and the Cold End operators
  - **Plant Performance Module 5:** Training in organisation and know-how for the IS-Maintenance workshop with special regard to reduce the job change downtime

## Heye Support Modules
- Free access to the Heye 24/7 service hotline and free software updates for the Heye equipment