X6

System Weighing Controller

- Programmable weighing controller with 19"-housing
- EC type approval certificate as Indicator classIII, 5000e
- Compact, comfortable, fast
- Easy-to-use operator interface
- Integrated PLC with substantial library
- Programmable according to IEC61131
- Wide range of interfaces
- Connection of second weighing point (external)
- Easy integration in automation concepts

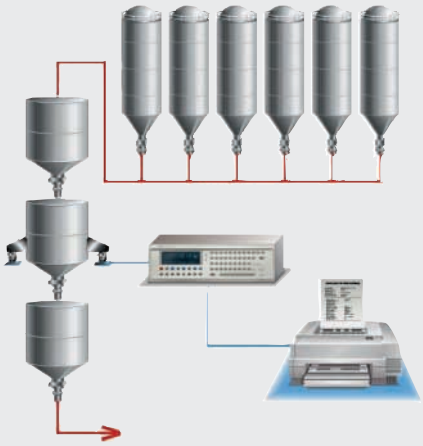
The X6 Controller family is designed as a micro-processor controlled weighing device with 19" housing to be used in any kind of process automation.

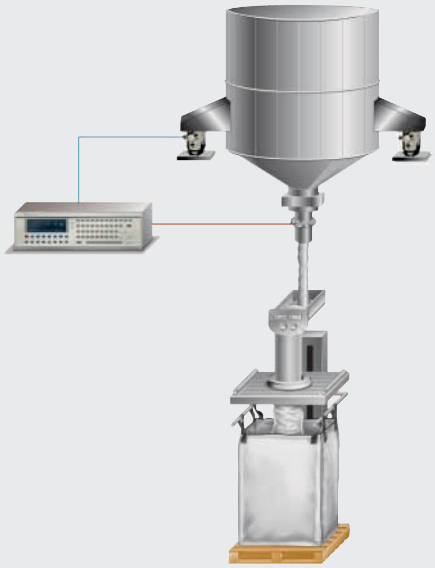
Equipped with 32-bit technology the X6 controller ensure the accuracy of OIML R76 resp. EN45501. Beside the normal operating elements for weighing functions the instrument has soft-keys specific defined for the application running on the device. The operator will be prompted via the display to act accordingly. The full alpha-numerical keyboard allows a comfortable entry and editing of data direct at the controller.

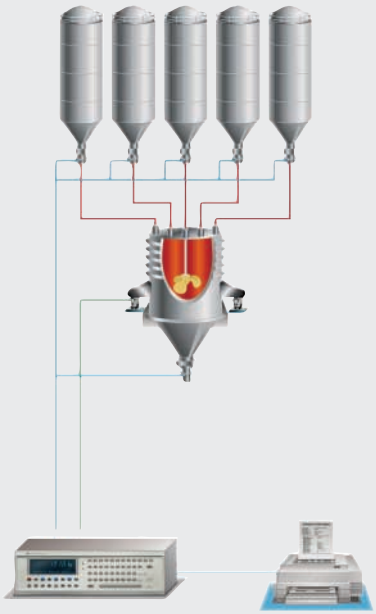
The construction in a 19" housing make it easy to incorporate the device in a common industrial surrounding.

Based on the well approved hardware platform several applications are available which can be easy configured and adapted to industrial processes.
These are:
- IBC application
- Batchprocesses
- Loss in weight
- Truck scales

The basic instrument named PRO-X6 controller can be used by engineering and construction companies as base for their specific demands. Basic features are already incorporated and can be modified with powerfull programming tools. The controller has 3+1 slots for optional interface boards. The predefined controller for applications has the necessary cards already on board. A variety of serial, digital and analogue interface options are available.





