MATCON® From IBCs to Turnkey Solutions

LABORATORY IBC BLENDING SYSTEM

General:

The Laboratory IBC Blending System is designed to blend powders in small IBCs. The geometry of the IBCs, blending speed and time is similar to that of larger "production" IBCs. The system includes the following: Blender & Controls, IBCs, Support Frames and if necessary an IBC Handler.

Blender & Controls:

The Blender is a stand-alone, floor-mounted unit incorporating a single rotating, cantilever shaft onto which may be placed a series of interchangeable IBCs for blending.

The control system is integral to the main drive housing. Standard controls include a digital timer displaying "completed" and "remaining" blend times. Rotation speed is fully adjustable by frequency inverter (Min 5 RPM, Max 25 RPM).

Controls also include automatic return of IBC to vertical and a button to "invert" IBC.

The Blender may be manufactured in Carbon Steel or Stainless Steel and comes in three model sizes to suit the sizes of IBCs being handled - see table overleaf.

IBCs:

Standard sizes of IBCs are shown in the table overleaf.

IBC geometry is based on a 1000L full scale Matcon IBC. Other geometries are also possible.

IBCs are attached to the Blender by means of a common size bracket on the side of the IBC. This is attached on an asymmetric axis to ensure optimum blending of contents.

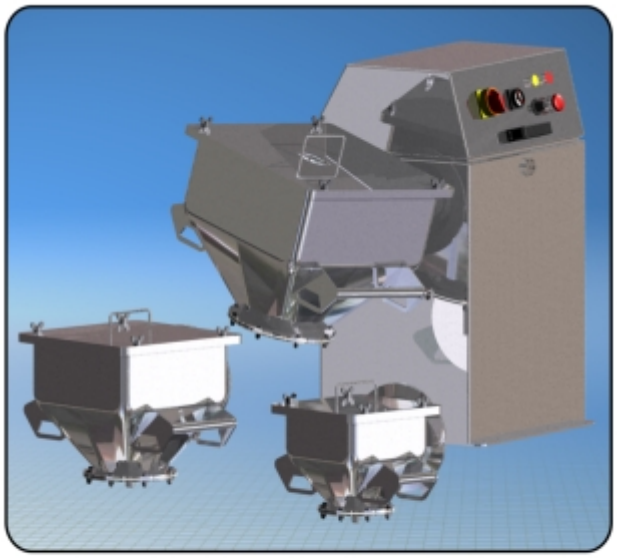
When selecting IBCs note that typically between 15% to 35% free air volume is allowed for material to flow inside IBC during blending.

Each IBC has a removable, gasketed lid for filling, sampling and emptying. The bottom outlet is flanged and fitted with a blanking plate (no valve as standard).

IBCs have handles for manual movement and fork pockets for optional mechanical handling.

Support Frames:

When not on the Blender, IBCs should be placed into a Support Frame, which supports the IBC at a convenient height.



IBC Handling:

Smaller IBCs are manually lifted from Blender to Support Frames.

Larger IBCs may be carried by manual mechanical IBC Handler.

Safety:

Rotating equipment is dangerous and it is necessary to ensure operators cannot be injured by the blender when in operation.

A safety interlock is pre-wired into the Blender controls as standard.

On request Matcon can provide a Safety Cage (in either carbon steel or stainless steel) which is electrically interlocked to prevent operation of the system unless closed.

Alternatively, the user may provide suitable safety screen, chains, light beams etc which are connected into the standard electrical interlock.

The Blender control panel includes an Emergency Stop button.

