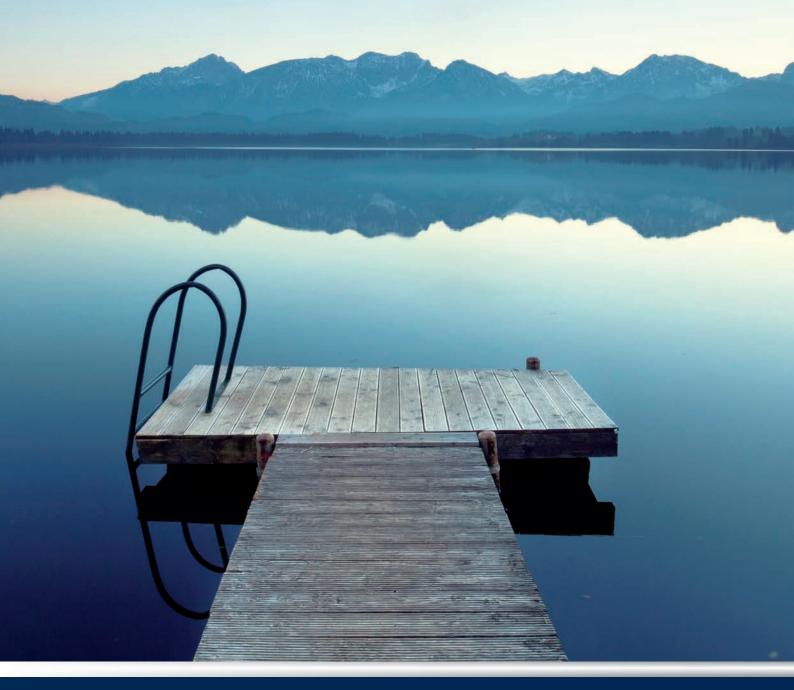
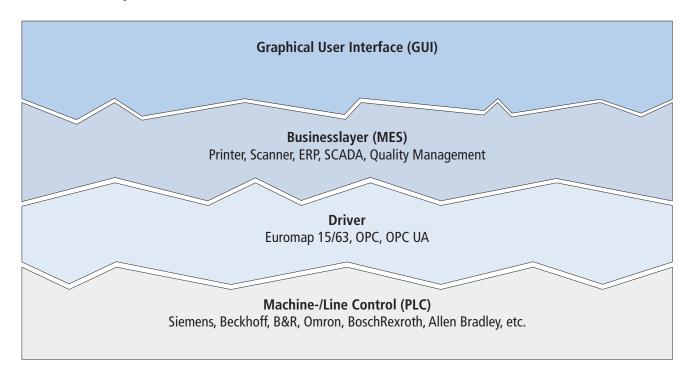
Our competence for your entry into the Industry 4.0

bfa solutions Itd



Areas of competence



Software engineering:

- Drafting of rough papers, functional specifications and plant standards
- Collaborating with the customer during the development of a prototype plant
- Developing software according to specifications
- Realising complete projects, where we may also profit from the competences of our partner firms
- Commissioning and providing support during the manufacturing of plants, as well as customer training

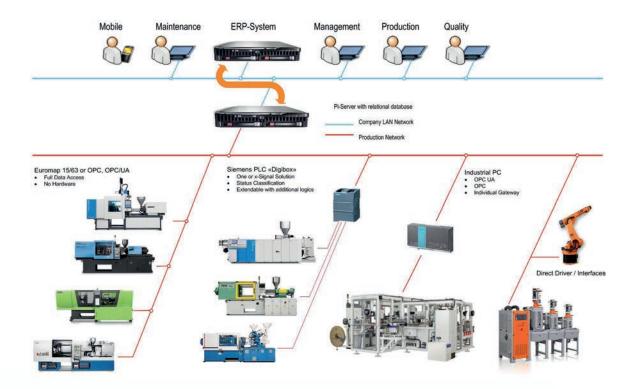
Software development:

- Defining and realising interfaces between interdisciplinary applications
 (e.g. MES and machine input via OPC, OPC UA etc.)
- Managing parameters through security and change implementation monitoring (FDA standard)
- Collecting and evaluating production data
- Developing software according to customer specifications in the areas of HMI and computer engineering
- Integrating camera systems, scanners etc

Our services and competences.



