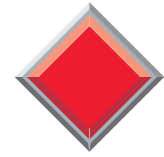


BAKERY SLICING & PACKAGING



ibonhart
PRODUCT RANGE



**Bradman Lake
Group**

Integrated Packaging Technology

From Process to Pallet

Bakery Slicing & Packaging

Who we are

Established in 1948, the Bradman Lake group is a leader in integrated packaging technology incorporating the Autowrappers, Europack and Ibonhart brands.

Bradman Lake design and manufacture a full range of packaging technologies. From process to pallet, Bradman Lake's solution based approach is gained from the thousands of installations around the world handling baked goods, dry foods, chilled foods, chocolate, confectionary and healthcare products.

In September 2017, Bradman Lake acquired the business and operations of Ibonhart (Norwich) Ltd, a specialized and innovative manufacturer of bread and baked goods bagging, slicing and packaging machinery, to expand Bradman Lake's product offering to the bakery sector.

Bradman Lake is located in the UK and USA with regional offices in Russia and India, and is a wholly owned subsidiary of the privately owned UK based industrial group Langley Holdings plc.

Contents

About	2
Ibonhart product range	
B51/LB65/LB90	3
BS420/BS420R/BS420A	4
DS2/DS4/BS2	5
IB30	6
IB270/IB360/IB520	7
IBPRO	8
Ibonhart solutions	
Freebake & Half loaf	9
Vision Guided Robotics (VGR), Flow Wrapping, Automatic Bun Collator	10
Bag Closing Options, Machine layout options	11



Bradman Lake produces from its two large freehold sites in the UK.



Bradman Lake's new purpose-built freehold manufacturing facility, Rock Hill, SC, USA.



Ibonhart Product Range

Reciprocating Slicers

B51/LB65/LB90

The operation of the reciprocating blade Slicer is both simple and efficient with the products being delivered to the slicing position by side and bottom feed belts.

The slicing process is performed by knives mounted in two frames (half the total number of knives in each frame) which are reciprocated in opposite directions while the product is pushed through. The reciprocating motion is effected by connecting rods mounted to a double throw dynamically balanced crankshaft totally enclosed in an oil filled crankcase.

The speed of product feed is by an Inverter controlled motor mounted on the side of the slicer. When linked to an Ibonhart Bagger this motor is controlled from within the bagger to ensure optimum line efficiency.

- Easy slice thickness change by changing the cutting frames
- Ability to bag whole loaf by simply removing frames
- Minimal crumb loss
- Bread Slicer is electronically linked to the bagger control system resulting in the feed rates being identical

Speed	The machine is controlled from the bagger drive and will cover a range of speeds depending on the product and temperature. B51 up to 45 loaves per minute. LB65/LB90 up to 65 loaves per minute.
Cutting stroke	B51/LB65 cutting stroke = 65mm for most products. LB90 cutting stroke = 90mm for use with blade oiling system on Rye products
Product size	B51 Length: 52mm to 340mm (up 440mm for wide version) LB65/LB90 Length: 52mm to 315mm (up 415mm for wide version). Height: 65mm to 170mm Freebake products: ±10mm tolerance on product length



B51 Bread Slicer

LB65/LB90 Bread Slicer

Electrical specification	Blade drive motor: 2.2kW Belt Infeed motor: 0.75kW Europe: 380/420V 3Ph 4 wire 50Hz+E 16 amps USA: 460/480V 3Ph 60Hz
Dimensions	Length: 1830mm Width: 1080mm Height: 1120mm
Weight	600 Kg

Optional features

- Top belt to control and feed freebaked products
- Oiling system for products with high Rye content
- Wide version available for maximum length product – 440mm (B51) 415 (LB65/LB90)
- Side belts through the blades for tinned products
- Side belts up to the blades for half loaf products

Optional features

- Antibacterial UV-C lamps
- Extended slicer width
- Blade oiling system

Band Slicers

BS420/BS420R/BS420A

The operation of the high capacity Band Slicer is for all types of bread. The band blades are tightened between two hard chrome-coated steel drums. With the hard alloy blade guides and long lasting blades, the slices are cut straight and the thickness of the slice always remains exact.

The **BS420** Band Slicer is equipped with an adjustable infeed system with driven bottom, side and top belts. Such a well controlled feeding is ideal for a wide variety of products, especially when free-baked products are concerned. The loading of the machine takes place directly from the cooling conveyors or can be manually loaded..

