

PIR PRO

AUTOMATION | ASSEMBLY | PACKAGING



Innovative
Packaging
Solutions

Packaging machinery
Vision inspection
End-of-line



ABOUT US

At PIT PRO, we believe tube packaging should be smarter, faster, and more reliable. Since 2008, we have been delivering innovative solutions that connect the cosmetic, pharmaceutical, oral care, food, and chemical industries with advanced automation technologies. Our focus on in-house R&D, engineering, and production enables us to provide turnkey solutions that meet the highest global standards.

Within our three key areas of packaging automation, we offer tube packaging machines designed to meet a wide range of configurations to satisfy diverse customer needs; vision inspection systems seamlessly integrated into production lines to ensure every tube is inspected with precision; and end-of-line solutions that fully automate the final packaging stage, reducing labor requirements while maximizing efficiency and consistency across the line.

With our dedication to stability, reliability, and long-term service, we understand how crucial it is for tube manufacturers to maintain production continuity and efficiency while simplifying maintenance. Our mission is to deliver innovative, intelligent, efficient, and high-quality packaging solutions built on durable, flexible, and adaptable machinery.

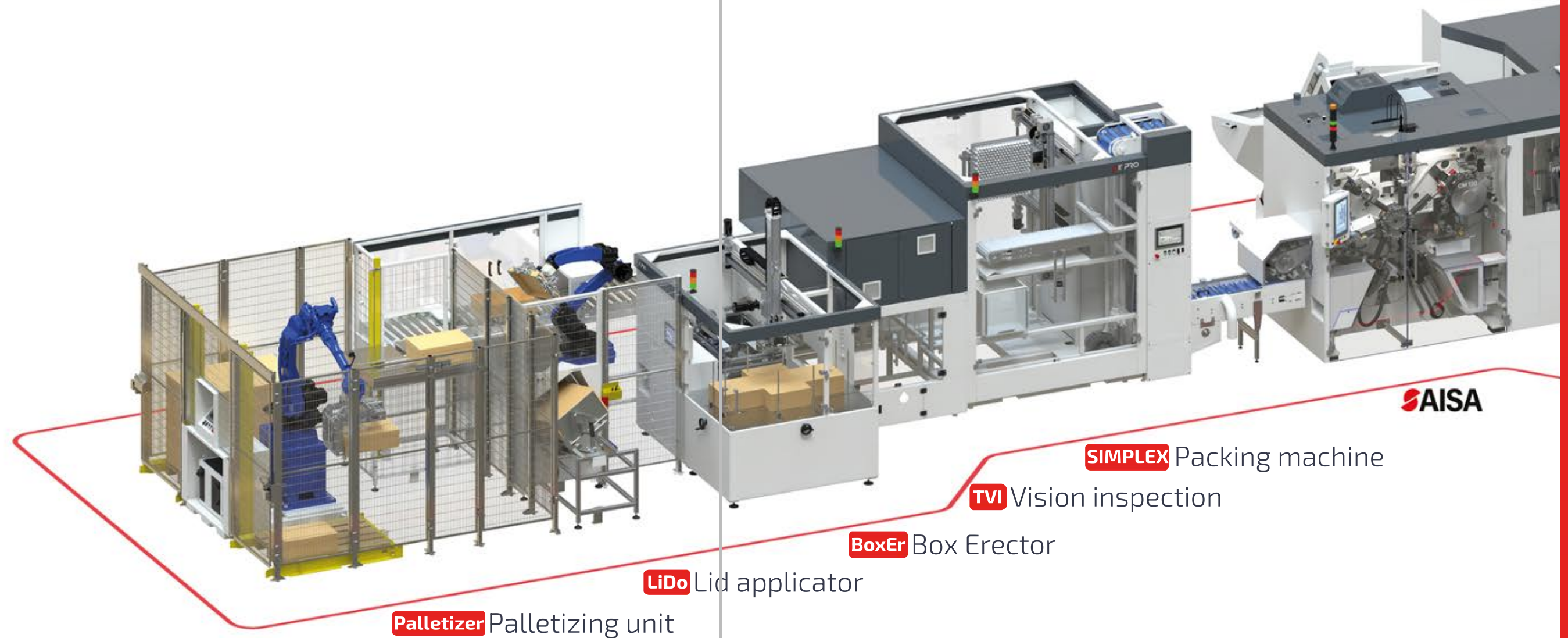
Explore this brochure and discover your new tube packaging machine or end-of-line solution within our portfolio of high-quality, innovative systems—designed to ensure performance, productivity and profitability.





