

## ATEX Mixing Bowl Lift

ATEX Mixing Bowl Lift  
BLM/1500/3200/B/G/SCREW

### ATEX Mixing Bowl Lift Description

This ATEX mixing bowl lift is a screw driven machine that was designed to raise and lower a 1500 Kgs Baker Perkins Mixing Bowl of explosive material to a height of 2900mm from the floor so that the material could be discharged from an outlet on the bottom of the mixing bowl. The ATEX mixing bowl lift is constructed from mild steel and is fully welded construction. The lifting was accomplished via a 50mm diameter ball screw driven by a motor driven gearbox mounted at the bottom of the machine. There were two frictionless re-circulating lifting nuts, one of which was in reserve as a safety nut. The ATEX mixing bowl lift was bolted to the floor and it was braced at height from the wall.



*Double Pillar ATEX Mixing Bowl Lift*

Call now on **01495 312 172**

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### Safety Guard to PD 5304:2005 Safety of Machinery

The safety guard is constructed from 40 x 40 x 3mm mild steel box section and 3mm wire, 40mm aperture mild steel weld mesh to meet the requirements of PD 5304:2005 Safety of Machinery. It encloses the ATEX mixing bowl lift to a height of 2200mm with two doors through which the mixing bowl and the containers being filled could be loaded. The guard doors are electrically and mechanically interlocked with Castell type interlocks to prevent the ATEX mixing bowl lift from operated with the doors open.

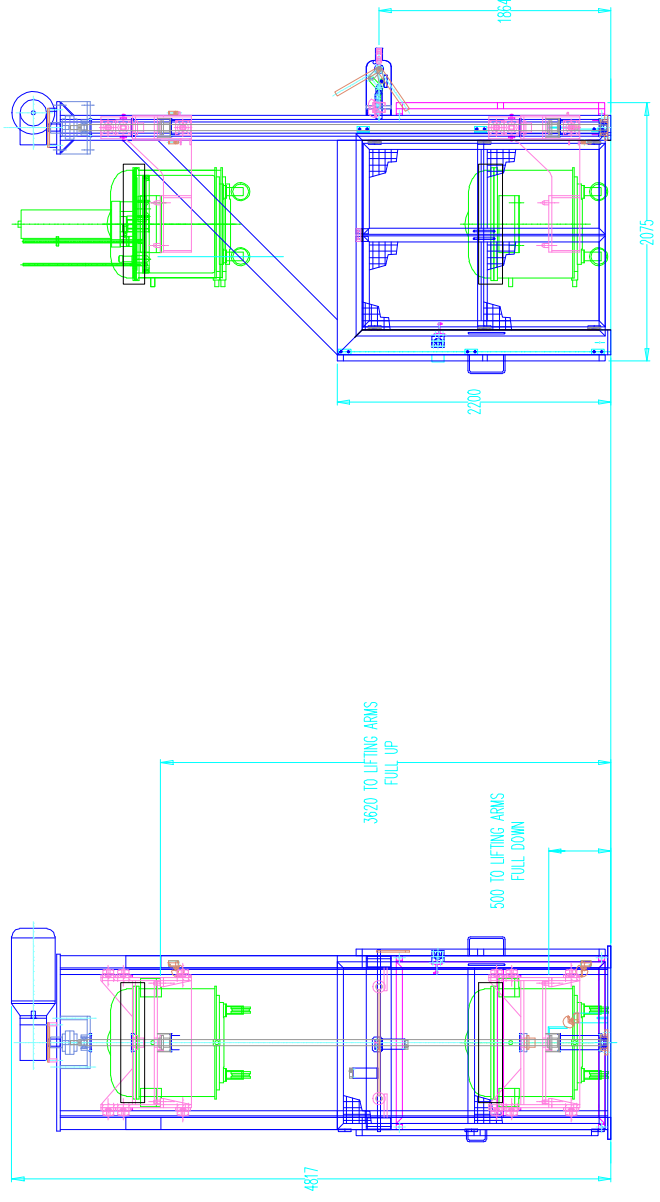
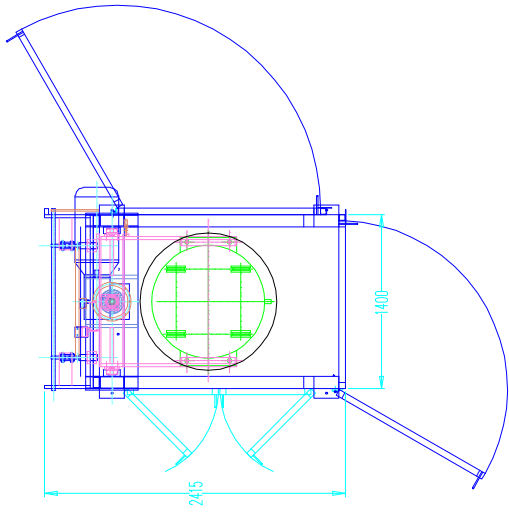
The method of operator for this piece of equipment was that the bowl was loaded and raised to a position suitable for a discharge mechanism to be attached to the bottom of the mixing bowl. To do this, the operator engaged a locking device which ensured that the lift carriage could not fall to the floor whilst the discharge mechanism was attached. Once the locking bar was engaged with the lift carriage it was possible to remove a Castell type key to open the machine guard gate permitting access to the underside of the bowl. Whilst the locking pin was engaged, it was possible to raise and lower the machine, with the secure knowledge that the load would always be secure above the operator

### ATEX Mixing Bowl Lift Specification

DESCRIPTION	DOUBLE PILLAR ATEX MIXING BOWL LIFT
MODEL NUMBER	BLM/1500/3200/B/G/SCREW
CAPACITY	1500 Kgs
LIFT HEIGHT	3200mm
OVERALL HEIGHT	4450mm
BOWL DESCRIPTION	BAKER PERKINS MIXING BOWL
BASE ARRANGEMENT	BOLTED TO THE FLOOR
CONTROL CIRCUIT	24Vac (STANDARD)
ELECTRICAL RATING	IP65
LIMIT SWITCHES	BURGESS E1M9CTQMSA 2330
MOTOR DETAIL	415Vac, 3 PHASE, 50 CYCLE, 3.0Kw BROOK HANSON MOTOR TO BS 6467 ZONE 'Z' DUST IGNITION PROOF, THERMISTERS T5 & FITTED WITH A HEAVY DUTY TERM. BOX.
MOTOR BRAKE	INTEGRAL WITH ABOVE MOTOR
INVERTER	3.0Kw SPECIFIED TO SUIT.
LIFT SCREW	50mm DIAMETER, 20mm PITCH
LIFT SPEED	1 METRE/15SECS (4 METRES/MIN)

### ATEX Mixing Bowl Lift Application Story

This ATEX mixing bowl lift was designed for use in an ATEX Zone 21 T135 °C explosive environment. The ATEX mixing bowl lift was required to raise a mixing bowl of explosive material to allow the material to be discharged from the bottom of the bowl in a safe and controlled manner.



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REMOVE ALL BURRS AND SHARP EDGES TOLERANCES : UNLESS OTHERWISE STATED FABRICATIONS : +/- 2.0mm MACHINING : +/- 0.2mm SHEET METAL WORK : +/- 1.0mm AND +/- 1.0 DEG	
DRAWN JPW	CHECKED DATE 06-02-01
DRAWING NUMBER BP2175-1	

DRAWING TITLE ATEX DOUBLE PILLAR MIXING BOWL LIFT BOLTED GUARDED	
REVISION NUMBER	CUSTOMER