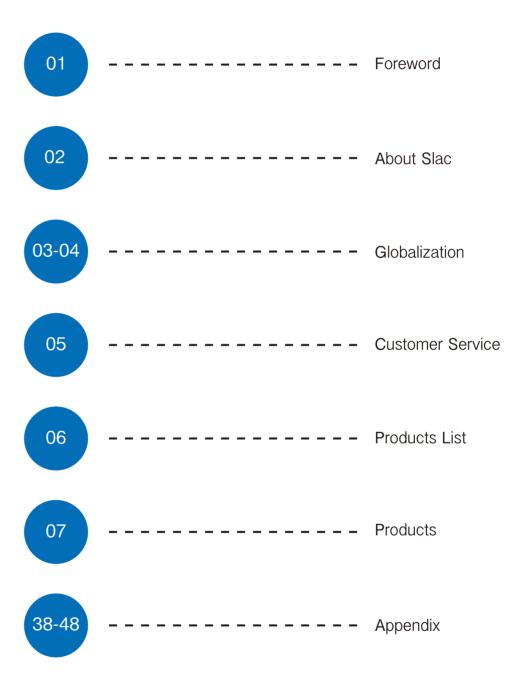


# **Actions speak louder than words**

# CONTENTS



# Foreword

Welcome to SLAC Precision Equipment Co. Ltd and an overview of our product range to date. This catalogue sets out our wide range of high speed, precision equipment that SLAC provides today, evidencing the strong growth experienced since our humble beginnings in 2004. However, this is only but a part of the story. Growth on this scale has only been possible due to the values that we have tried to follow from the beginning: integrity in our dealings with our customers, dedication in our efforts to meet their needs, and a science-based approach to designing and assembling machines.

Like every company working in this industry today, we are standing on the shoulders of the original inventors of equipment for metal packaging, and in many cases we are still using the same base technologies. Our understanding of technology and therefore understanding the science behind them enables us to improve and innovate, well beyond the limits generally recognized by the industry. Our large team of design engineers, coupled with in-house manufacturing of the vast majority of our components, makes it easier for us to be flexible and responsive to customer requirements and preferences, and to move more quickly than our competitors. SLAC now produces the fastest Easy Open-End conversion press in the world, and has developed and commercialized a new generation of digital printers for round metal cans.

These strengths are being deployed today on new projects which we will be adding to this catalogue as our future unfolds. As our product range deepens, we are also expanding internationally, with production units in North America, UK and Italy, allowing us to provide local technical service in support of our installed base. As a result, we believe we are uniquely well positioned to serve you now, and for the many years to come.

Shu An

President and Chairman

Chris McKenzie

Chief Operationg Officer (International), Chief Marketing Officer, Board of Directors **Richard Moore** 

.....

Board of Directors

intelligent manufacturing of high-end equipment, accurate understanding of industry and market trends, and precisely meeting the changing needs of the customers through steady investment in machinery design, manufacturing, and inspection.

# **About SLAC**





SLAC Precision Equipment is proud to share our extensive range of equipment and services. SLAC's position in the global market is focused on the design and production of specialized quality equipment, thereby providing clients of the metal packaging industry with high-end equipment as well as end-to-end solutions. Product offerings include complete sets of high-speed easy open end (EOE) systems, can production equipment, image detection systems, as well as research, design, manufacturing, and assembly of different systems and precision dies.

SLAC from small beginnings has grown to be accepted as a mainline supplier serving the 2 and 3-piece Can, DRD and End Manufacturing Industry globally with the most comprehensive range of equipment on each of the industry linear equipment needs.

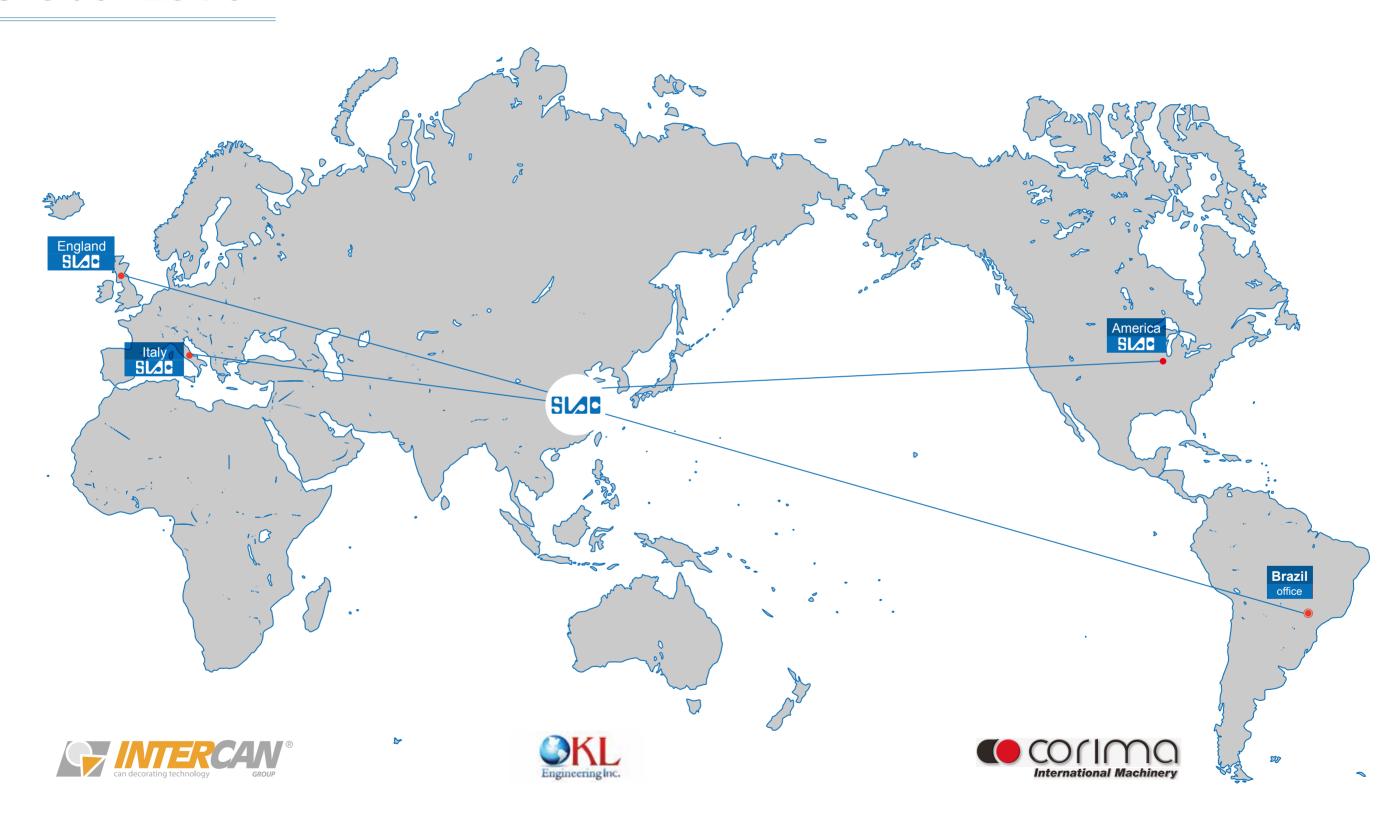
SLAC's complete high-speed EOE and can production systems have reached globally advanced levels and filled the product vacancy in China's domestic market. SLAC has earned the trust and support from its clients through advanced and reliable technologies, cost-effective products, and quality service, and is selling its products to more than twenty countries and regions around the globe with a home market share of over 50%. Through successfully developing key equipment in complete production lines, SLAC has become the only provider of complete EOE and can production lines in Asia. Key equipment to the EOE and can production lines as well as complete lines, light inspection, and image detection products have been promoted globally, reaffirming SLAC's reputation as a company with world-class Research & Development and market capabilities.

