# Operation and Maintenance Manual





## **Bremner Ripon**

Model: 107-20

SN: 8873

October 2007

#### WARRANTY

ARPAC warrants the equipment of its manufacture to be free from defective material or workmanship for a period of one year from date of shipment from the factory, provided that:

- 1. Such equipment is given normal and proper usage.
- 2. It is still owned by the original purchaser.
- 3. The equipment has been operated in accordance with generally approved practice and in accordance with ARPAC's instructions.
- 4. No repairs, alterations, or replacements have been made by others without ARPAC's written approval.

The purchaser shall notify ARPAC immediately of any defective parts and ARPAC shall take corrective action. If such correction requires the replacement of a defective part or parts, ARPAC will supply them F.O.B. the factory.

ARPAC shall in no event be held liable for damage or delay caused by defective parts and will not accept any charges for work performed by purchaser in making adjustments or repairs to the equipment unless such work has been authorized in writing by ARPAC.

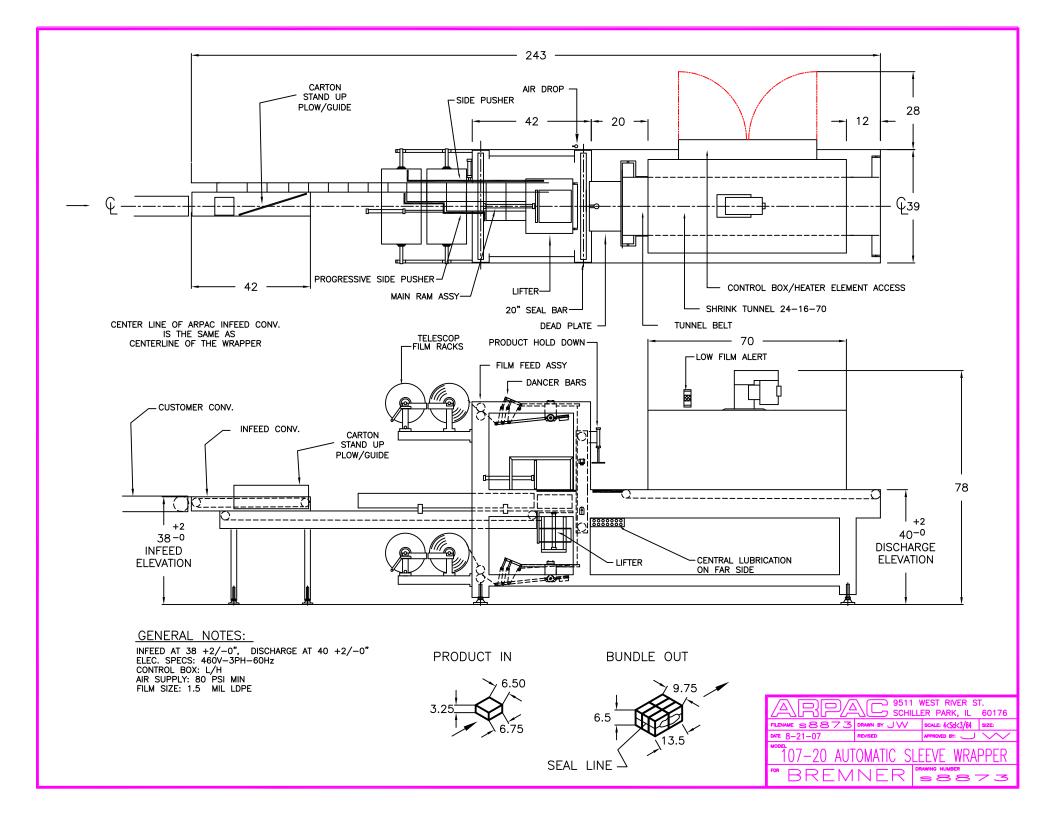
Any equipment or component not of ARPAC's own manufacture is sold under whatever warranty is provided by the maker, to the extent ARPAC is able to enforce such warranty. Such items are not warranted by ARPAC in any way.

When components are sold to be assembled in combination of purchaser's design, the warranty shall be limited to each separate component and shall not apply to any combinations or components.

ARPAC's liability (except as to title) arising out of the supplying of the equipment shall in no case exceed the purchase price of the said equipment. ARPAC makes no guarantee or warranty, expressed or implied, other than as stated above.

ARPAC factory trained, qualified technical services personnel are available for start-up and instructional assistance. If the customer does not utilize ARPAC personnel for this function, ARPAC is only liable for replacement of defective parts, not for labor or expenses necessary to adjust any problems out in the field.

ARPAC personnel are available for ARPAC equipment training either on-site/hands on or in classroom environment, supported by visual aid and literature to be administered under a separate purchase order.



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# SECTION 1 Introduction

- 1-1 Using This Manual
- 1-2 Manual Design

#### Introduction

This manual is an operations and maintenance manual for THE ARPAC® GROUP packaging equipment. Use this manual if you are responsible for using, operating and/or maintaining the equipment. It is organized in a manner that can be easily understood by personnel with reasonable experience. This manual is designed to provide clear and simple explanations of safety, daily operating procedures, troubleshooting guidelines and descriptions of machine parts and controls.

