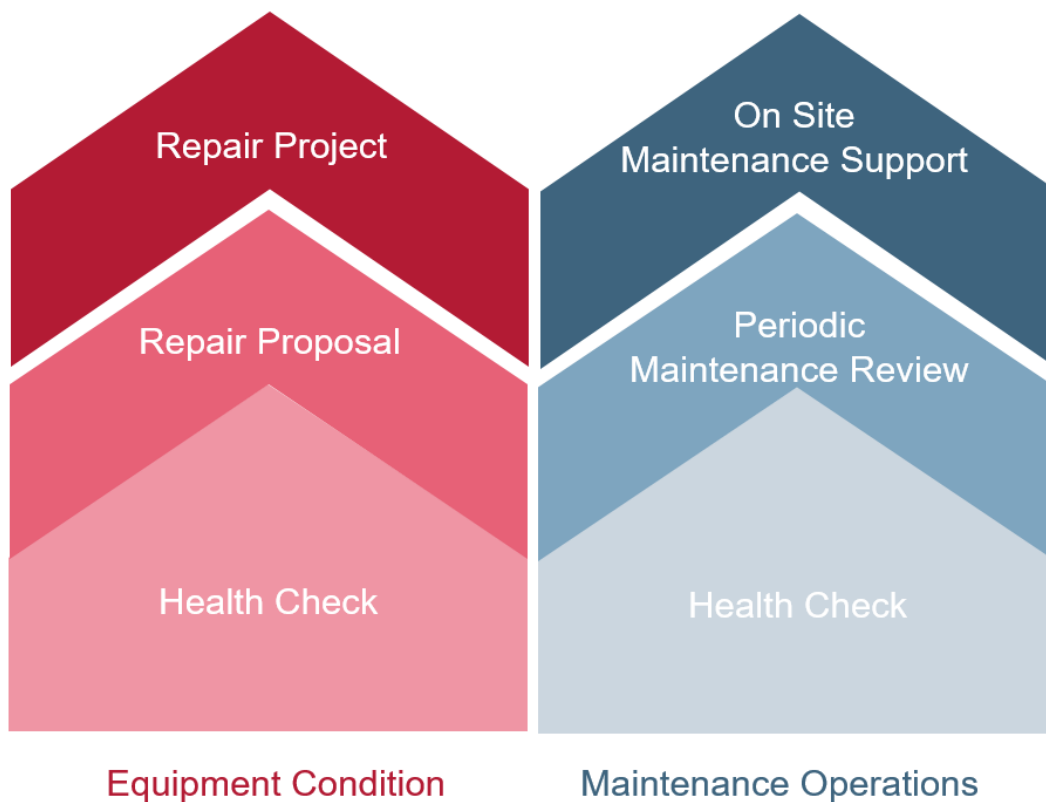


Technical News Bulletin

Steinhausen, January 2018



Maintenance Support

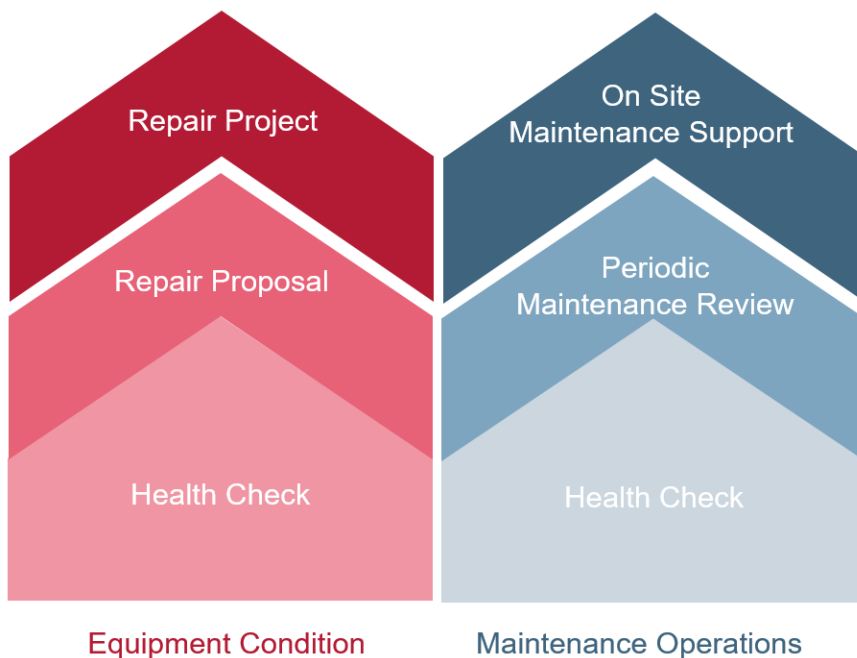
- Modular support options to fit specific needs
- Six new forming maintenance support packages
- Customized Technical Services Agreement

Introduction

Bucher Emhart Glass supports your maintenance of forming and inspection equipment with modular support options to fit your specific needs. Six new forming maintenance support packages are available for equipment condition and maintenance operations. Inspection maintenance support includes a customized Technical Services Agreement (TSA).