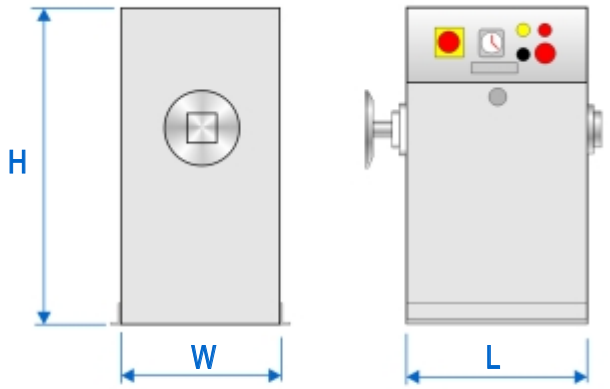
Standard units are for "Safe Area" use. ATEX rated units can be supplied on request.

MATCON® From IBCs to Turnkey Solutions

TECHNICAL SPECIFICATION

(All data is approximate and not to be used for detailed planning)

Blender



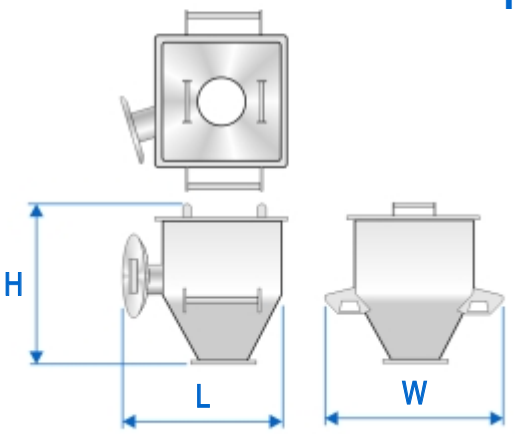
Blender	LB1	LB2	LB3
Standard IBC Sizes (Ltr)	10, 25, 50, 100	10, 25, 50, 100, 150, 200	10, 25, 50, 100, 150, 200, 250, 300
Dimensions H x W x L (mm)	900 x 450 x 550	1200 x 600 x 650	1300 x 900 x 800
Power (see note ** below)	0.55 kW, 1ph, 230V, 50/60Hz	1.1 kW, 1ph, 230V, 50/60Hz	2.2 kW, 3ph, 400V, 50/60Hz
** Power supply shown is standard. Other supplies available on request.			
Weight (Kg)	150	200	250
Max Load (Kg)	100	200	400

Materials of Construction
Blender SS manufactured in stainless steel sheet AISI 304, welded, glass bead blasted.
Blender CS manufactured in carbon steel sheet, welded, painted colour blue.

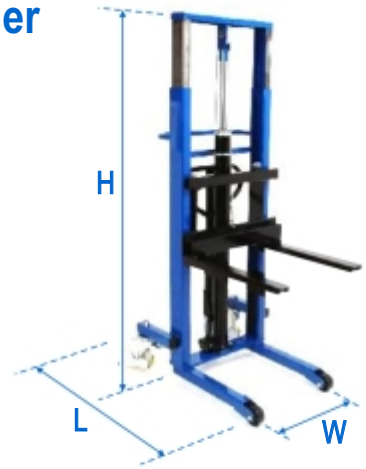
Capacity Ltr	Dimensions H x W x L (mm)	Weight (kg)
2	250 x 410 x 300	9
5	275 x 460 x 350	11
10	325 x 430 x 370	13
25	410 x 520 x 450	18
50	490 x 600 x 540	23
100	600 x 710 x 650	32
150	670 x 770 x 720	39
200	730 x 770 x 780	46
250	770 x 770 x 830	52
300	820 x 780 x 880	57

Materials of Construction
IBC manufactured in Stainless steel AISI 316L, welds polished to <0.5 Ra.
IBC Support Frame (not shown) manufactured in Stainless steel AISI 304.

IBCs



IBC Handler



IBC Handler	H1	H2
Standard IBC Sizes (Ltr)	10, 25, 50, 100, 150, 200	10, 25, 50, 100, 150, 200, 250, 300
Dimensions H x W x L (mm)	1925 x 610 x 975	2270/1395** x 665 x 1030 ** Height with forks raised/lowered.
Weight (kg)	83	106
Max Load (kg)	150	250

Materials of Construction
IBC Handler manufactured in Carbon steel, painted colour blue.