



# BBULL FEM/FM/EM

Filler and Labeller Management Systems  
with Processing Electronics

# PRODUCT SPECIFICATIONS

## Three Reasons for a BBULL Management System

### Complete Production survey:

- which product was filled?
- how much was filled?
- which faults happened?

### Complaint and Regress:

- test bottle program regularly performed?
- broken bottle management active?
- documentation of the safety installations

### Efficiency:

- to classify production losses
- preventive maintenance to reduce down times
- targeted maintenances safe cost



## BBULL 5000

### What's behind?

- high-performance industrial pc
- TOUCH SCREEN PC with Windows XP embedded operating system
- multi-lingual alphanumeric and graphic data presentation of:
  - production counter
  - error rate
  - production lead time
  - typ-related protocols
  - filling valve statistics
  - closing head statistics
  - bottle burst statistics
- statistics per day, week or month of the production counter (Windows)
- database connection via ODBC interface (Windows)
- quality-related fault analysis
- monitoring of inspection pattern
- complete logging of all production faults
- multi-level password protection, incl. user administration and complete data logging (Windows)
- 96 types can be stored and edited
- self-diagnostics with logging
- Teach IN
- online operator interface and spare parts list (Windows)
- network connection (PROFIBUS / CAN-BUS / ETHERNET /..)
- remote maintenance, set-up and software-update via internet



Sensor bridge for the X-ray-fill level measurement

## BBULL Broken Bottle Management

- for filler and closer
- bottle burst rejection (symmetric and asymmetric)
- bottle burst valve statistics
- bottle burst simulation programme

## BBULL Filler Monitoring

### Fill Level Inspection

- by X-ray, gamma, HF, optical or camera inspection bridge
- filling valve monitoring and valve oriented statistic

### Filler Sampling

- for quality control
- single or multi-rejection during the respective production speed
- freely adjustable

### Service Stop Filler

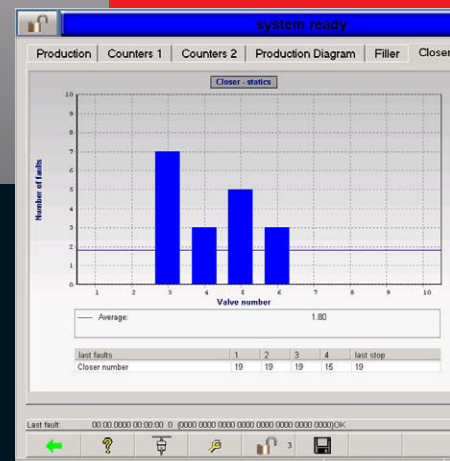
- 2-stage filler stop on defined repair position

### High Air Rejection

- targeted rejection of contamination endangered bottles, standing between filler and closer on an emergency stop

### Test Bottle Program

- automated test bottle request with data logging



# BBULL Closer Monitoring

## Cap Inspection

- presence
- quality
- closing head monitoring and head oriented statistic

## Closer Sampling

- for quality control
- single or multi-rejection and full production speed
- freely adjustable

## Service Stop Closer

- 2-stage machine stop on defined repair position

# BBULL Labeller Monitoring

## Label Inspection

- presence
- quality - inspection software "IMAGE"
  - ➔ label position
  - ➔ label verification
  - ➔ code reading OCR/OCV

## Service Stop Labeller

- 2-stage machine stop on defined repair position



# Sorting Technology

## Fault Rejection

- **BBULL BINPUSH:** pneumatic rejection into a bin up to 120.000 c/h, for bottles, cans, boxes, glass and PET
- **BBULL SOFTPUSH:** pneumatic rejection onto a reject table until 80.000 c/h for bottles, cans, glass and PET