Well-maintained equipment increases productivity and reduces unplanned downtime.

Maintenance Support (Forming)



Equipment Condition

Health Check

The Health Check is an in-depth on-site audit to get a detailed overview about the machine's technical condition. It is performed by an experienced Bucher Emhart Glass (BEG) mechanical service engineer plus a production specialist. The Health Check is based on a detailed checklist and it takes 2 days per machine line to finalize.

You get:

- A detailed report with pictures to explain the condition of the installed equipment from feeder to stacker
- A list of shortcomings and recommendations

The Health Check gives you an in-depth technical understanding of the mechanical condition of your installed equipment, shortcomings and recommendations.

Repair Proposal

A Repair Proposal starts with the Health Check (as detailed above).
Additionally, a technical maintenance expert identifies the customized and prioritized scope of work and associated budget for identified equipment to be repaired.

You get:

The Health Check
A customized repair proposal (quotation) including required parts and services

The Repair Proposal gives you a clear budget.

Repair Project

A Repair Project starts with a Repair Proposal (as detailed above).
The repair is realized per the Repair Proposal.
Repair work is performed on-site or off-site at the Bucher Emhart Glass repair partner Ergon Meccanica, Italy.

You get:

- The Repair Proposal
- A professional repair of the equipment with original parts, qualified service engineers and Bucher Emhart Glass project management

The Repair Project guarantees professional repair of your equipment with BEG original parts and qualified service engineers.

Maintenance Operations

Health Check

The Health Check is an in-depth on-site audit performed by an experienced BEG mechanical service engineer plus a production specialist. 5 days in plant, including a management review on day 5.

The audit includes:

- Gap analysis / report on key maintenance routines based on BEG maintenance manuals

- Quality of current maintenance procedures
- Parts requirements
- Workshop operations
- Downtime measurement
- Personnel level and skills

You get:

- A detailed audit report and gap analysis of current forming maintenance operations versus BEG maintenance guidelines & recommendations

The Health Check provides guidance on maintenance operations based on the BEG maintenance manuals & recommendations. It is a professional analysis based on global glass industry know-how.

Periodic Maintenance Review

The Periodic Maintenance Review starts with the Maintenance Operations Health Check (as detailed above). Additionally, quarterly maintenance follow-up sessions with an experienced BEG service engineer & a production specialist assist in closing the gaps identified in the Health Check.

It is a formal maintenance operations effectiveness review using an iterative maintenance model.

You get:

The Health Check

3 follow-up plant management review sessions with a BEG service engineer, a production specialist and a BEG management representative, 2 days in plant per session

- Time frame: 12 months

The Periodic Maintenance Review improves equipment condition and reliability and reduces repair costs. It contributes to a more stable forming efficiency and reduced chance of unplanned breakdowns and related overtime.

On-Site Maintenance Support

On-Site Maintenance Support starts with the Periodic Maintenance Review (as detailed above). Additionally, a full time BEG maintenance service engineer in your plant supports you in the following maintenance areas:

- Introducing BEG equipment maintenance guidelines based on BEG maintenance recommendations
- Providing maintenance on-the-job knowledge transfer for plant maintenance staff
- Empowering plant maintenance staff

You get:

- Periodic Maintenance Review
- Full time BEG maintenance service engineer in your plant (normal week, dayshift operations)
- FlexIS Remote Service
- Time frame: 12 months

The On-Site Maintenance Support offers you continuous hands-on maintenance supervision by a BEG maintenance service engineer in your plant, to implement BEG maintenance guidelines and to transfer maintenance skills to your maintenance organization, protecting your investment.

Maintenance Support (Inspection)

Technical Services Agreement (TSA)

A Bucher Emhart Glass (BEG) inspection service engineer performs a periodical complete health check, preventive maintenance as well as minor repairs for each inspection equipment in your plant to ensure optimum equipment performance. At the same time, refresh training can be conducted if required.

Required time per visit for one inline / statistical equipment: first year: 1 day, second year: ½ day

You get:

- Twice a year: health check, cleaning, adjustments, repairs, recommended parts; performed by a BEG inspection service engineer
- Including detailed report about equipment status and training performed

The Technical Services Agreement (TSA) maintains your inspection equipment in optimal condition, reduces unplanned down time and increases productivity.

Supported Equipment

Maintenance Support (Forming)

- Equipment Condition: BEG forming equipment; covered are IS, AIS and NIS lines
- Maintenance Operations: BEG forming equipment; covered are AIS and NIS lines

Maintenance Support (Inspection)

- Covered is all BEG Inline and Statistical inspection equipment