The **BS420R** is available for rye type breads and is equipped with a larger drive motor and an integrated oiling system.

The **BS420A** is our flag-ship slicer with a fully automatic adjustable slice thickness linked to the bagger touch screen for ease of slice thickness adjustment.

The slicer can be adjusted within a 5mm range, the optimum starting thickness will be selected based on the customers requirements.

Speed	Up to 70 loaves per minute, depending on the product
Blade type	163 inches long blade loops, various profile options
Product size	Length: Up to 400mm Height: Up to 150mm
Electrical specification	5.5kW main drive motor 0.18kW-0.37kW belt drive motor Europe: 380/420V 3Ph 4 wire 50Hz+E USA: 460/480V 3Ph 60Hz



Dimensions	Length: 2920mm Width: 1390mm Height: 2200mm
Weight	1000 Kg

Disc Slicers

DS4/BS2

Designed to hinge cut rolls leaving an adjustable depth uncut portion.

The product is controlled via top and bottom conveyors which along with the blade height and depth are adjusted at single point by hand wheels.

Available in single, twin and four lane versions.

Band Slicers

BS2

Designed to fully cut rolls, either single or double cut.

Available in twin lane format.

Both systems can be integrated into our collation systems and feed either bagging or flow wrapping equipment



Typical products

- Burger Buns
- Hot Dog rolls
- Bagels

Speed	Up to 7,000 products per hour depending on the product temperature and constant product flow
Blade height	Adjustment range from 10 to 40mm
Product size	Minimum height 30mm Maximum height 120mm
Electrical specification	Europe: 380/420V 3Ph 4 wire 50Hz+E USA: 460/480V 3Ph 60Hz

Dimensions	Length: 1700mm Width: 1000mm Height: 1450mm
Weight	450 Kg

Standard features

- Fully adjustable guides and bag openers
- All stainless steel construction
- Adjustable height stand
- Removable fan housing for easy deep cleaning of unit

Optional features

- Custom made Opener guides for unusual or difficult products
- Motor Driven conveyor to accept Bag Closure unit

Hand Bagger

IB30

The Ibonhart IB30 Hand Bag Loader is the ideal machine when moving to semi-automated packaging of products.

- Designed to provide an economical solution whilst providing ease of use
- As the top bag is filled and removed the next bag is automatically inflated ready for use
- Uses standard pre-made wicketted polythene bags
- Ideal for a range of products such as sliced and unsliced bread, rolls and food products in trays



Speed	The machine is equipped with an electric fan and will cover a range of 10-15 packs/min depending on the product and operator.
Style of pack	Neck tied, Pre-made wicketted bags.
Bag material	Conventional, low density, high slip 30 Microns, (120 gauge) polythene is recommended, but wicketted bags of other materials including Paper Bags can be accommodated.
Bag closure	When used with the Optional Motor Driven Conveyor can be fitted with any conventional 'Bag Closure Unit' to suit the customers particular application, including: Kwik Lok, Heat Seal, Twist Tie, Adhesive Tape seal and Twin Wire Clip

Product size	Length: 152mm to 355mm Width : 83mm to 200mm Height: 25mm to 150mm Max Bag Width: 310mm (other sizes available)
Electrical specification	Europe: Single Ph 230 volt supply Rating 0.4 amps USA: Single Ph 110V
Dimensions	Length: 840mm Width: 330mm Height: 240mm
Feeding height with stand	950mm adjustable

Bagging Machines

IB270/IB360/IB520

The IB series includes IB270, IB360 and IB520. The three models have been designed and built specifically for the Bakery industry and are the result of many years of experience providing packaging solutions in diverse markets worldwide.

The IB series unique features include the ability to use paper or poly bags on the same machine, and can be integrated with either semi-automatic or fully-automatic bag loading systems. In-addition, the equipment can handle free bake, half-loaf and unsliced products and is also available as a combination machine with an inline conveyor and slicer infeed allowing sliced bread, solid breads, rolls, pita breads etc. giving maximum machine utilization and a truly flexible packaging solution. So if you are feeding your slicer by hand or are loading via an automatic feed from your cooler with speeds from 45 packs per minute to 60 packs per minute there is a machine in the range for you.



