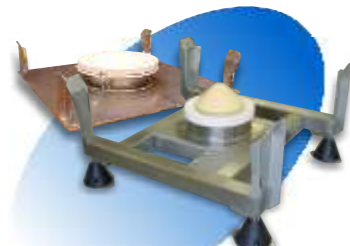


POWDER HANDLING SYSTEMS

TABLET HANDLING SYSTEMS



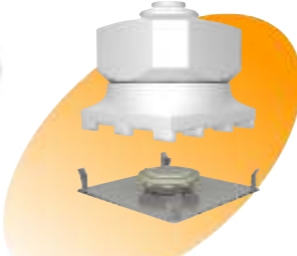
Intermediate Bulk Containers (IBCs)



IBC Discharge Stations



IBC Filling Systems



Bulk Tablet IBC and Tablet Discharge Stations



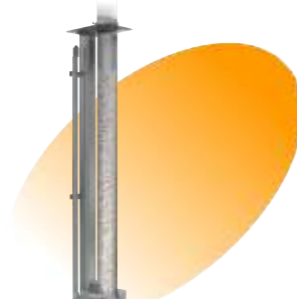
IBC Blenders



IBC Washing



Silo / hopper Discharger Valves



Gentle Transfer Chute (GTC)

IBC WASH BOOTH



WORLDWIDE OFFICES

UK

Tel: +44 1608 651666
Fax: +44 1608 651635
www.matcon.co.uk

USA

Tel: +1 856 256 1330
Fax: +1 856 256 1329
www.matconinc.com

Germany

Tel: +49 7621 970 610
Fax: +49 7621 970 609
www.matcon.de

Holland

Tel: +31 23 5 10 10 80
Fax: +31 23 5 10 10 89
www.matcon.nl

Spain

Tel: +34 93 654 96 39
Fax: +34 93 654 96 04
www.matcon.es

Sweden

Tel: +46 455 776 70
Fax: +46 455 247 72
www.matcon.se

France

Tel: +33 (0) 3 89 89 75 02
Fax: +33 (0) 3 89 89 83 90
www.matcon.fr

China

Tel: +86-21-66081980
Fax: +86-21-66081982
www.matcon.cn

Australia

Tel: +61 2 9892 4822
Fax: +61 2 9892 4844
www.matcon.com.au

Japan

Tel: +81 45 861 1627
Fax: +81 45 861 1628
www.matcon.co.jp

*Wash all types and sizes of IBCs,
Cone Valve, Butterfly Valve & others.*

This information and data is provided for illustrative purposes only and does not form part of any contract or agreement. The information and data may be updated and changed from time to time.

IBC WASHING SYSTEMS

MATCON
Market leader in Solids Handling IBC systems since 1980

SUNCOMBE
CIP & PROCESS ENGINEERS
IBC & Process cleaning specialists since 1960

"BIN THERE.....WASHED THAT"



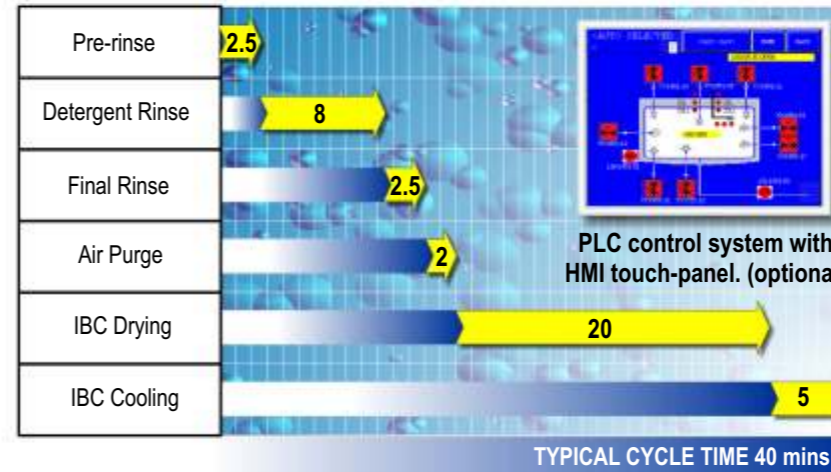
Inflatable Door Seal



Internal Spray Nozzle



Multiple External Spray Nozzles



Cleaning Philosophy

Internal (product contact surfaces) washing is achieved using a series of high pressure jets inserted into the IBC, which follow a controlled and repeatable pattern to ensure total coverage of internal surfaces. The powerful jets provide the force to remove stubborn surface contamination.

External washing is achieved using a series of static spray balls, strategically located to reach all IBC external surfaces.

Wash water is only used once in a "single pass" on contaminated surfaces - this is the preferred method for critical applications, however if required, re-circulation systems are also possible.

Booth Specification (typical)

- Floor mounted booth - adjustable support feet.
- IBC loaded by forklift or pedestrian stacker truck.
- Hinged manual door(s) with air-tight inflatable seals.
- All stainless steel 316/316L construction with insulation.
- Hygienic components, pipework, valves and fittings.
- Drainable, crevice free design.

Skid & Controls Specification (typical)

- Variable speed water pump 50-125 litres per minute.
- Detergent delivery pump and conductivity monitoring system.
- Double plate, steam heat exchanger - water heating up to 95°C.
- Self draining, crevice free design to cGMP standards.
- Air Handling Unit - steam or electric heated drying up to HEPA standard.
- Instrumentation controlling all cleaning-critical parameters.

Design Options (typical)

- Wash all types and sizes of IBCs, Cone Valve, Butterfly Valve & others.
- Number of doors & hinge orientation to suit facility layout and goods movement
- Systems integrated neatly into GMP facility with support services located in technical spaces.
- Alternative IBC loading methods - conveyors, AGV or other.
- Automatic actuation / opening systems for IBC inlet lids & outlet valves.
- Buffer water storage tanks.
- Re-circulation of wash water.
- Multiple detergent / sanitizer additions.
- International design guidelines- cGMP, PED, ASME BPE, CE, GAMP, ISPE, FDA, 21CFR11, ATEX & EHEDG.
- Data logging - retention of cycle records.
- Communication with other systems such as DCS.
- Validation package with supporting documentation.
- Simple "relay logic" controls.