

Reasons for the purchase of an E&B control.

Quality/security/service/price

I. Quality

1. The Components and/or parts that are used have been tested for at least 1 year in industrial conditions without restrictions.
2. The keypad for our controls is the best available on today's market. That has its price, but it is worthwhile. The keypad is not a foil keyboard glued onto an aluminum board with low push press buttons in the background, but a printed circuit board with integrated circuit and integrated contact press buttons.
3. The structure of the control is compactly and cleanly separated according to the following criteria:
 - A. Operating panel within plastic frameworks with LCD behind Plexiglas windows.
 - B. Logic board with CPU, Flash PROM, RAM and different interfaces.
 - C. Shield board for rectification between low and high voltage circuit.
 - D. Relay boards with analog and digital inputs and outputs and integrated RC articulate for rectification of relays.
 - E. Plexiglas protective cover.The dimensions are width: 340/260 mm, height: 260/340 mm, depth: 80 mm
4. Because of the compact construction of the hardware, the control can be integrated into all controls offered on the market. (No SPS). In most cases the existing control cabinet is used for the installation.
5. The same controller can be used in Hot smoke-, Cook- and Bake units, as well as Intensive cooling units, climate smoke – climate storage – and ripening units, tumbler and autoclave etc. units. This complexity is important for the user, operator and service personnel. One control for most diverse applications.
6. Separate power supply unit 230V with built in Elco for emergency power supply of the control in order to secure the current data in the case of a power failure.
Platium: With the PLATIUM a multi-range power pack (85-230 V) is integrated into the control.
7. The control is CE, CSA examined and approved.
8. The customer can program all cook-, smoke-, bake-, tumbler- etc. programs with this control freely without any restraints. The corresponding process codes are used in accordance with assigned variables such as time, humidity, temperature etc
9. The capacity of the control contains 1800 possible adaptation of the necessary configuration for programs and steps. 60 programs with 30 steps are standard. Optionally e.g. 30 programs

with 60 steps is possible . Moreover, a linkage of two and/or several programs is possible. The PLATIUM has as standard 99 programs with 99 steps.

10. New technologies software upgrades are frequently available. The software is in house developed and maintained.
11. Technologically superior program modules and programs; for example for optimizing the cooking process as differential cooking processes with the use of programmable F-value control and C- value information to avoid high weight losses and save energy. (***This is not*** the plain Delta T- cooking process).
12. The E&B Cook step does not need a preceding internal cook step, The E&B cook process uses the actual internal temperature as a start value, with the service variable 38 the desired Delta –T can be adjusted, for calculation in regards to the maximal house temperature.
13. Technological programs for Salami ripening/maturing, which making it possible to prevent a dry rim surface formation, with the use of the monitored and continual recorded Surface-AW-value process step.
14. Calculation of the “degree/hours-value” to meet the USDA required norm.
15. Program for the Entalpie control of an air conditioning system. The control decides independently whether the usage of outside air regarding to humidity and temperature can be used.
16. Glycol control over that is independently adapted to the inlet temperature of the Glycolcycle with air conditioning systems due to the ambient temperature.
17. Employment of continuous pH value control and regulation according to the pH desired value in climate smoke and climate fermentation units.
18. Employment of scaling system to continues control of the decrease in weight, primarily in climate smoke, fermentation and post ripening units.
19. Ripening controller which regulates circulating air speed based on humidity release from the product.
20. Core temperature control with several core probes for large cook, smoke, bake etc units, process is controlled to the lowest temperature.
21. Core temperature control of a second probe at end of a program for the verification of the final value. If the programmed value of the core temperature is reached, the control switches to the second measuring point and compares the programmed value. If the criteria is met, the control goes into a 5min holding stage . If the criteria is not met, the control operates until the set value is reached +5 Minutes. (USA)
22. Optional – Core temperature calculation (***without a core probe***) with FEC is available. The necessary form software is also available.

23. Exhaust air amount regulation during drying processes. The dampers closing, when the humidity value is below set point. The Humidity builds via water release from the product.
24. Analogue outputs as 0-10V and/or 4-20mA for proportional control of numbers of revolutions of the circulation motor, constantly regulating gas burners or Heater valves, cooling valves, flap position etc. with 0-10V and/or. 4-20mA signal
25. For Tumbler, a vacuum control, speed regulation, thawing processes, recipe administration also weight control and massaging with distance are available
26. The control operates glow- smolder, friction and liquid smoke generator. The necessary pre-igniting times and ignition coil check are software and hardware standard.
27. Temperature is displayed in Grad Fahrenheit or Grad Celsius.
28. Input of 12 wagon numbers; for product identification isselectable with service variable.
29. Input of article numbers; for product identification and traceability
30. Personal identification with two different admission levels. The identification takes place either (standard) with personal admission code and random number generator or with contactless transmission to a card reader.
31. Batch and article number input at the control.
32. The control contains a program listing which is displayed at the monitor in an organized manner. Written notes on the unit control are not necessary.
33. The control has two language files, which are reversible. Standard language is German; the second language depends on user requirements.
34. The display for remaining time and temperature and/or humidity and core temperature (depending on program execution) can be readjusted with the Zoom function to a bigger display.
35. During the current program, all programs can be viewed. The current running program is not affected when viewing other programs.
36. The PLATIUM has the option to view process data in graphical form . Process data can be stored up to 6 month (depending on the set recording interval)
37. The remaining process time can be displayed at any time.
38. The Control monitors the cleaning interval at smoke houses. A maximal Smoke time can be set . Smoke times then are deducted until the counter reaches zero. To the indication that the cleaning is necessary, the control display flashes. The regular function is not impaired thereby. The flashing stops, if the process cleaning was sufficient used.
39. The control is IP65 built and is very durable.
40. World-wide several, thousand customers trust the quality and the authority of the E&B and their Controls.