As well as offering an extensive range of equipment SLAC are very proud to be innovators constantly looking to push the boundaries thanks to a strong product Research & Development team supported by over 160 engineers, of which most hold Master's or Doctorate degrees. SLAC are also supported by the Tsing Hua University

Suzhou SLAC Precision Equipment was founded in 2004 and listed on the Growth Enterprise Market of Shenzhen Stock Exchange in January of 2014. Currently, SLAC has over 600 employees and 16 subsidiaries operating in fields spanning intelligent manufacturing, new energy, and detection systems.

SLAC will continue to uphold the company value of "actions speak louder than words", and is committed to

# Globalization



# **Customer Service**

### **Asia and Others**

Suzhou SLAC Precision Equipment Co., Ltd No.1028, Sunwu Road, Xukou Town, Wuzhong District, Suzhou, Jiangsu Province, China E-mail: sales@slac.com.cn

### North and South America

SLAC Precision Equipment Corp.

2045 Lyons Road

Miamisburg, Ohio 45342

E-mail:administrator@slacdayton.com

### **Europe, Middle East and Africa**

Corima International Machinery srl Via Ippolito Medini 17/19, 44049 Vigarano Pieve – Ferrara – Italy E-mail:sales@corima.org

### Intercan Group Limited.

38 Burners Lane, Kiln Farm, Milton Keynes MK11 3HB, UK

E-mail:sales@intercan.com











# **Products List**

# Food & Beverage

HIGH SPEED EOE LINE, MANUAL, SEMI- AUTOMATIC OR AUTOMATIC

HIGH SPEED SHELL SYSTEM

HIGH SPEED CONVERSION SYSTEM

### Beverage

HIGH SPEED 2-PIECE CAN LINE

**CUPPER SYSTEM** 

**BODYMAKER** 

TRIMMER

BASE COATERS

OFFSET PRINTERS

DIGITAL PRINTERS

**INSIDE COATER** 

**NECKER** 

**PALLETIZER** 

### **INSPECTION EQUIPMENT**

VISION INSPECTION SYSTEM
LIGHT LEAKAGE INSPECTION SYSTEM
SCORE RESIDUAL MEASURING DEVICE
CAN VACUUM TESTER

### **AUXILIARY EQUIPMENT**

SCORE POST REPAIR MACHINE
AUTOMATIC BALANCER
AUTOMATIC BAGGER
ELECTROCOATER
PLASTIC WRAPPER/UNWRAPPER
CONVEYING

# SLAC HEXAD CONVERSION SYSTEM



### SLAC HEXAD™ CONVERSION SYSTEM FOR ALUMINIUM ENDS

The Hexad™ Conversion System is unique in its ability to manufacture 6 lanes of ends on a traditional Minster ECH125 usually designed to manufacture a maximum of 4 lanes of ends thus allowing for a 50% increase in production with the same footprint but still remain competitive in pricing.

The Hexad™ System runs at 750 SPM giving 4500 ends per minute with an improvement in metal utilization of 4.5%.

### **Main Features**

- Two three-out dies, with convenient and efficient die set adjustment and maintenance
- Reduction in vibration through weight reduction while increasing strength to keep the accuracy of the die set. The die set is also equipped with a temperature control system.
- Score heating system
- Down-stacker contains six individual adjustable structures. It is easy to adjust the position of each one independently
- The guides and guide posts of the die set are equipped with an automatic lubrication system





### **Specifications**

- Press: Minster ECH-125 series
- Electric Power: 480 Volt-3Phase-50Hz (can be changed according to customer's requirement.)
- Press Dimensions: L-R 3500mm, F-B 2900mm, H4250mm
- System Weight: 33,000Kg

- Air Pressure: 6-8kgf 1m<sup>3</sup>@8kgf
- Press Speed: 750 SPM
- End Type: 202 and below
- Tab Type: RPT/SOT
- Electric Control System: AB, Siemens or Omron
- PLC control

# C12&C24 COIL FEEDING SHELL SYSTEM

**C8 COIL FEEDING** SHELL SYSTEM

SLAC coil feeding shell system is built on Minster or Bruderer presses. It can run stably at high speed and is easy to maintain. The feed rollers are dual servo driven, which will not cause any damage to the surface of the coil when the shell system is fed steadily at high speed.

The shell tooling has air pressure forming structure so that the shell specs remain constant.

The tooling parts have long service life and are easy to replace. The shells come out along an air drain into the Curler. The air drain structure makes shells go into Curler at high speed with good stability. The Curler is usually a horizontal type and all the Curlers are driven by one motor.

SLAC can design a customized coil feeding shell system and upgrade the system design to the customer's needs while maintaining the most economic proposal. The system stability & reliability will not be affected.

