

# Infrastructure support - building services



Manufacturing operations throughout the globe continue to face ever changing ecological, economic and legislative demands for energy efficient, sustainable and low-carbon building services technologies.



## The role of building services

With the rising cost of energy consumption a comprehensive building management system is required to control and monitor the use of distributed energy. By utilising ABB's extensive building management experience, you can prepare today for the 'challenges of tomorrow'.

ABB Consulting specialises in industrial, rather than commercial, building services. We understand the particular demands of industrial users, particularly when dealing with potentially hazardous environments and our solutions match those demands.

## Energy management

### Energy saving and carbon emissions:

Building services are energy hungry systems which can account for as much as 30% of your site energy costs. Your building utilities which are not directly associated with production can be a low priority which may be badly controlled and operated and subject to breakdown maintenance. The energy costs are often seen as just a 'necessary cost' of doing business.

We can survey and review your systems with energy conservation in mind to provide you with a prioritised report identifying remedial work. Refurbishment or changes to the operational configuration can often improve efficiency, effectiveness and reduce costs. We usually identify a number of small remedial tasks with short payback periods.

## Specialist building services

### Critical building environments:

ABB Consulting can support your project from concept to commissioning and fault diagnosis where the environmental control of a space or process activity is critical and safety is paramount.

Clean rooms, laboratories or COSHH LEV systems all require bespoke ventilation design and equipment selection to maintain a safe operating environment. Often these systems not only support of research and manufacturing but are essential when demonstrating fit for purpose processes to customers and regulatory bodies.

### Controlled environments:

Heating, ventilation or air conditioning are less critical, but essential to create and maintain a modern working environment in accordance with a surprising number of statutory regulations. From detailed design and the specification of remedial works, ABB offer support, tailored by you, to complement your companies existing engineering expertise.



### Piped services:

We can design and specify, all internal piped services including water storage, pressurisation and distribution networks for non-process buildings. These piped services can range from multi-services systems within large laboratory complexes to simple domestic services in a small office or amenities building.

Basic utilities or steam, condensate, cooling water or gasses can be designed and integrated into your buildings in compliance with current statutory regulations. Like most utilities these systems are often overlooked and neglected until they go faulty. We can survey and review all your services to identify, often modest remedial work, to prevent complaints and costly repair when your utilities suddenly fail.

### Problem solving

Buildings and their services are an important company asset that provides an efficient working environment to aid and support manufacturing.

Competition in the global market requires a flexible approach to the use of such assets, however the change of use or the loss of experienced staff may mean that these systems are poorly understood or are no longer fit for purpose, becoming a barrier to profitability, performance or staff relations.

By identifying your requirement and challenging your needs and assumptions a brief visual survey often results in establishing the root cause of a problem and the original design and operational criteria of an existing system. Fundamentally, this is a first step towards problem solving and maximising the benefits of these assets.

### Where we can help:

New build or refurbishment:

- Plant control rooms and amenities
- Laboratories – analytical and research
- Clean room design
- Manufacturing – cross contamination
- Buildings in hazardous areas
- Offices
- Explosive - overpressure buildings
- Toxic refuges
- Infrastructure buildings, eg. switch rooms
- COSHH and dilution ventilation
- HVAC - control methodology / pressure regimes
- Dust and fume control
- Piped services design
- Controlled environments
- Prevention of hazard ingress
- Construction support
- Measurement / documentation

For further information please contact:

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