II. Security

41. The control verifies its program contents every 50ms with a query test.
42. In the case of power failure and/or interruption, the currently running program and/or its current data are stored. After a restart, the control continues its process, where it left off.
43. The room, core temperature and humidity probes are checked continuously for breakage and/or short circuit.
44. Optional available for the SC-9000 are: 8 additional relays, temperature inputs and 8 optocoupler inputs 24V (2 times 230V).
With the PLATIUM these additives are standard.
45. Through the already built-in RC components on the relays board these components are not required in the control box of the unit.
46. The function of an ignition coil in the smoke generator can be checked.
47. For the closed system: smoke times and material limitation are standard.
48. The program data are downloaded with the SC-9000 over a RS-232 (standard available) on a PC/laptop and saved for a backup. The PLATIUM uses an USB interface for the up and download function.
49. The operator is permitted via a pin number to temporally change the current program for the remainder of process time, Temperature, humidity, core temperature levels as well as circulating air number of revolutions. The process program will reset into original state after program stop.
50. World-wide several, thousand customers trust in the quality and the security of the E&B and their controls.

III. Service

51. A single relay test can be executed via a service program, each individual function and/or relay of the unit can be tested and therefore a troubleshooting of the unit is simplified
52. The calibration of the probe cable is done in the standard control trough spindle potentiometers with resistors in accordance with instruction. In the case of optimally extension (big Relay board), calibration occurs with additional software and the data is written into RAM.
53. All parts are usually exchangeable (possible differences at the analog inputs) among one another in different controls. Simple and fast repair can be done through the mechanics of the customer. Simple stock keeping.
54. All parts supplied by E&B have a 24 months guarantee period
55. World-wide, several thousand customers trust in the service and the quality of the E&B and their controls.



Est. 1985

E&B Smoke Technology

IV. Price

56. The prices for our controls are not the lowest. The price performance ratio however is the best one. References in the whole World will proof this statement.
57. With the provided Tools, our customers can obtain amortization rates of an unbelievable short time. With the use of intelligent automatic controllers and programs energy can be saved and unnecessary weight loss can be reduced. The production risk is extremely low do to the high quality of the used control units and their high reliability.

V. IMPULSE XP

58. The Data Acquisition IMPULSE XP can be used for the recording of the process cycles in the units and the monitoring of temperatures and humidity from production areas. Besides other conditions of machines (refrigerators, compressor, steam generators etc.) can be monitored and logged .
59. Program Protocols can be provided as diagrams and/or tables. The file can be printed or saved as a pdf format. Data export is possible also in Excel format
60. The process data is stored locally or via network in a SQL database.
61. The error forwarding is standard with different options(Printer, E-Mail, fax, SMS etc.)
62. The software corresponds to the today's requirements and runs under WINDOWS2000/XP or better and is equipped with the appropriate data base also networkable.
63. The software is equipped with two language files. One is in German language, the other one in the language of the user. It can be switched at any time between the files.
64. With remote software (PCANYWHERE, VNC, TeamViewer, VPN etc) the user can be remotely supported
65. One of the functions of IMPULS is the article and program management, cook and smoke programs are logged (batch number, load and article number etc.)
66. Creating, copying, modifying, uploading and downloading process programs from and to the controller are standard function.
67. The software fulfills all well-known requirements of ISO 9001, USDA or the HACCP concept.
68. The user can select a automatic printout at program end and/or daily production end. This printout contains the process cycles and process values (IFS protocol).
69. Process documentation can contain, set and actual House temperature and core Temperature(s), set and actual Humidity, F-Value, C-Value, 4-20 mA output, Relays function, pH -Value, weight value et.c.

70. An automatic graphical Temperature printout can be selected for the production (Daily, weekly, per month etc.). Additional values can be monitored, like steam pressure and air pressure, Glycol temperatures, waste water management etc.
71. An integrated Error management system can forward any kind of fault to a pager, text messaging, fax or printer

VI. General information

72. Delivery times approx. 4 weeks after placing of order.
73. Test installation for 3 months locally possible in accordance with separate offer.
74. Optimization of existing programs with use of special technologies to avoid unnecessary weight loss and to improve the quality of the product
75. Use of energy savings functions to lowering operating cost.
76. The controls of the E&B are in use at almost all units available at the world-wide market. Switzerland, Germany, Austria, Hungary, Slovenia, Russia, Sweden, Finland, the Netherlands, Belgium, France, Spain, Croatia, China, Taiwan, the USA, Canada, Alaska, Japan, Australia, Caribbean.
77. The control is extremely simple to use due to a easy dialogue.

VII. The High Lights

78. Reduction of the energy costs
79. Reduction in weight loss
80. Reduction production risk
81. Installation at all kinds of units
82. References world-wide
83. pH value control and regulation
84. Degree hour
85. weight loss monitoring
86. Exhaust air rate regulation
87. Energy-optimized cook processes
88. F-value control and C-value monitoring
89. Control with several core probes
90. Monitoring of the core temperature verification with second probe
91. Humidity controlling circulating air
92. Entalpie control
93. Intelligent heater regulators
94. Person identification
95. Most modern data acquisition
96. Program management at the PC
97. Error forwarding over E-Mail and SMS
98. World-wide Service net
99. 24 months warranty