### Main Feature

- Air drain conveyor system
- Independent gas circuit control
- Servo Feeding system
- Tooling parts protected by sensors
- Speedy rotating or air-suspending dismantling feeding system



### **Specifications**

	C12	C24	
Press type:	Minster	Minster/Bruderer press	
End size:	113-209	113-209	
Output:	11-14 outputs	22-26 outputs	
Capacity:	6000~7700epm	9900~10800epm	
No.of Curler:	Up to the outputs	Up to the outputs	
Feeding system:	Dual servo drive rollers Single servo drive rolle		
Speed:	550strokes per min 450strokes per min		
Diameter (L*W*H)	9×6.5×4m* 9×10×4m*		
Weight*:	25 tons 45 tons		
Compressed air:	6-8kgf 8m <sup>3</sup> @8kgf 6-8kgf 15m <sup>3</sup> @8kgf		
Power:	380-460V, 50/60Hz, 3 phases (customized)		
Electronic control system:	AB, Siemens or Omron PLC Control		

### Description

SLAC coil feeding shell system is built on Minster or Bruderer presses. It can run at high speed stably and is easy to maintain. The feed rolls are dual servo driven or mechanically driven, which will not cause any damage to the surface of the coil when the shell system is fed steadily at high speed. The shell tooling has an air pressure forming structure so that the shell specs remain constant. The tooling parts have a long service life and are easily replaced. The shells come out along an air drain into the Curler. The air drain structure allows shells to go into the Curler at high speed with good stability. The Curler is usually a vertical type and each Curler is driven by one motor separately, which makes it convenient to maintain and adjust. The curler section is compact and occupies small floor space.

SLAC can design customized coil feeding shell systems and upgrade the system design to customer's needs, with the best and most economic proposal. The system stability & reliability will not be affected.





### **Main Feature**

- Dual mechanical or servo wheel type drive feeding system
- Air drain conveyor system
- Independent gas circuit control
- AB or SIEMENS brand electronic control system
   No. of Curlers: Depending on the output and can be customized
- Tooling parts protected by sensors
- Speedy roller feeding system

### **Specifications**

- Press type: Minster or Bruderer Press
- Shell size:113-209
- Output: 2-8 out
- Capacity: 1200~4800spm
- Feeding style: Mechanical or servo drive
- Speed:600 strokes per min
- Size:7×6.5×4m\*

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- Weight: Approx. 22 tons (2-8 out)
- Compressed air pressure:6-8kgf 6m³@8kgf
- Power:380-460V,50/60Hz,3 phase(customized)
- Electronic control system: AB CompactLogix or SIEMENS S7300 PLC control

\*Specifications variable when the press and outputs are different. Please refer to system layout provided by SLAC

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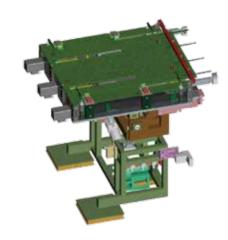
\*Specifications variable when the press and outputs are different. Please refer to system layout provided by SLAC

# S280 SHEET FEEDING SHELL SYSTEM

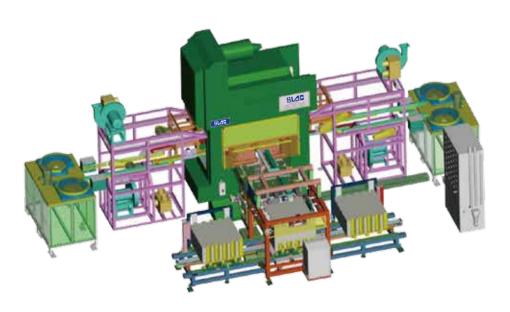
### Description

SLAC Sheet Feeding shell system is built on Minster or in some cases other brand presses can be used. It can run at high speed stably, and is easy to maintain. The feeding mechanism can be dismounted by an air-suspending mechanism, with clamping jaws to catch the sheets. The shell tooling has an air pressure forming structure so that the shell specs can stay the same. The tooling parts have long service life and are easy to replace. The shells are carried to the curler on a vacuum transfer belt. There are 4 Curlers, whose simple configuration is easy to adjust and ensure that the produced shells have the same specs. The maintenance cost is low.

The sheet feeding system can be redesigned by SLAC to best suit customers' specific requirements.



SLAC air-suspending dismantling feeding system with clamping jaws



SLAC SHEET FEEDING SHELL SYSTEM



### **Specifications**

- Press type: Minster or other brand press
- Shell size: 113-401
- Output:16 outputs maximum
- Speed:280 strokes per minute (Aluminum shells)
- 200 strokes per minute (Steel shells)
- No. of Curlers:4 sets
- Feed system:Servo system
- Diameter:7×10×4m\*
- Weight:25 tons
- Compressed air:6-8kgf 6m³@8kgf
- Power:380-460V,50/60Hz,3 phase(customized)
- Electronic control system:AB, Siemens or Omron PLC Control

### Main Feature

- Clamping Jaws Feeding Mechanism
- Vacuum transfer belt conveying system
- Independent gas circuit control
- Tooling parts protected by sensors
- Fast air-suspending dismantling feeding system

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POST REPAIR MACHINE Compact Electrocoater

### Description

The post repair machine ensures score line repair for Easy Open Ends. It features stable production, low power consumption and easy maintenance. It can run different ends sizes/types depending on customers' request.



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### Description

Electrocoating technology ensures protection of all potentially bare metal surfaces following conversion of the end, not just on the score line.

The new design of our machines meets or exceeds all other types of machines offered on the market.

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We also achieve better performance giving more immersion time, checking the process end by end, reducing bath foaming and solution waste and reducing cleaning and maintenance downtimes.

The total accessibility of all parts makes this machine "user-friendly" for the operator.

### **Dimensions**

 $\emptyset$  52mm (200) to 155mm (603) and Hansa, also other sizes can be considered.

### Infeed Lanes

1 or 2

### Output

Up to 600 epmper line

### **Natural Gas Consumption**

10-15Nm3/h(average for 2-lane machine)

### Water consumption

400 l/h(can be reused)(average for 2-lane machine)

### **Air Consumption**

600 nm2/h at 6 bar (average for 2-lane machine)

### **Electrical Requirements**

20Kw, 380V, 50/60HZ,3-phase(easily adaptable to other standards)



**Compact Electrocoater** 

# AUTOMATIC BALANCING SYSTEM

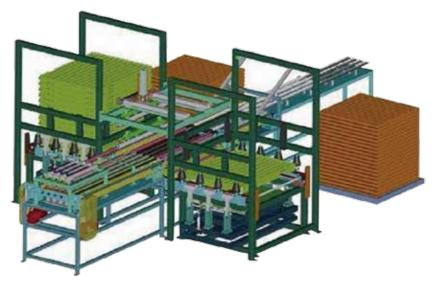
### Description

The SLAC Automatic Balancing System balances the outputs between the shell system and the Liner as well as the outputs between the Liner and conversion system, thus improving the efficiency of the production line. This system is stable, low power consuming and easy to maintain and repair. It can be customized into being servo driven, and the number of robots can be one or two, dependent on speed requirements.