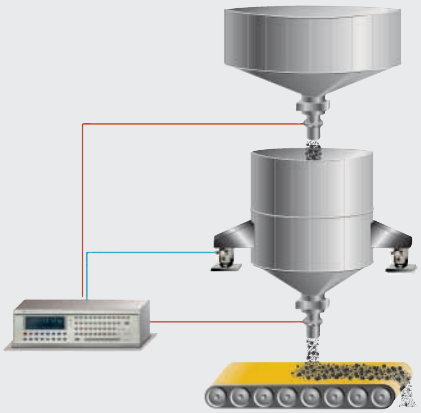


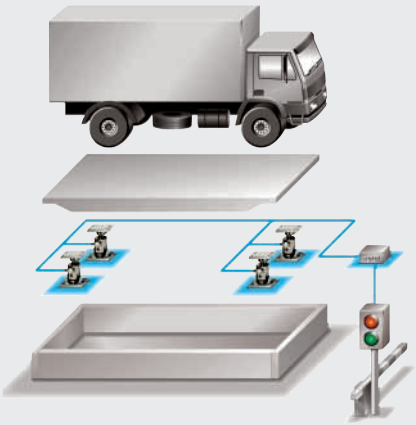
BULK-X6
The BULK-X6 is a weighing and control electronic for circuit scales with automatic supervision and control of material flow in auxiliary hoppers Circuit scales are ideal for all processes where big quantities of raw material have to be measured within a short time. Typical applications are loading and unloading of ships, trains and trucks of agricultural commodities usually grain, flour as well as building materials and fodder. Circuit scales allow the measurement of big quantities of raw material in a relatively small scale. This is realised by summing up the results of single weighings. As the procedure has to be time-saving auxiliary hoppers are used as a buffer. The buffering allows a continuous material flow. The BULK-X6 meets all requirements of typical circuit scale applications. BULK-X6 guarantees high accuracy even at high material throughput.

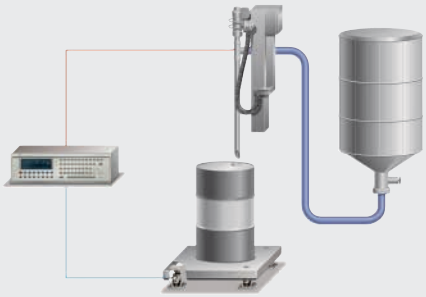
IBC-X6
The IBC-X5 is a flexible control unit for the direct control of automatic charge and discharge processes for IBCs (Intermediate Bulk Containers) with powders or granulated material. Operator interface, batch control unit and PLC are integrated in a single compact unit. The Controller is ideal for all processes where charging or discharging of IBCs like Big Bags or Tote bins is required. It contains a user-friendly operator interface and a powerful programmable logic controller (PLC). Four predefined operation modes allow the direct use without any programming.

Benefits:
- Integrated direct control of valves or feeders
- User-friendly container data base with integrated tare-table
- Direct start with setpoint entry or via container selection
- Integrated material and consumption reports

BATCH-X6
In many batch processes, different kinds of raw material are processed into intermediate and end products. From raw material storage area they are dosed to the production and processed in different steps like heating, cooling, stirring etc. The production steps and the raw materials with its set-points are described in a recipe. The Stand-alone batch controller BATCH-X6 meets the requirements of small batch applications in different industries, like food industry, chemical industry or building material industry.
The robust stainless steel housing allows the use also under rough environmental conditions. It provides a two-line display for a text based dialog with the operator.
A convenient user interface is implemented to supervise the complete process.
The operations can be done via soft-keys at the front of the BATCH-X6 or an external keyboard. There is also a PC-tool available for the input of data to Material and recipe tables in a comfortable way.







FLOW-X6
The FLOW-X6 is a flexible control unit for the direct control of continuous discharge processes from weigh-hoppers. Operator interface, digital signal processing, digital controller and PLC are integrated in a single compact unit. It not only integrates direct control of feeders and valves but also supports specials functions like automatic start-up value acquisition, linear material compression correction and intelligent top-up functions. The unit is designed to allow the flow control of different materials even under adverse conditions. It is very versatile and especially easy to operate.

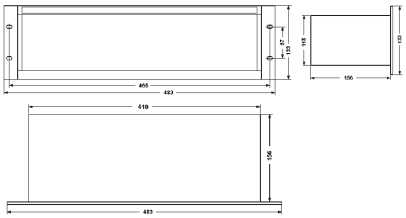
Benefits
- Direct control of valves and feeders via analogue output
- User-friendly material data base
- Manual or full-automatic adaptation to different materials
- Totaliser function
- Intelligent top-up mode for continuous material flow

TRUCK-X6
The new TRUCK-X6 controller greatly facilitates process monitoring of weighbridge applications. The TRUCK-X6 controller with the implemented software fulfills the basic requirements for effective data gathering and comfortable operation.

With this solution, the weighbridge is operated with a single device only. The program includes the following standard functions:
- Database with truck, product, address and on-site table.
- Functions like 1st-Weighing, 2nd-Weighing, Tare-Weighing and Single-Weighing.
- Control of barrier/traffic-light
- Internal Alibi-Memory Table
- Statistics

FILL-X6
The FILL-X6 is a flexible controller for the direct control of automatic filling of liquids into containers or drums. A user-friendly operator interface, batch control unit and a powerful programmable logic controller (PLC) are integrated in a single compact unit. The controller is ideal for processes were liquids are charged in automatic or manual mode.