Bag Material	Conventional, low density, high slip 30 Microns, (120 gauge) polythene is recommended, but wicketted bags of other materials including paper bags can be accommodated.
Product size	Length: 152mm to 420mm* Width: 83mm to 200mm Height: 65mm to 150mm Wider versions available to order. *340mm for a 5 paddle machine

Speeds	IB270: 4 paddle, semi-automatic bag change up to 45 packs per minute IB360: 5 paddle, semi-automatic bag change up to 60 packs per minute IB520: 5 paddle, fully-automatic bag change up to 60 packs per minute
Electrical requirements	Europe: 380/420V 3Ph USA: 460/480V 3Ph

All Ibonhart Bagging Machines can be fitted with any conventional 'Bag Closure Unit' to suit the customers particular application, including: - Kwik Lok, Twist Tie, Adhesive Tape seal and Twin Wire Clip. Heat sealing units can also be fitted.

Standard features

- HMI Touch Screen
- Simple program adjustments for operator and engineers
- Silvent air nozzles for reduced air consumption
- Idle mode for reduced power consumption
- Recipe selection changeover
- Customized product handling
- Ease of access for maintenance & hygiene
- Achieves performance level E, the highest safety rating
- Synchronize with other elements of the process such as the slicer, bag closure unit or basket fillers and stackers.

Optional features

- Inline Infeed
- Dual Slicer Infeed

System Control & Safety

- Safety system all panels and guards access via interlocked doors and dual channel safety system.
- Variable speed options for different product requirements all programmable via the HMI.
- Optional remote assistance via VPN connection through Ibonhart's firewall friendly communication system which allows remote fault diagnosis and new programme updates.

Max Product Dimensions (mm)	Length: 150 to 340 Width: 83 to 300 Height: 25 to 160
------------------------------------	---

Bagging Machine

IBPRO

The IBPRO Bread Bagging Machine is extremely efficient, space saving and incorporates hard wearing components. It is the world's most advanced bagging system available today.

The IBPRO has been specifically designed for large plant bakeries with the requirement for high throughput, minimal downtime and reduced waste.

The Pro incorporates ergonomic design with ease of access to maximize operator and engineer efficiency.

When coupled with our fully automatic slice thickness adjustable band slicer, the IBPRO creates a market leading high speed, bread slicing and packaging system.

- Left or Right handed machines available
- Up to 70 packs per minute
- Air tank reservoir maintains pressure for bag inflation consistency
- Ease of access for operation, maintenance and hygiene
- Ergonomic controls to allow one operator to control two machines.
- Fully integrated high speed slicer with option for adjustable slice thickness linked to central bagger touch screen for ease of slice thickness adjustment
- Bread pushed onto dynamic inline system by fully adjustable synchronizer which gives a smooth product transition, for different product sizes including free baked bread
- Dynamic inline system reduces product speed by 30% and is accelerated just before going into the bag, allowing greater product control
- Alarm log stored in machines memory
- Machine manual built into HMI
- All fasteners internal giving clean lines and increased safety
- Overtake overhead, single position clutch system giving smooth product transition
- Dual action openers accurately open the bag from the centre and are suitable for PE, PP and Paper bags
- Three tray bag changing system, changes bags automatically, optional four tray available
- Digital counters on all adjusters can be set for different products
- AWC sensors are ultrasonic and not effected by crumb or dust and are not sensitive to different bag colours
- Connection for sealers, check weigher and metal detector built in as standard



Freebake

Synchronizing infeed

The Freebake synchronizer allows us to handle a wide variety of bread from round loaves to the traditional baton shape used in many markets around the world.

Following the slicing process the Freebake arm pushes the bread in the correct shape in front of the over-head paddle system. This ensures that the bread is presented in the bag sliced in its original shapes and form.

Different styles of pusher faces allow us to accommodate the many different styles of bread that you produce.

Speed	Variable speed 20-60 depending on the product.
Product size	Length: 152mm to 350mm Width : 88mm to 152mm Height: 80mm to 150mm (Other sizes can be accommodated)



Half loaf

Synchronizing infeed

The principle of half loaf bagging is to split whole loaves into two halves after they are sliced. One half is turned through 180 deg. Each half is then automatically fed into the bagging machine to be bagged and sealed.

The Ibonhart Half Loaf Bagging System is designed to fit between both Ibonhart's reciprocating or band slicers and any Ibonhart Automatic Bagging Machine.