SLAC can design a customized Automatic Balancing system and upgrade the system design to the customer's needs.



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### **Main Features**

- Small floor space with flexible layout according to customer's plant size and demand
- Festo cylinders
- Festo straight line module and servo system
- Steel structure pallets and plastic pallets , Customized buffer

### **Specifications**

- End size: 113-603(Aluminum & steel ends)
- Speed: Up to10800epm
- Diameter (L\*W\*H): 10m×6m×5m
- Compressed air: 4-6kgf 0.5m<sup>3</sup>/min
- Power: 380-460V, 50/60Hz, 3phase(customized)
- Electric quantity: According to the configuration
- Electronic control system: AB, Siemens or Omron PLC Control

AUTOMATIC BAGGER AUTOMATIC PLASTIC WRAPPER

### Description

The SLAC Auto Bagger is designed to pack the produced Easy Open Ends automatically, utilizing functions including counting, ends separation, pushing ends into paper bags, sealing the bags automatically and auto stacking. This system is stable, low power consuming and easy and convenient to maintain and repair. It can be customized into being servo driven, and the number of robots can be one or two depending on required speed.

SLAC can design a customized Automatic Bagger and upgrade the system design to the customer's needs.



### **Main Feature**

- Small floor space with flexible layout according to customer's plant size and demand
- Kuka robot with long service life
- Festo cylinders

### **Specifications**

- End size: 113-603 (aluminum and steel ends)
- Speed: Up to 3000epm
- Margin of error: 1-2 pcs per bag
- Diameter: 10m×9m×5m
- Compressed air: 3-6kgf 0.5m<sup>3</sup>/min
- Power: 380-460V, 50/60Hz, 3phases(customized)
- Electricity consumption: according to the configuration
- Electronic control system: AB,Siemens or Omron PLC Control



### Description

This machine has been developed to automatically shrink wrap steel and aluminium ends.

The ends coming from the production lines are counted (accuracy  $\pm$  1 end per sleeve) into a stack and then picked up by a gripper. The gripper moves on a system of x-y axes and transports the stick to the wrapping station, where it is wrapped using micro-perforated plastic film, heat-sealed longitudinally and then heat shrunk by hot air blowers during transport through a step roller conveyor to the out-feed of the machine. The machine can be tooled with one to 5 lanes and will conform to the required safety and accident preven-

### **Technical data**

tion requirements.

Optional:	Manual packing station with pre-made paper bags and Quality inspection station.	
END TYPE:	standard sanitary ends,easyopen ends,aerosol bottoms and domes,general line components.	
END DIMENSION:	Ø 52 mm(200)to 155 mm(603).	
STICK LENGTH:	from 250 mm to 800 mm.	
INFEED LANES:	from one to five.(it is possible to work simultaneously with different end diameters on each lane)	
OUTPUT:	up to 8 rolls/minute.	
ELECTRICAL REQUIREMENTS:	10 Kw,380 V,50/60 Hz,3-phase.(easily adaptable to other standard)	
AIR CONSUMPTION:	400-600 l/minute at 6 Bar(average).	

# **SLAC Cupping System**

### Description

SLAC Cupping System is configured of press, feeding system, tooling, electric control and other auxiliary equipments. It can produce different size of aluminum and steel cup according to customer's requirement, for example 250ml,330ml,500ml and so on.

The press type will be defined to customers capacity requires, SLAC recommends MINSTER DAC-150-84 series double action press, Maximum speed can reach 250SPM.

With the newest technology in the world, SLAC cupping system produce the highest quality cups with maximum speed, reliability and material efficiency. It is very convenient to install, adjust, change and maintain the die set.

### **System Characteristics**

- Non-round cut edge design to maximize the use of materials.
- Forming parts inlay carbide to improve service life.
- Pneumatic ID design for customer to track product quality conveniently.
- Design the upper piston with 3 stages to reduce pressure requirement of equipment.
- The upper piston with sequential action to make sure cup earing smaller and more stable
- The new structure is adopted for inner guide pin of die set, there is no need to take out the parts when changing the die set, so it is more convenient to change the die set.
- Adopting inclined internal scrap blade, cutting material more stable.
- The upper die center is connected by multiple segments, ejecting the cup more stable, easily for maintenance.

# **Specifications**

,	,
Press model	DAC-150-84
Bed size	86inch(2184.4mm)*44inch(1117.6mm)
Outer slide size	84inch(2133.6mm)*36inch(914.4mm)
inner slide size	59inch(1498.6mm)*17inch(431.8mm)
Height	4978.4mm
Speed	100-250SPM
Max Tonnage	150 Tons
Total weight	About 33 Tons
Press main motor power	75Kw
Max product material width	1816 mm
Air requirement @100 psi	350CFM
Total Power	About 120Kw





### BODYMAKER SC-8824-BM

### Description

The SLAC SC-8824-BM is designed to provide a stable, reliable continuous production of two-piece DWI can-bodies. Its speed while dependent on the can dimensions is designed to achieve 400CPM using the 610mm stroke which covers can size from 202 to 300 with a Maximum Can Height of 182 mm. SLAC can however manufacture specially designed Bodymakers for dimensions outside of this range.

### Main Feature

- The one-piece machine bed provides a stable foundation for the finishing of can bodies as well as addressing the well-known issue of oil seepage.
- The cup infeed system and the can unloader system are driven by servomotor or gear system, which can be designed to suit customer requirements.
- Uses the SLAC Domer (also compatible with Pride Domer)
- With either mechanical gravity or Vacuum crossover track work the bodymaker links to the SLACTR-403 trimmer
- Siemens power-saving motor equipped to save energy drastically.
- Air operated clutch-brake.
- With an optimized hydraulic system less lubricant is required and the hydraulic power pack is simplified, consuming less energy.
- Two Configurations of Discharge Assembly: Vacuum & Gravity. If can size is often changed, Vacuum Discharge is recommended.