## Fault Rejection and Sampling

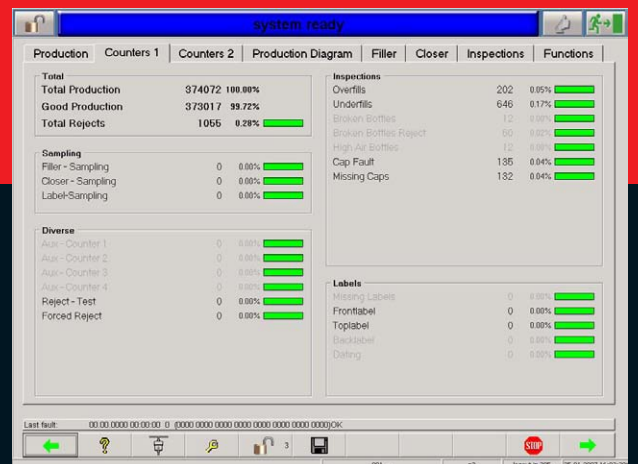
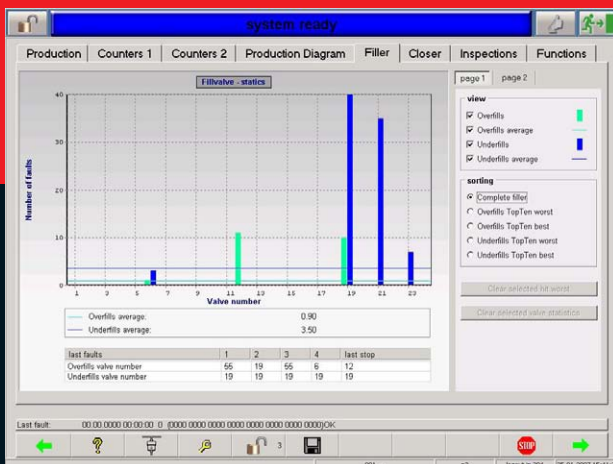
- **BBULL TRANSLINER:** standing displacement by special mechanical design up to 40.000 cph for bottles, boxes and special formats, glass and PET
- **BBULL BRUSH OFF:** standing rejection and sampling of glass bottles up to 90.000 cph
- **BBULL SNAKE** soft displacement by synchronized rejection fingers up to 90.000 cph (1,8 m/s), for bottles, and special format, glass and PET. Rejection of fallen bottles

- **BBULL FLEX:** multi-segment sorting system up to 50.000 cph, for bottles, boxes and special formats, glass and PET