The unit will handle both half loaf and whole loaves utilizing quick change parts and state of the art electronics to offer a truly versatile machine.

Variable speed facility capable of speeds up to 60 packs per minute, (half loaves and whole loaves), depending on product.

Speed	Variable speed 20-60 depending on the product.
Product size	Length: 152mm to 330mm Width : 88mm to 152mm Height: 80mm to 170mm (other sizes can be accommodated)



Bradman Lake is a leading innovator in the development of integrated packaging technology: from process to pallet





Vision Guided Robotics (VGR)

With an ever increasing demand to pick and place randomly orientated products, Bradman Lake utilizes vision guided robotic technology. The latest version of this method is the VGR2000. This system has been specifically designed to meet the requirements of our customers.

This allows the integration of all Bradman Lake bagging, flow wrapping, cartoning and case packing machines into complete packaging systems.



Flow Wrapping

Bradman Lake has designed and manufactured flow wrapping machinery and machine systems that have proven to be the best solution for the most demanding of packaging needs. Continuous development and innovative designs ensure unrivaled reliability in operation as well as high production rates.

We can supply a 'stand alone' machine for a low speed handfed application, up to a fully automatic system to meet the demands of the most sophisticated processing and packaging lines. Systems commonly include automatic feeding, product storage, multiple primary flow wrappers and secondary multipack flow wrappers. The Bradman Lake FT series flow wrapping machines operate at the highest levels of efficiency even in the most demanding of environments.

Automatic Collation

Designed for the Plant Bakery looking to fully automate collation and product inspection, Bradman Lake is able to utilize the latest in guided robot technology to collate products into bags. With the introduction of product buffering, stored product can be reintroduced into the system during normal production operation, thus minimizing downtime and product waste while increasing plant productivity and efficiency. The packaged product is automatically loaded into baskets using Bradman Lake's proven basket loading system. This takes the packaging of bread rolls to new levels of automation and sophistication.

Bag material	Conventional, low density, high slip polythene 25 plus micron, other materials such as co-extruded blends can be accepted.
Tying	Conventional systems such as Twist Tie, Clip, Tape Tie or Heat Seal



Typical Products

- Burger buns
- Finger and Hot Dog rolls
- English muffins
- Crumpets
- Bagels

Bag Closing Options

Twist Tyer

- Servo motor driven
- Package recognition system
- Up to 100 bags per minute
- Simple operator controls
- Quick easy threading

Flexi Sealer Adhesive Tape Bag Closure

- Servo motor driven
- Electronic conveyor advance / retard timing
- Sleep mode facility
- Bag tension brush assembly
- Paperless tape 12mm width
- Jumbo tape reel attachment – approx. 40,900 seals per reel
- 90mm or 110mm tape length available