Domer



Main Frame



Clutch



Discharge Assembly

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### SC-8824-BM Specifications

Width 2.00 m

Height 2.30 m

Length 4.50 m

Weight 12000 kg

Air Supply 6 bar (90PSI) , 1.85m³/min (45 SCFM)

Water Supply 120 L/min 30oC MAX

Coolant Supply 100 L/min 40oC

Drive Motor 55 kw

Electrical Power 380 V, 3-PHASE, 50 Hz

Can Diameters 200, 204, 211 to name but a few

Can Height 182 mm MAX

Speed up to 400 CPM dependent on can size

Electronic control system: AB. Siemens or Omron PLC Control

### OKI BODYMAKER

The OKL BODYMAKER is designed to provide a stable, reliable continuous production of two-piece DWI can-bodies. Its speed while dependent on the can dimensions is designed to achieve 315CPM using the 24" stroke which covers can sizes from 202 to 300 with a Maximum Can volume of 500 ml.

### **Features**

- Linear Guidance System: Our patented LGS has full contact composite bearings that eliminate the need for oil and hydrostatic pump station. The removable bearing cartridges allow for quick diameter changes - no need for re-alignment and can easily be changed in 1-2 hours.
- Redraw Air Bag Assembly: Low cost replacement for redraw Air-Cylinder. Air bag can be replaced without removing the ram guidance. Elimination of lubrication lines reduces tramp oil. No need for cooling water.
   Does not continually consume air.
- Aluminum Parallel Motion Assembly: Our direct replacement is easy to install. The APMA is 50% lighter and stronger than standard steel. This allows for increased speeds with less vibration and provides reduced down time for Rod or Link changes. It can also make the replacement of individual component in side the machine possible.
- Composite Redraw Carriage Bushings: Extends life of leader pins the coolant inlets into the drilled leader pins eliminates oil requirements.







Linear Guidance System

Redraw Air Bag Assembly

Aluminum Parallel Motion Assembly

- Drop In OKL Tool Cradle: The coolant manifold lid allows for elimination of hoses and improved can quality.
   The floating tool pack allows for easy change of modules and can reduction.
- Stainless Steel Guard Package: Allows for easy access to key components in your bodymaker.
- Servo Cup Feed: Eliminates all PTO shaft and gear box requirements. Allow for electronic timing of cup in feed at high speeds. It provides functions, such as back stop, canmade sensor, air strip timing, cup drop timing, self-contained diagnostics.
- Redraw Idler-Convenience: 50% Lighter for easier, safe installation. Reduces inertia for smoother operation at increased speeds. Accepts High-Speed lubrication packages. Pinch Bolt Access from top for easier access.
- Shortest Reach for Access to Tooling: Flexible tool pack configuration (optimized for specific products).
   Optimized stroke based on customer requirements. Familiar design with significant improvements. Reduces ergonomic issues related to lifting objects away from the body.
- Ability to Quickly Change Can Size, Include Quick-change conveyor diameter adjustments. Quick-change conveyor height adjustments. External lubrication for conveyor, snap on pockets.







Tool Housing/Tool Pack

The Green Machine

Easy Access

### **Features**

- The Green Machine: The use of composite-bearing materials allows a significant reduction in oil usage with up to a 60% savings. Utilizing an air bag reduces both air and oil consumption when compared to a standard air cylinder. Removal of high-pressure pump stations reduces power consumption. The new frame has access panels which are o-ring sealed. The frame also includes large and conveniently located service points to accommodate routine maintenance and set-up procedures. OKL's guard package is CE approved.
- Other features include: Optical encoder electronic timing. Machine lubrication, injector and/or Trabon. Tool
  housing, top-loading (choose from fixed, floating or adjustable). Clutch/brake (choose from disk or drum). Air
  strip (choose from electronic or rotary mechanical). Floor mounting, Isolator assemblies.



### OKL Bodymaker

Width 1.96 m

Height 2.44 m

Length 4.45 m

Weight 10433 kg

Air Supply 6 bar (90PSI),  $2.34m^3/min$  (83 ft3 a min)

Coolant Supply 75.7 L/min(20gpm) @50psi

Drive Motor 45 kw

Electrical Power 208-230/460 V, 140/70.2 A, 3-PHASE, 50~60 Hz

Can Diameters 200, 204, 211 to name but a few

Can Volume 500 ml (211) MAX

Speed up to 380 CPM dependent on can size

Electronic control system: AB, Siemens or Omron PLC Control

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TRIMMER TR-403 The New Decorator SC-DR-B228S

### Description

SLAC provides a new model of trimmer TR-403. With speed of 400CPM, it can couple with all kinds of bodymakers in the market and deliver quality products which have the extremely close tolerances required. The trimmer is designed for 330ml and 500ml cans, but it can be adapted to produce other sizes of can body. Compared to other existing types, the structure of SLAC's trimmer is simpler.



### **Main Feature**

The patented SLAC non-round knife design avoids the need for indexing of knives to the can body. The simple design allows for a clean burr-free trim with minimal moving parts presenting a system that is easy to maintain, low cost and easy quick change from one can size to another.









Trimming Head

Pusher

Non-round Knife

### **TR-403 Specifications**

Width 1.0m

Height 1.3m

Length 2.0m

Weight 1200kg

Air Supply 5.5bar, 1.2m³/min

Vacuum Supply 0.74bar,2.27m³/min

Blower(Optional) Vacuum 0.27bar, 5.5m³/min max

Drive Motor 2.2kw

Electric Supply 380V,3-PHASE,50Hz

Can Diameter 211

Can Heights Up to 170mm(after trimming)

Speed 400PPM

Electronic control system: AB, Siemens or Omron PLC Control

SLAC provides a new model of Decorator SC-DR-B228S. The SLAC 8 Color Decorator brings can decorating speed, quality and efficiencyto a new level. Due to optimization design based on Rutherford Decorator, it can meet the demand of mainstream can sizes production. With the development of technology innovation and accumulation, SLAC will supply more decorator products with outstanding performance in operational stability, produce efficiency, and convenient maintenance. Besides, the excellence of this model is shown as following:

### **Main Features**

- Speed: 2200CPM (Refers to specific can size) . Material: Steel/Aluminium
- Infeed: Starwheel Design ensures stable infeed.Enhanced success rate of can-on-mandrel, reduced skip frequency.Easy to change Can Size
- Segmentation Master Cam designmeets the requirement of quick change
- Reverse Over Varnish design reduces misting effectively withindependent drive. Gravure roller and applicator roller can tripat the same time and adjustprinting pressure automatically.
- 8 color Printer Unit, modular Blanket Wheel, Easy maintenance, small inertia, and high precision
- 24 mandrels design for can size: 202-211; mandrel material: special nylon/ steel(DLC paint coat), Max Can Height 613 (173mm)
- Design of adjustablePin chain transferring track is suitable for multiple can sizes and quick change
- Mandrel Frame with liner guideenhances print quality and lowers maintenance price
- · Centralized Lubrication. Easy maintenance.
- 20 Station Transfer: Light Weight Design, stabilizedcan transferring forquick change.