OUR MACHINERY

EXPLORE INNOVATIVE PACKAGING SOLUTIONS



Palletizer Palletizing unit

LiDo Lid applicator

BoxEr Box Erector

TVI Vision inspection

SIMPLEX Packing machine

AISA

SHAPE **YOUR** IDEAL PRODUCTION LINE
WITH **AISA** TUBE PRODUCTION MACHINERY
AND **PIT PRO** COMPLETE END-OF-LINE SOLUTION



OPTIMO

EFFICIENCY MADE AFFORDABLE



Simple, Small, Effective - OPTIMO. Designed for manufacturers who need fast delivery, a small footprint and easy to operate tube packing machine. Simple design provides cost-effective solution while ensuring ease of use and reliability.

KEY FEATURES

- Cost-effective solution
- Small footprint
- Rapid and simple setup
- Fast and simple tool exchange
- Suitable for aluminum, extruded and laminate tubes
- Low maintenance



TECHNICAL SPECIFICATION

Machine



Packing speed (max):
Machine orientation:
Dimensions (LxWxH):
Machine infeed:

300 Tubes/minute
Left or Right
1380 mm x 2100 mm x 2070 mm
Roller conveyor

Tubes



Tubes diameter range:
Tubes length range:
Suitable for:

11 mm - 63,5 mm
60 mm - 300 mm;
Aluminum, Laminate and Extruded tubes

Trays



Tray type:
Min. dimensions (LxWxH):
Max. dimensions (LxWxH):
PP bag option:

Cardboard and Plastic
280mm x 300mm x 55mm
630mm x 630mm x 250mm
No

OPTIONS

- Tubes elevator for larger height differences
- Empty tray infeed conveyor direction change
- Full tray outfeed conveyor direction change
- Vision inspection
- Antistatic Unit

Connect OPTIMO with

- PIT PRO BoxER
- PIT PRO End of line solution
- AISA SAESA 100 H
- AISA SAESA 120
- AISA SAESA 240



SIMPLEX

DESIGNED FOR SIMPLICITY. BUILT FOR EFFICIENCY.



The SIMPLEX sets new standards in tube packaging with simplicity, performance, and efficiency. Designed for effortless operation, it delivers reliable results with ease of use, quick changeovers, and high-speed output – keeping production smooth and quality consistently high.

KEY FEATURES

- High efficiency and reliability
- Packs laminate and extruded tubes
- Controlled tube transfer throughout the entire packing process
- Tubes packed tightly in the box
- Intuitive, simple setup
- Easy operation and low maintenance



TECHNICAL SPECIFICATION

Machine



Packing speed (max):
Machine orientation:
Dimensions (LxWxH):
Machine infeed:

350 Tubes/minute
Left or Right
2260 mm x 2220 mm x 2570 mm
Bucket conveyor and compensator

Tubes



Tubes diameter range:
Tubes length range:
Suitable for:

11 mm - 63,5 mm
60 mm - 280 mm;
Laminate and Extruded tubes

Trays



Tray type:
Min. dimensions (LxWxH):
Max. dimensions (LxWxH):
PP bag option:

Cardboard and Plastic
280mm x 300mm x 55mm
630mm x 630mm x 250mm
Yes

OPTIONS

- Tubes infeed direction and height change
- Empty tray infeed conveyor direction change
- Full tray outfeed conveyor direction change
- Vision inspection quality control
- Mini or Standard tube size configuration

Ready to connect with

- PIT PRO - BoxER
- PIT PRO - End of line solution machinery
- AISA - SAESA 100H
- AISA - CM 120 and CM 240
- AISA - KSM 120 and KSM 240



AB-BOT

FLEXIBILITY WITHOUT COMPROMISE



Flexibility defines the AB-Bot. It receives and packs tubes in multiple orientations with precision and reliable performance, even at high speeds. Built for maximum efficiency, it offers quick changeovers, seamless integration, and versatile layouts that connect effortlessly with any manufacturing line.

KEY FEATURES

- High flexibility - Cap-up and Cap-down
- Seamless compatibility with any type of upstream machine
- Controlled tube transfer throughout the whole packing process
- Integrated Vision inspection quality control
- 2 models AB-BOT 120 and AB-BOT 240



TECHNICAL SPECIFICATION

Machine



Packing speed (max): 350 Tubes/minute
Machine orientation: Left or Right
Dimensions (LxWxH): 3440 mm x 2240 mm x 2140 mm
Machine infeed: Bucket conveyor and compensator

Tubes



Tubes diameter range: 19 mm - 63,5 mm
Tubes length range: 60 mm - 260 mm;
Suitable for: Laminate and Extruded tubes

Trays



Tray type: Cardboard and Plastic
Min. dimensions (LxWxH): 280mm x 300mm x 55mm
Max. dimensions (LxWxH): 630mm x 530mm x 250mm
PP bag option: Yes

OPTIONS

- Tubes infeed direction and height change
- Empty tray infeed conveyor direction change
- Full tray outfeed conveyor direction change
- Integrated Vision inspection quality control
- Mini or Standard tube size configuration

Ready to connect with

- PIT PRO - BoxER
- PIT PRO - End of line solution machinery
- AISA - SAESA 100H, SAESA 120 and SAESA 240
- AISA - CM 120 and CM 240
- AISA - KSM 120 and KSM 240

Welcome to
Pit Pro VISION



Build your efficient tube production line
by combining different types of machines
with our fully integrated **END-OF-LINE** solution.