Benefits
- Predefined In- and Outputs for bunghole detection and process control
- Lance-control for three different filling modes: bunghole position, under or above surface
- Complex material database
- Lance collision detection
- Master or slave mode possible
- Printable consumption and production reports



Power supply
115/230 V_{AC} 50-60 Hz
max. 19 W / 25 VA

Housing
Steel housing, Aluminium front plate
Class of Protection: Front IP 54, Back IP30

Display
7-Digit plus status symbols
text: 2 lines, 20 characters

Order information

Type	Description	Order numbers	SLOT	1	2	3	4
PR 5710/00	PRO-X6 230V	9405 157 10001					
PR 5710/10	TRUCK-X6 230V	9405 157 10101					
PR 5710/20	BATCH-X6 230V	9405 157 10201					
PR 5710/30	IBC-X6 230V	9405 157 10301					
PR 5710/40	FLOW-X6 230V	9405 157 10401					
PR 5710/50	FILL-X6 230V	9405 157 10501					
PR 5710/70	BULK-X6 230V	9405 157 10701					
PR 5710/80	LOG-X6 230V	9405 157 10801					
PR 5710/90	PHASE-X6 230V	9405 157 10901					
Options							
PR 1713/05	RAM Memory Extension 1 MB SRAM	9405 317 13051					
PR 8901/81	Internal Alibi Memory (Licence)	9405 389 01811					
PR 1713/31	Extended EW Commands	9405 317 13311					
PR 1713/91	Schalttafeleinbausatz	9405 317 13911					
PR 1799/99	W&M Approval Labels (1 set)	9405 317 99991					
PR 8001/01	X-Family PowerTools	9405 380 01011					
PR 1792/20	AccessIt Licence	9405 317 92201					
PR 1792/13	OPC Server Licence	9405 317 92131					
PR 1713/04	Serial interface card (RS 232/485)	9405 317 13041		o	o	o	
PR 1713/06	Analogue Output	9405 317 13061		o	o	o	
PR 1713/07	1 Analogue Output / 4 Analogue Input	9405 317 13071		o	o	o	
PR 1713/08	BCD 24 out, 1 in	9405 317 13081				o	
PR 1713/12	Digital 4 In- / 4 Output, Opto / Opto Ouput: 31 V, 25 mA	9405 317 13121		o	o	o	
PR 1713/13	DIOS-Master (add. Software required)	9405 317 13131				o	
PR 1713/15	Digital 4 In- / 4 Output, Opto / Relais Ouput: 24 V, 1 mA	9405 317 13151		o	o	o	
PR 1713/17	Digital 6 In- / 8 Output, Opto / Opto Ouput: 31 V, 25 mA	9405 317 13171		o	o	o	
PR 5710/12	Digital 6 In- / 12 Output, Opto / Opto Connection of PR 1623/xx possible	9405 357 10121				o	
PR 1721/11	Profibus-DP interface	9405 317 21111					o
PR 1721/12	Interbus-S interface	9405 317 21121					o
PR 1721/14	DeviceNet interfacee	9405 317 21141					o
PR 1713/24	Ethernet interface, 10 MBaud	9405 317 13141					o

Interfaces
Bi-directional serial interfaces RS232; user selectable protocols: EW Com, remote string, printer, XON, Jbus, Modbus, Dust 3004R

Accuracy
5000e class III acc. to EN 45 501;
OIML R 76 min. verification interval 1.2 µV/e;
suitable for automatic weighing instruments

Load cell input
6- or 4-wire
Load cell supply: 12 V/20 V
Impedance: min. 75 Ohm,
e.g. 8 load cells with 650 Ohm

Linearity
< 0.007 %

Resolution
max. 330,000 div. (internal) ≙ 0,11 µV/d
usable step width 0,4 µV/d

Measuring principle
ratiometric integrating A/D converter
Conversion time: 50 ms
Update: 100 ms to 2 s

Input signal range
Net range 2.4 mV to 36 mV
tare range: 0... 33.6 mV
(for 100 % maximum capacity)

Temperature influence
Live zero Tk_o: < 0.1 µV / K RTI
Span TK_{spn}: < 0.006 %/10 K

Environmental conditions

Temperature range
Operation: -10° C to +55° C
Storage: -40° C to +70° C

Electrical safety
According to IEC 61010-1

Vibration
According to IEC 60068

Electrostatic discharge
According to IEC 61000-4-2

Supply line
According to IEC 61000-4-4

Electromagnetic fields
According to IEC 61000-4-3

Radio interference
According to EN 55011

Specifications subject to change
without notice.
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o = optional, x = included in delivery
The documentation will be delivered on a CD, a paper version can be ordered separately.
* max. 1 Analogue Output Card

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