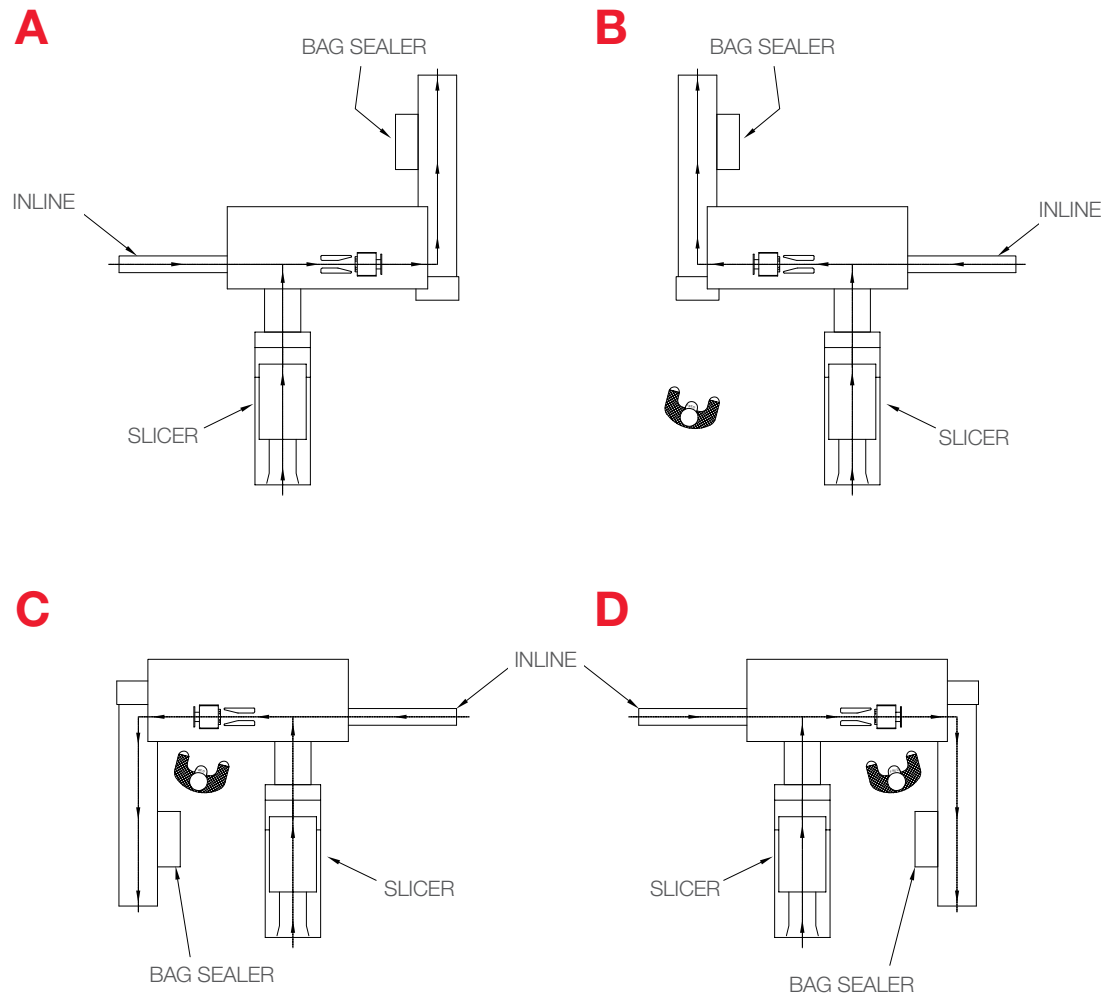
Kwik Lok Plastic Clip Bag Closure

- 872 XLS Automatic Bag Closing machine
- Model 1082 J8 Bag tension brush assembly
- Model 1011E Cold foil imprinter
- All electrical controls and variable speeds
- 1,000 seals per reel

SS2 Heat Sealer

- Stainless Steel finish
- Hot air sealing technology.
- Optimum seal quality with low maintenance
- Variable speed
- PID temperature controls
- Adjustable base.
- Simple set up and adjustment

Machine Layout Options





Bradman Lake Group
Integrated Packaging Technology

PRODUCT FEEDING SYSTEMS

STORAGE SYSTEMS

BAKERY SLICING

BAKERY BAGGING

FLOW WRAPPING

ROLL WRAPPING

CARTONING

CASE PACKING

SHRINK WRAPPING

PALLETIZING

ROBOTICS

TURNKEY SOLUTIONS

Bradman Lake Ltd

Common Lane North, Beccles,
Suffolk, NR34 9BP, England, UK
T: +44 (0)1502 470 500
E: uk@bradmanlake.com

Bradman Lake Ltd

Unity Road, Keynsham,
Bristol, BS31 1DT, England, UK
T: +44 (0)117 971 5228
E: uk@bradmanlake.com

Bradman Lake Inc

3050 Southcross Boulevard,
Rock Hill, SC 29730, USA
T: +1 704 588 3301
E: usa@bradmanlake.com

Bradman Lake Russia

Business Center "East Gate",
100 Schelkovskoe Highway,
Building 2, Office 13,
Moscow, 105523 Russia
T: +7 495 287 4768
E: russia@bradmanlake.com

Bradman Lake Ltd

c/o: Claudius Peters (India) Pvt. Ltd.
Unit 408, 4th Floor, Peninsula Plaza,
A/16 Fun Republic Lane,
Off Link Road, Andheri (West),
Mumbai-400053, India
T: +91 22 2674 0043 (Direct)
E: india@bradmanlake.com

Supported by Sales and
Service Partners worldwide.

From Process to Pallet

bradmanlake.com

Bakery Slicing and Packaging (US) Issue 1. Due to a policy of continued improvement, we reserve the right to change any specification without prior notice. ERRORS & OMISSIONS EXCEPTED.
Printed on a Manroland R700 press.



A Langley Holdings Company