VISION INSPECTION

EVERY TUBE INSPECTED, QUALITY PERFECTED



The TVI, Tube Vision Inspection system is a fully automated quality control solution for packed tubes in boxes. With high-resolution cameras, it inspects each tube for debris, damage, and pattern, ensuring accuracy, flexibility, and reliable performance in modern packaging lines.

KEY FEATURES

- Connect In-line or use as Stand-alone
- Inspection of every single tube in box
- Two or three high-resolution cameras
- Checks packing pattern and counts tubes
- Detects debris and defects on tubes
- Automatic upload parameters from packing machine or upload from predefined recipes



MACHINE SPECIFICATION



Speed:	Up to 300 Tubes/minute
Tube diameter:	19* mm to 63,5 mm
Tube length:	60 mm to 240 mm
Box dimensions max (LxWxH):	600 mm x 600 mm x 240 mm

INSPECTION SPECIFICATION

Function	Description
Missing tube detection	Checks every tube position in box and reports missing
Missing or uncomplete membrane	When orifice size bigger than 3,5mm damaged or uncomplete membrane detected
Shoulder contamination	0,15 mm for <Φ30mm tubes; 0,20 mm for >Φ30mm tubes
Side wall contamination	0,25 mm for <Φ30mm tubes; 0,3 mm for >Φ30mm tubes
Ovality	Detects ovality above 6 to 14% - adjustable
Wrong tube/packing format	Detection of wrong packing format in the box
Missing or wrong colour cap	When without membrane visible through orifice
Damaged tube	Open end general damage and deformation (crushed)

Important note:

To avoid vision inspection rejecting packed box with tubes without defects it is recommended that the tubes packed in the box are not too loose (suggested space between tubes and box sidewall 3 mm). Tolerance can be approved when tests with actual system are made.



BOXER

THREE FORMING METHODS. WIDE DIMENSION RANGE. ONE BOXER.



BOXER brings reliability and flexibility to box forming. With three forming methods and a wide size range, it ensures uninterrupted packaging flow – enabling more efficient workforce allocation while delivering consistent results and efficiency across the packaging process.

KEY FEATURES

- Possible 3 methods: Tray assembly, Hot glue sealing and Ultrasonic welding
- Easily adapts to various box shapes
- Magazine capacity up to 130 blanks
- Possible to add bag insert module
- Intuitive, simple setup
- Easy operation and low maintenance



TECHNICAL SPECIFICATION

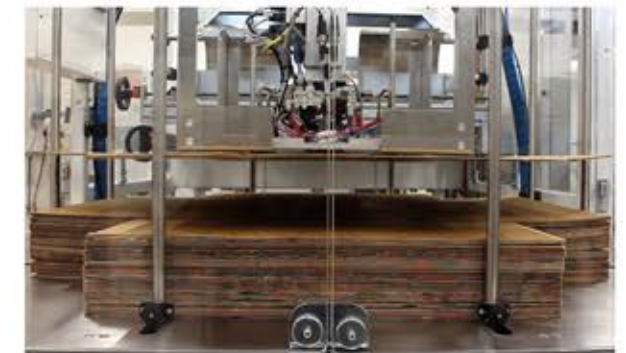


Speed:
Box type:
Box dimensions min (LxWxH):
Box dimensions max (LxWxH):

Up to 5 Boxes/minute
Cardboard box, Plastic box
300 mm x 300 mm x 60 mm
630 mm x 630 mm x 250 mm

OPTIONS

- Bag insert module
- Pick-up blanks directly from pallet
- Combine assembly, hot glue and ultrasonic welding modules in one machine
- Configuration as stand-alone machine



Ready to connect with

- PIT PRO - Optimo
- PIT PRO - Simplex
- PIT PRO - AB-BOT



LIDO

COVER WITH SPEED, SECURE WITH PRECISION.



LIDO is a fully automated lid covering system for end-of-line packaging. It applies lids either pre-assembled or formed in-line with hot glue, operating with or without robotic integration. Optional bag close or foil covering provides added protection and a clean, uniform finish.