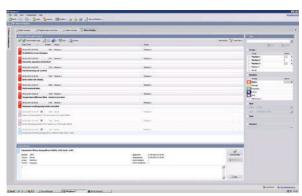
With PiSolutions[™], an in-house Manufacturing Execution System (MES) is available to optimise manufacturing processes.



- PiSolutionsTM monitors the processes cycle of the production and guarantees complete traceability.
- PiSolutions™ is autonomous. However, it can coordinate key figures, such as OEE and KPI, and, according to preconfigured criteria, send these to specified individuals.
- PiSolutions[™] has a modular build and can be extended piece-by-piece, which is why adjustments and extensions are always possible.
- PiSolutions[™] is user-friendly and flexible, and all users can adjust their application according to their requirements.
- PiSolutions[™] enables solutions in a heterogeneous environment. Therefore, different plants from varying generations and with different controls can be united.
- PiSolutions[™] adapts to the latest technologies (HTML5, CSS3).



Pi_Assembly is the solution in the area of automation. The system allows for the monitoring not only of individual plants in numerous locations, but also of various production lines within a single production plant. At the same time, it allows for the gradual expansion into a full MES with job management and ERP-Connectivity with quality management.







Pi_Inject is the solution for the discerning manufacturer of injection moulding. Any injection moulding machine can be monitored. This is possible either by implementing a simple logic with integrated controller and manual classification (Pi_DigiBox), or by connecting a modern interface such as Euromap 15/63, OPC, OPC/UA, Arburg VE 437/xx, etc. A comprehensive expansion, which includes the automation machines and building technology, is also possible, because the functionality can be extended modularly (e.g. with batch management or energy management).



The option Pi_OEM is geared towards machine manufacturers who are seeking new ways to monitor the production and servicing of their machines and production lines, as well as the integration of superordinate control systems, etc. The design of the completed product reflects the customers' branding.

Advantages:

- Time to market: the application of pre-existing concepts, together with the high quality of standard modules, assures that the implementation time and development risks are reduced.
- Transfer of knowledge: collaboration between the staff of the customer and bfa solutions ltd allows for a transfer of know-how.
- Back up of knowledge: the inclusion of a second company means that the customer has the option to obtain additional support during manpower shortages.
- Systems maintenance: bfa solutions ltd supports and executes the maintenance and further development of Pi components

PiSolutions™ bundle solutions.

Founded in 1981, bfa solutions ltd is an engineering firm with a high level of competence in the area of industrial automation and the optimisation of manufacturing processes.

Our know-how is interdisciplinary and encompasses the traditional areas of automation technology as well as computer technology. This allows for the conception and realisation of solutions for plant control systems (PLC, SPS) from the shop-floor level, and the data-centred collection of manufacturing data, right up to the interfacing with ERP systems and mobile applications.

Our production platform in the MES area ranges from the collection of manufacturing data of a small number of plants of varying ages and types (different interfaces and controls etc.) to the interlinking of numerous locations for companies operating globally. At the same time, our services are in high demand in the building of automation systems for all types of industries. bfa solutions ltd produces solutions that are widely used in the following areas:

- pharmaceutical sector
- medical sector
- plastics sector (injection moulding/extrusion)
- automotive sector
- packaging sector
- beverages sector
- watchmaking sector
- foundry sector

Many plant manufacturers have limited development possibilities, particularly in relation to the more complex programming of high-level software language, and this is where we have the competence to fill the gap in demand. A great advantage is that our development department is not involved in the day-to-day operation of the business, and consequently is able to concentrate completely on individual projects. Some parts of our software is FDA approved. Due to numerous installations abroad, PiSolutions™ is available in the following languages: GER, ENG, FRE, DUT, ESP, ITA, DAN, TUR, RUS.





Over 30 years' experience!

Sales representatives:





Plastech Solutions Ltd. // Manor Barn // Church Rd // Bacton Norfolk NR12 0ET





Partner in Plastics // De Akker 114 // NL-2743 DP Waddinxveen

ERP solution partners:



Systems partners:







Engineering Partners:

Development/Project management partners:







bfa solutions Itd

bfa solutions ltd // Industriestrasse 1 // CH-8117 Fällanden
Phone +41 (0) 44 806 64 64 // +41 (0) 44 806 64 04 // info@bfa.ch // www.bfa.ch