Infeed assy



Reverse Over Varnish



Blanket Wheel



Pin chain Track



Mandrel Frame



Transfer Assy

### **Specifications**

ij	Dimensions(L×W×H)	4140 mm × 1430 mm × 3270 mm
[	Weight	24018kg
	Special Foundation Required	Yes
Ī	Air Supply	110 cfm @ 90 PSIG(3.1 m³/min. @ 6.2 bar)
Ī	Vacuum Supply	75 scfm @ 20 in.Hg. (2.1 m³/min. @ 50.8 cm Hg.)
Ĩ	Exhaust Supply	3500 scfm @ 4 in H2O(100 m3/min. @ 10 cm H2O)
Ī	Electrical Power	460/380 VAC 50/60 Hz, 250 Amps
	Can Body Diameter Range	202–305 ( 52 mm – 84 mm )
[	Can Height Range	Up to 613 ( 173 mm )
	Speed	Up to 2,200 CPM on 211 × 413 can size



# **New Digital PrinterSC-DCP-B2006**

SLAC provides a new model of Digital Printer SC-DCP-B2006.

SLAC provides a Digital Can Printer SC-DCP-B2006, using CYMK + 2 special colours, UV Ink and UV-Led curing. It has many features: perfect quality, environmentally friendly, easy operation, continuous production.



### **Main Features**

- Highest resolution, can reach 600 DPI; with CMYK+2 special colours can create millions of different colour options
- Personalization becomes possible:
- One-can-one-code Each can in the printing queue can have a unique barcode / QR-code;
- One-can-one-picture Each can in the printing queue can have a different image printed
- Operator friendly software:
- Servo-motorcontrolled movement: High position accuracy & optimum speed control
- Patented mechanical structure:
- Compact structure small foot print;
- Convenient can loading / unloading;
- Continuous mandrel spinning, reducing acceleration / deceleration time to increase overall running speed.



### **Technical data**

Dimensions (L × W × H)	4500 mm × 3000 mm × 3000 mm
Weight	10000 kg
Resolution Available	600 × 600 DPI, 600 × 400 DPI, 600 × 300 DPI
Font Size	2pt positive
Mandrel Qty.	18 pcs
Colour	6, CYMK + 2 special colours
Printing Head	
Pressured Air Supply	90 PSI (0.62mPa)
Vacuum Supply	-13 in.Hg (-0.04mPa )
Power	70 kW
Can Body Diameter Range	202-211 (54-66 mm)
Can Height Range	308-700 (98-178 mm)
Speed	200 CPM

# INSIDE COATER IC-35S/D

### Description

SLAC provides two new models of inside Coater; IC-35S and IC-35D.Nordson nozzles are used in the machine, and the machine runs stably at 350cpm. The simple structure is reliable and makes it easy for maintenance. The stainless-steel covers make it easy to clean.

Additionally, the main working plate and waste coater box are Teflon coated for easier maintenance.

The IC-35D differs from the IC-35S in that it has a third gun to spray the can dome for cans that have to be retorted. The main indexing unit of each model can be replaced with servo motors if required.

### Main Drive

- 1.CAMCO Indexer ensures quality and long life
- 2. Simple structure and reliable performance
- 3. Enough space for easy maintenance



- 1.Stainless steel or chromed parts are used to ensure easy cleaning and good appearance
- 2.Adjusting buttons all around spray guns for fine adjustment
- 3. Spray gun can be dismantled separately to facilitate maintenance









### Spray system

- 1.Nordson MEG2 provides better performance and swifter response
- 2.PLC gives an accurate control on spray time
- 3. Pressure control system consisting of Nordson filter, reducing valve and throttle valve provides steady pressure
- 4.Enough space for easy access and maintenance 5.Nordson options: Ink Dot system, Temperature control unit, Itrax system etc.

### **IC-35S Specifications**

Length 1.0m
Width 1.3m
Height 1.6m
Weight 570/700kg(35D)
Compressed air 90 PSI
Vacuum10CFM@-13in.Hg
Main motor 1.1/1.5(35D)
Auxiliary motor 0.25kw
Power 380V,3-phase,50hz
Can size 202-211(52-66mm)
Can height 308-700(90-178mm)
Speed 350CPM

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# SC-NFC- KAYAN - NECKING SYSTEM

### **Product Description**

The SC-NFC-KAYAN-NECKING SYSTEM designed and manufactured by SLAC, is a multiple stage high-speed machine used in the production of two-piece aluminum or steel cans. The machine adopts multiple Die Necking stages to progressively reduce the diameter of the open end of a can. Depending on customer production demands, supplementary stages; Flanging Stage, Base Reforming Stage, Light Tester Stage, can also be positioned after Necking Stages. This modular design makes expansion quick and easy.



### **Main Features**

- Infeed unit --- waxing mechanism included or not
- Its main feature -- Dual star-wheel for trouble-free can handling at high speeds

Necker Flanger Reformer and Light Tester

- (1) Cam work arc: 240°, bigger than normal at the same speed, reduces pusher acceleration, improves cam follower system stability, lengthens cam follower life.
- Increased process time allows increase in pusher stroke to 1.75" (44.45mm)
- (2) Longer Pusher Stroke gives greater Control of Neck to Body concentricity Longer "Throat" Tooling
- (3) Longer Pusher Stroke --- Increased stroke allows the use of proprietary re-circulating ball slide
- (4) Ball slide use --- Lubrication yearly, simple maintenance
- (5) Ram material: Al 6061 T6
- Lightweight (low inertia) assembly which is very simple to assemble compared to existing solutions, improving the life of the cam and cam followers
- (6) Non-Metallic gears at every other stage to eliminate the requirement to lubricate drive train, decreases gearing noise

### **Technical Specifications**

- Rated speed: 3400 CPM
- ◆ Can body size range: 202 211
- Can height range: 307-804
- ◆ Can neck size range: 209 200
- Vacuum: 8-10"/HG@15 scfm
- Air flow requirements: 55-80scfm/Necker; 40scfm/flanger or LT; 30-50scfm/reformer
- Air pressure requirements: 50 PSI (3.4 BAR)

(dual- compressor setup)

# **SLAC Palletizer**

SLAC Palletizer is an automatic, high efficient system and has the following three advantages.