KEY FEATURES

- Possible 2 methods: Preassembled or in-line with hot glue lid application
- Easily adapts to various lid shapes
- Magazine capacity up to 70 blanks
- Possible to add bag close or cover with foil module
- Intuitive, simple setup



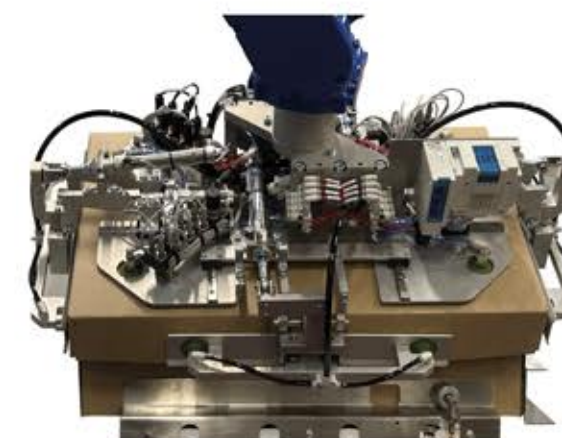
TECHNICAL SPECIFICATION



Speed:	Up to 4 Lids/minute
Box orientation:	Horizontal or Vertical
Box dimensions min (LxWxH):	300 mm x 300 mm x 60 mm
Box dimensions max (LxWxH):	630 mm x 630 mm x 250 mm

OPTIONS

- Bag closing module
- Cover with foil module
- Configuration as stand-alone machine
- Integrated labeling station



Ready to connect with

- PIT PRO - Optimo
- PIT PRO - Simplex
- PIT PRO - AB-BOT





PALLETIZER

FROM BOX TO PALLET IN NO TIME



The Palletizer is a flexible End-of-Line solution that automates packaging by efficiently stacking boxes onto pallets. With robotic precision and optional labeling integration, it ensures high efficiency, reduced manual handling, and reliable performance for modern, high-speed packaging lines.

KEY FEATURES

- Alternate cells for pallet change on the fly
- Easy box dimension and pattern change and settings
- Optional labeling station before palletizing
- Intuitive, simple setup
- Fast palletizing speed



TECHNICAL SPECIFICATION

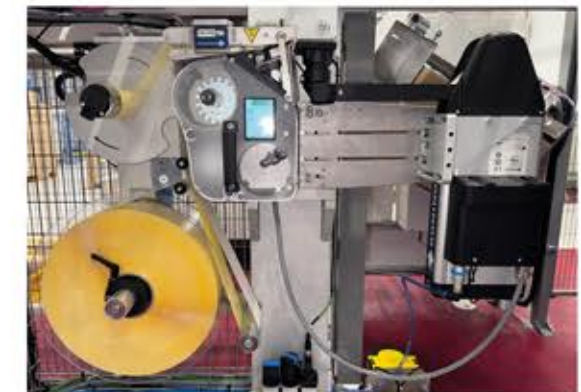


Speed:
Max load:
Box dimensions max (LxWxH):
Max pallet height:

Up to 6 boxes/minute
60kg (for higher loads contact us)
630 mm x 530 mm x 300 mm (customizable)
2.100 mm

OPTIONS

- Integrated labeling station
- Gantry or Robotic palletizer
- Up to 4 pallet spaces for Robotic version
- Automated pallet exchange



Ready to connect with

- PIT PRO - LiDo
- Any existing box/package line
- New custom made palletizing projects



SERVICES

At PIT PRO, customer satisfaction is our top priority. Our mission is to keep your machines operating at peak performance throughout their entire lifecycle—without compromise.

We understand the critical importance of reliable machine performance, which is why we are dedicated to providing first-class service and genuine spare parts, delivered in the shortest possible time.

With a professional, tailored approach, we ensure your machines remain efficient, dependable, and ready for long-term operation—so you can focus on productivity and growth.

TRAINING

Packaging quality depends greatly on operator knowledge. With every machine, we provide training on mechanical, electrical, and automated operation, including proper maintenance—ensuring efficiency and long-term reliability.

TECHNICAL SUPPORT

We provide quick, effective support—whether it's improving production efficiency or solving issues. With remote access and live video, our experts deliver cost-effective solutions without delay.

TOOLING

Efficient, stable packaging requires the right tooling. We design and deliver custom tools for your machine, enabling fast set-ups, high productivity, and consistent quality.

SPARE PARTS & CONSUMABLES

A PIT PRO machine means long-term partnership. We secure the supply of spare parts and consumables, keeping your production stable and reliable throughout the machine's lifecycle.



PIT PRO

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