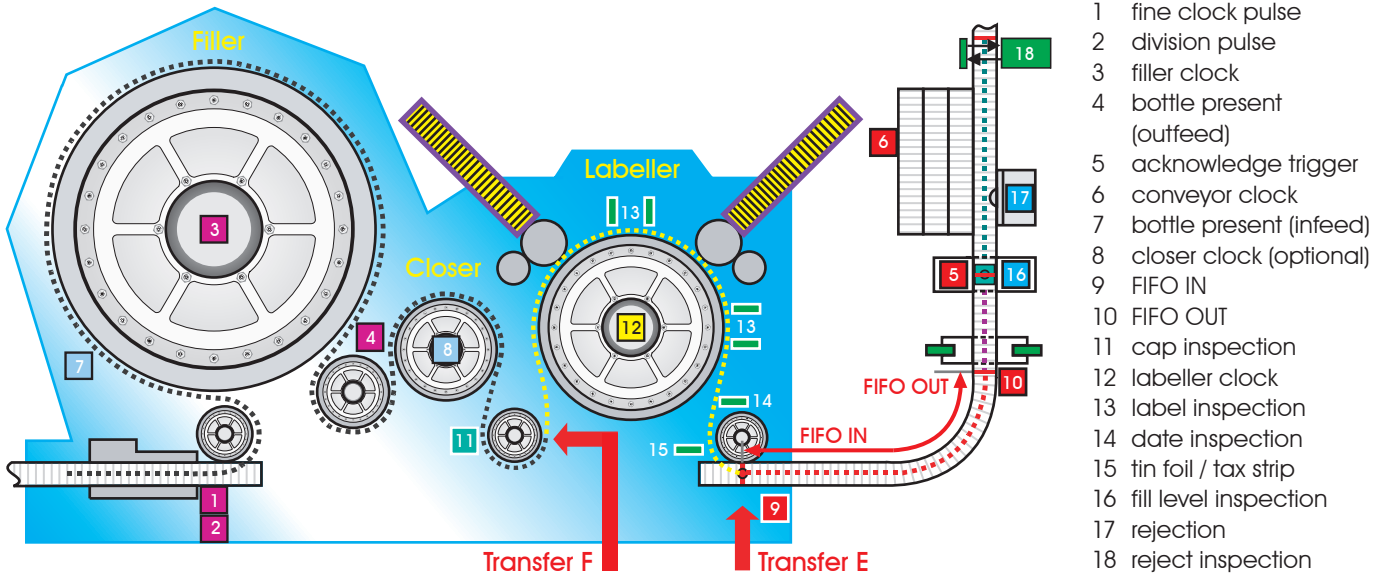


# Technical Data

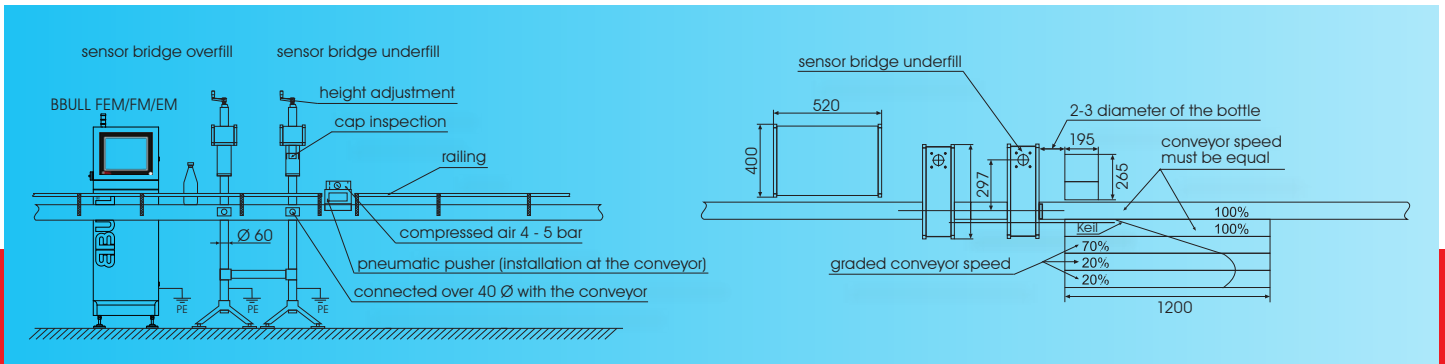
PC Windows XP embedded: \_\_\_\_\_ with Touch Screen  
 Power supply in V/Hz: 110-250/50-60  
 Environmental temperature in °C: \_\_\_\_\_ 5- 40  
 Measurements control unit (WxHxD) in mm: \_\_\_\_\_ 520x1700x400  
 Weight control unit in kg: \_\_\_\_\_ 85  
 Building class: \_\_\_\_\_ steel cabinet without air condition: \_\_\_\_\_ V2A / IP 54 with air condition: \_\_\_\_\_ V2A / IP 65  
 System performance in c/h: \_\_\_\_\_ max. 120.000  
 Interface: \_\_\_\_\_ Ethernet, Profibus, CAN, 1x serial RS232/RS422/RS485  
 BDE Interface: \_\_\_\_\_ according to Weihenstephan  
 Inputs: \_\_\_\_\_ 24, extendable, 24V+  
 Outputs: \_\_\_\_\_ 8, extendable, 24V+  
 Rejection: \_\_\_\_\_ 2  
 Control technology: \_\_\_\_\_ Gamma, X-ray, optical, CCD



# FILLER / LABELLER MANAGEMENT SYSTEM WITH FIFO BUFFER



## Installation Drawing (example)



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