- Steady and High-speed system
- Easy to operate and maintain
- Adapt to all familiar types of cans and pallets in the market

### **Main Feature**

High efficiency:

- Sweep /drop layer and sheet prep by servo motor
- Two touch screen console for test and maintain
- Optimizing the sequence

Improving structure

- Main hoist have two chain drive systems
- Sheet prep position
- Hoist for loads of sheets and top frames
- Increase one position for pallets stack to balance consumption and reduce feeding times
- Setting maintain platform for install and debug and maintain Customer option
- Customize to offer palletizer system according to customer's requirements

### **Parameter**

Pallet Types(mm):

- 1420x1120x(110-150)
- 1200x1000x(110-150)
  - Can Types:
- Standard Cans (250ml/330ml/500ml etc.)
- Sleek Cans (200ml/250ml/330ml etc.)
- Slim Cans(250ml/330ml etc.)

- System Speed: 3000CPM (NOTE: The speed is for 211 can and the 1420x1120 pallet)
- Max Load Height(mm): 2800
- Max Load Weight(kg): 600
- Standard TOC(mm): 330
- Standard TL(mm): 4724
- Max Height Of Pallet(mm): 1200
- Height Of Top Frame(mm): 600
- Height Of Sheets(mm): 600
- Compressed Air Pressure(psi): 80
- System Whole Power(kw): 27
- Operating Conditions Average Power(kw): 18

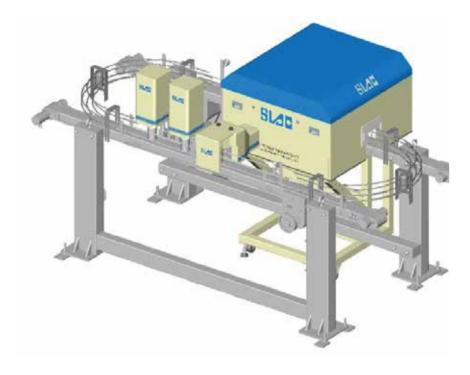
\*Above information can be changed on the basis of customer requirement.



# **SLAC MACHINE VISION SYSTEM FOR CANS**

### Description

From our experience with ends inspection, SLAC has developed a new machine for inspection of cans. It can work both on-line and off-line. Customers can select its function as required. The system can inspect both inside and outside of the can as well as more specific features for example, to inspect bar codes and to provide SPC, in a modular design and a flexible combination to bring benefit to customers.



### **Main Feature**

- Inspect 2P and 3P Cans, steel or aluminum, inside or outside;
- Specific LED light source for the requirement;
- Perfect after-sale service, including system updates and remote technical support.

### **Applications**

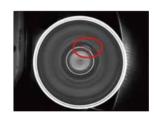
- 2 Piece Cans steel or aluminum
- 3 Piece Cans
- Other Cans Milk Powder Cans, Fish Cans

### Test items

- Flange (Crack, Dent/Bump, Dirt)
- Inside body (Crack, Dent/Bump, dirt, Scratch)
- Bottom (Crack, Dent/Bump, Dirt, Scratch)
- Weld (Slag, Lacquer Missing and Shift)
- Neck (Wrinkle, Dirt)
- Outside body (Reverse can/Inside Out can, Print,Bar code, Double-lids, Color, Crack, Dent/Bump,Dirt, Label etc.)



**System Running Screen** 



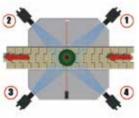
2P Can



Reverse can inspection



3P Can



Outside body inspection

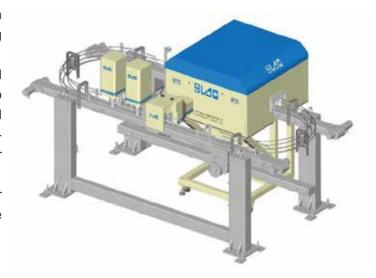
# **SLAC CAN OUTSIDE PRINTING INSPECTION SYSTEM**

### Description

The SLAC Can Outside Printing Inspection System is ideal to guarantee high printing quality for beverage and food products.

Utilizing SLAC's unique algorithms and software techniques, the system can unwrap the cylindrical surface of an un-oriented container automatically and acquire a 360-degree image of the can. Any defective container will be ejected from the conveyor.

SPC, modular design and simple user interface designed for changeover are additional customer benefits.



### **Features**

- 100% high-speed inspection online
- Automatically rejects unqualified products
- Easy to changeover
- Monitoring printing component with defect data
- System update and remote technical support available

### **Applications**

- 2 Piece Cans steel or aluminum
- 3 Piece Cans





Stitched image

### Test items

- Too light or too dark ink.
   Registration
- Incomplete printing
- Incorrect Colors
- Scratch/Dent

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- Incorrect Barcode
- Surface Contamination
   Rough Can







**SLAC Sheet Inspection System** 

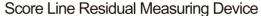


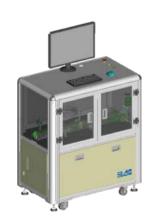




Light Leakage Testing System







SLAC Machine Vision System Medical Cap

CAN VACUUM TESTER
Appendix

### Description

This machine is ideally installed directly in production lines.

It has an extremely simple operating principle for the total elimination of defective cans (pin holes,dented-flanges,cracked welds,etc.)

Standard vacuum pressure is applied to cans and those found faulty will be automatically rejected.

Can height can be set with simple adjustments in about 5 minutes

Changeover of diameter is also possible by means of tool kits (setting in 50 minutes).

The infeed belt with screw feeds cans to the rotary testing unit with 20, 40 or 52 heads.

As each head completes a full revolution, it depressurizes the can being tested to a standard pressure value. Any variations detected in this depressurization mean there is a leak in the can, so the machine produces an electronic signal or ejects the can. Afterwards the good cans are reinserted in the production line.

The machine is equipped with a special pneumoelectronic transducer unit for detecting microholes.

This device displays on the electronic board the number of the pockets in which a defect has been found. Set up is done automatically using a special soft key installed on the same panel.

