Security that advances industry
The Building Integration System

BOSCH
Invented for life

Never before have manufacturing operations been so highly automated. Computers are now directly used for production and quality control, as well as to support these and many other processes. The growing role of technology is also creating new safety requirements. To help quickly trace immediate threats and communicate instructions on how to deal with them, Bosch has developed the Building Integration System.

The sheer size of production plants poses special challenges. It's common for facilities to cover over a million square meters and accommodate a wide range of activities. The biggest challenges are complying with high safety standards and ensuring functionality and cost-effectiveness.
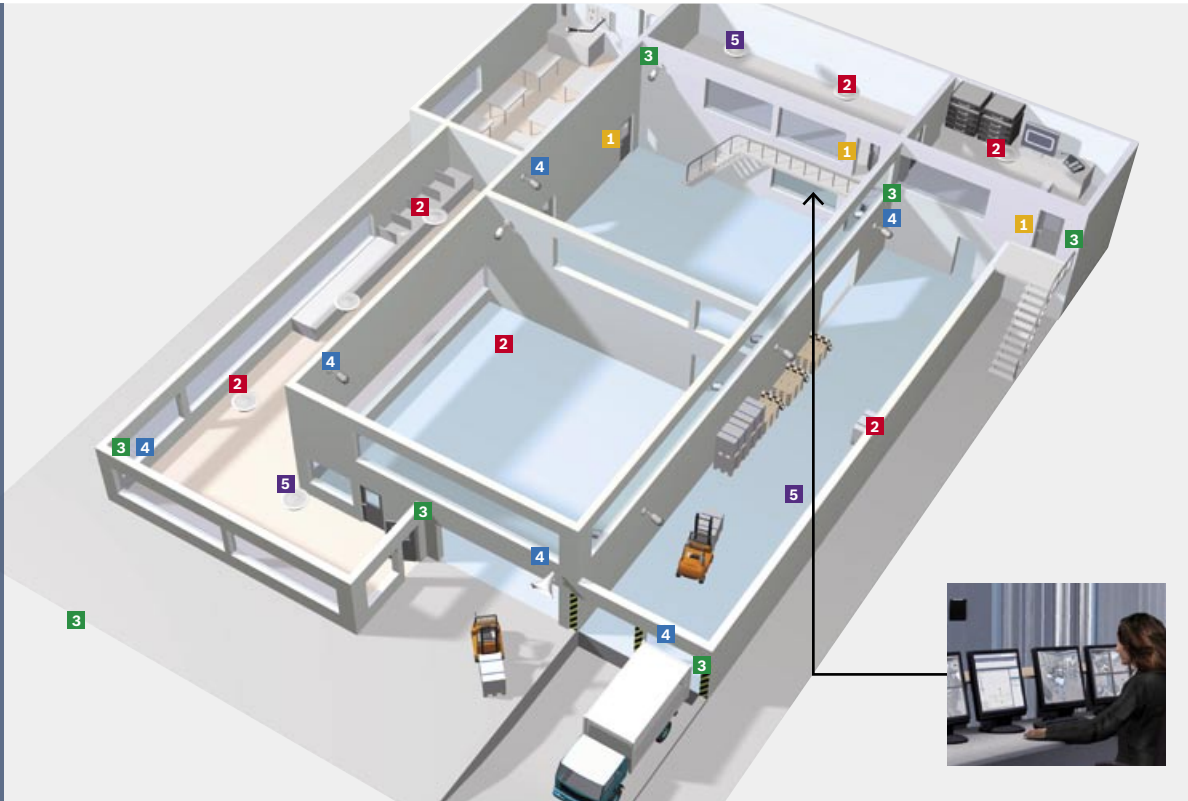
The Building Integration System does the job: information on all areas is clearly displayed on a single user interface. A distributed, server-based management system makes it easy to control all functions. In the event of an emergency, customized action plans guide personnel.

Security in practice:
The Building Integration System in use
High-level interfacing of all security systems ensures optimized event management to meet the unique needs of any plant: access control, intrusion systems and video surveillance. In the event of a fire, emergency exits are automatically unlocked while announcements support evacuation. Fire detection systems prevent damage to equipment. Intrusion and video systems protect stored assets, while high-security areas are secured against unauthorized access.

High-level interfacing with all security systems to flexibly meet the needs of industry

Building Integration System (BIS): Everything controlled by the same software

1 Access control systems: control software, door controllers, card readers
▸ Flexibly definable employee access privileges for storage and production areas; additional biometric access controls for development laboratories.

2 Fire alarm systems: fire panels, fire detectors, manual call points, interfaces
▸ Optical-thermal-chemical fire detectors that distinguish between production-related and combustion gases; emergency shut-off of resources such as gasoline, diesel fuel, electricity and gases; gas and oil leak detection; monitoring of potentially explosive areas by flame detectors with UV and IR sensors; fully automatic monitoring of test rigs by flame detectors and smoke extraction systems; control of alarms and flashing lights for evacuation.

3 Intrusion alarm systems: control panels, motion detectors, transmission units, signaling devices, panic button

4 CCTV – video surveillance: cameras, IP video, digital recording and storage, intelligent video analysis (IVA)
▸ Fast and reliable identification of possible production losses; AutoDome (with AutoTrack) video surveillance of large and diversified premises.

5 Communication systems: public address and voice alarm, conference systems
▸ Electro-acoustic systems: support for building evacuation; communication between firefighting units.

The BIS also integrates conventional building systems and processes including building automation, electrical functions, HVAC and others.

More information on innovative security systems is available at www.boschsecurity.com