The control panel controls and monitors the various operating phases of the machine, providing a rapid set-up of reference parameters and display of the current pressure values and reject counts for each rotary head.

### **Specifications**

MODEL	CVT16T	CVT20	CVT40	CVT52
DIAMETER RANGE(mm)	108-260	99-155	52-99	52-73
HEIGHT RANGE(mm)	140-300	35-260	35-260	35-260
OPERATING SPEED(cpm)	from 20 to 80	from 100 to 400	from 100 to 800	from 100 to 1000
OPERATING TEST VACUUM	400			
(CVT20-40-52)	400 mBar-500 mBar			
ACCURACY IN FUNCTION OF	Erom 0.09 mm to 0.15 mm			
CAN SIZE AND LINE SPEED	From 0.08 mm to 0.15 mm			
ELECTRICAL REQUIREMENTS	5 Kw,380 V,50/60 Hz,3-phase.(easily adaptable to other standard)			
AIR CONSUMPTION	50 l/minute at 6 Bar(average)			

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RPT (Ring Pull Type)

SOT (Stay on Tab)

FA (Full Aperture)





**Neck Diameter** 

引领创造・定制末

**Can Diameter** 

Volume



Height

# Can Diameter Conversions (Beverage)

Can diam	neter	Neck diameter		
Metric Imperial		Metric	Imperial	
	44.:		113	
53	53 202		200	
57.4	204	53	202	
			206	
65	211	62	209	

Note:

A/B \*C A: Can diameter, B: Neck diameter, C: Can height

Imperial Size	Metric Size	Common Name(volume)	Nominal Contents(volume)
, , , , , , , , , , , , , , , , , , ,	52/50*88	15cl	150ml
	52/50*111	20cl	200ml
	52/50*130	24cl	240ml
202/200*504	52/50*134	25cl	250ml
	58/52*114	sleek	250ml
	58/52*145	sleek	330ml
	58/52*157	sleek	355ml
211/206*310	65/60*92	25cl	250ml
211/206*315	65/60*100	100oz	275ml
211/206*409	65/60*115	33cl	220ml
211/202*409		33cl	330ml
211/206*413	65/60*122	120z	355ml
211/204*413		12oz	355ml
211/202*413		12oz	355ml
	65/60*130	 	375ml
	65/60*138		400ml
211/206*603	65/60*159	16oz	440ml
211/206*610	65/60*168	Half liter	500ml
211/202	65/52*188	 	568ml

# 2 PC DWI useful conversions

Thin and Thick wall			
mm	inches	thou (T)	
0.09	0.00354	3.5	
0.095	0.00374	3.7	
0.1	0.00394	3.9	
0.105	0.00413	4.1	
0.11	0.00433	4.3	
0.115	0.00453	4.5	
0.12	0.00472	4.7	
0.125	0.00492	4.9	
0.13	0.00512	5.1	
0.135	0.00531	5.3	
0.14	0.00551	5.5	
0.145	0.00571	5.7	
0.15	0.00591	5.9	
0.155	0.0061	6.1	
0.16	0.0063	6.3	
0.165	0.0065	6.5	

Dome r	eversal		
Bar	Psi		
5.44	80		
5.78	85		
6.12	90		
6.46	95		
6.8	100		
7.14	105		
7.48	110		
7.82	115		
8.16	120		

Axial	Axial load			
Kg	Lbs			
90.91	200			
93.19	205			
95.46	210			
97.73	215			
100	220			

	Aluminum for 2 Pc Beverage				
Alloy	Body stock	End stock coated	End stock bare	Tab stock coated	Tab stock bare
3004/3104	common				
3105	common				
5019A					
5182	 	UTS - Medium	UTS - Medium	UTS - High	UTS - High
5042		UTS - Low	UTS - Low	UTS - Low	UTS - Low
5082				UTS - Medium	UTS - Medium

# GUIDELINES FOR DRAW-REDRAW CANS

- Cans traditionally were made with single draw operation using tinplate or aluminium
- Later on systems were developed to draw redraw systems
- To allow thinner gauges, harder gauges













Round Rectangular

Oval

Pear

Bowl

Round conical

Names of cans change depending of German, French, Spanish or Portuguese nomenclature

# Rectangular Cans for Seafood



# Rectangular Cans for Ready Meals



# Rectangular Cans for Meat



# Oval Cans for Seafood





# **CAN DIAMETER CONVERSION (FOOD CAN)**

Imperial Ref.	114	202	207	209	211	213	300	301	307	310	313	401	404	410	502	603	606	700	802	[812	1000
Metric Ref	45	52	59	62	65	69	73	74	83	89	93	99	105	113	127	153	159	176	203	219	278

# **Popular Can Sizes Conversion (Food)**

Note:

(A\*B A: Can diameter B: Can height)

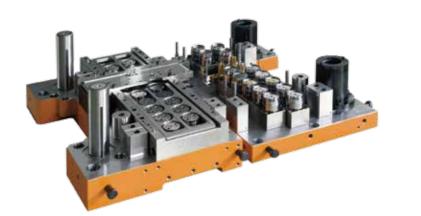
Imperial Size	Metric Size	Common Name	Nominal Contents			
202*108	52*38	3p-70gram	70ml			
202*213	52*72	3р	140ml			
211*202	66*54	3p-5oz	155ml			
211*301	65*78	3p-Picnic	235ml			
211*400	65*102	2p/3p A1 10o	315ml			
211*414	54*124	3р	385ml			
300*207	73*62	3р	230ml			
	73*108.5	RHT 2P	415ml			
73*110	2p/3p-1/2kilo(ET)	425ml				
300*402	73*105	2p/3p-14oz	405ml			
300*408.5	73*115	2p/3p-UT	445ml			
307*112	83*44	2p/3p-Tuna	215ml			
307*408	83*114	3p-A2	580ml			
401*212	99*70	3p-1lb flat	475ml			
401*400	99*102		720ml			
401*411	99*119	A2.1/2 -1kilo	850ml			
404*700	105*78	A3	1455ml			
603*600	153*152	A6	2630ml			
603*700	153*178	A10	3110ml			

Automatic Vertical Warehouse Tooling Systems

To increase working efficiency, improve productivity, and reduce risk to both people and goods, SLAC uses an advanced vertical warehouse. It reduces occupied space and helps to quickly locate spare parts.

















**NOTE PAGE SPARE PARTS** 



