If operated and maintained correctly, this machine is designed to provide the user years of trouble-free service. It combines up-to-date, state-of-the art technology as well as ARPAC's enormous experience in the area of packaging systems.

#### **Using this manual**

The following features help make this manual simple to use:

#### Construction

The binder on this manual is attractive enough to sit on the shelf in the office, yet rugged enough to bring into the shop. Tabbed dividers separate the sections of this manual, providing quick access to a specific area of the text.

#### **Text Notations**

The titles at the top of every page provide a quick reference as to which section the manual is opened to.

#### **Graphical Notations**

Manuals for older equipment may contain some old style graphical notations as well as the following current graphical notations.



**NOTE:** Contain additional information to assist personnel in the operation of this machine.



**DANGER:** Warn the user of possible personnel and/or equipment hazards in the operation and maintenance of this machine.

#### Manual Design

This manual is organized into the following sections:

Warranty with new equipment. The layout drawing provides a visual index of this **Machine Layout Drawing** manual. Use the layout drawing to find information on individual assemblies.

The table of contents is a directory of this manual. **Table of Contents** 

Introduction This section explains how to use the manual.

Describes the safety precautions that should be 2 Safety followed when working with, on or around the equipment.

Describes the features individual 3 Mechanical of the **Sub-Assemblies** mechanical assemblies and their function. It also provides a brief overview of the interaction of these assemblies with other machine

components.

Explains the purpose and location of all the **Operator Controls** controls used to operate the machine.

**Operating Procedures** This section is dedicated to the operator. lt describes in detail step-by-step procedures for starting, stopping and operating the equipment

including such operator functions as changeovers

This is the standard ARPAC warranty provided

and correcting minor setup problems.

**Troubleshooting** This section was designed to help the operator

> and the maintenance personnel understand and resolve any possible problems with the machine.

> Abnormal running conditions and error messages

are covered in the troubleshooting section.

#### **Manual Design**

7	Maintenance	Explains the tasks the operator and the qualified maintenance person should do in order keep the machine in top running condition. It also gives some brief descriptions of how to repair minor problems.
8	Glossary of Terms	This section contains words that pertain to the equipment, which the operator may not be familiar with.
9	Service Information	This section contains an overview of ARPAC's service. Included are a field service policy, installation policy and parts ordering information with an order form.
10	Mechanical Assembly Drawings	The mechanical assembly drawings are the prints for all of the major assemblies on your machine with the complete mechanical bill of material.
11	Electrical Information	Detailed information on the machine's electrical engineering. Included are electrical schematics and complete electrical bill of material.
12	Vendor Information	Here you will find manufacturer's manuals for

certain components.

# SECTION 2 Safety

#### 2-1 Safety Information

- 2-1 Personnel Instructions
- 2-2 Energy Hazards
- 2-3 Guarding and Doors
- 2-3 Interfacing Equipment
- 2-4 Warning Labels

#### **Safety Information**

Every effort has been made by **ARPAC** to provide you with a safe machine. This section describes the safety precautions that should be taken when working with, on or around the equipment. It is essential that machine operators and maintenance personnel follow the safety information below.

#### **Personnel Instructions**

All personnel working around or coming into contact with the equipment must be instructed to keep their hands and other parts of their person and clothing clear of all moving parts.

Equipment must not be operated if any safety devices, including guards and doors are removed, disconnected or damaged.

Personnel shall not reach into the equipment for any reason, including maintenance, adjustment or clearing of jams, while the equipment is in the cycle mode. The cycle mode stops when the guard doors are opened or when the cycle stop button is pressed. This process may take a couple of seconds. Do not reach into the machine until the machine has stopped.

Before any person reaches into the equipment for maintenance or adjustment, air and electrical power shall be turned off using lockable shutoffs provided. The clearing of jams may be done while the machine is turned on, but not while in the cycle mode.

Anyone entering the machine for maintenance, troubleshooting or any procedure entailing the removal of guards or performing work at any point of operation, shall be required to observe all applicable lockout/tagout requirements.



**NOTE:** Because companies tend to tailor the lockout/tagout program to their specific needs, we advise all users to refer to their company's procedure manual.

#### **Safety Information**

#### **Energy Hazards**

Guard doors are equipped with electrical interlocks. When opened they interrupt the air supply and de-energize all outputs to the motion control devices on the wrapper. They do not shut off the main drive motor, the seal bar temperature controller or any of the tunnel functions.

Before any person reaches into the equipment for maintenance or adjustment, air and electrical power shall be turned off using lockable shutoffs provided. The clearing of jams may be done while the machine is turned on, but not while in the cycle mode.

Cycle stop buttons do not de-energize any circuits.

Emergency stop push buttons shut off power to the control circuit, the seal bar, all motors, the master air supply regulator and the tunnel. They do not shut off power to the programmable controller.



**DANGER:** Machine devices may move when the air is turned on or off, when the electrical power is turned on or off or when the guard doors are opened or closed.

Heat is used to seal and shrink the film and apply adhesives, including heat seal type labels and glue. After shutting off the power, seal bar components, the tunnel, label applicators and glue units may remain hot to the touch for an hour or more.



**DANGER:** Do not clean a hot tunnel!!! When cleaning the machine or any components, use only non-flammable cleaning materials. Flammable and/or aerosol cleaners may ignite or explode when coming into contact with the hot tunnel. This is extremely hazardous to your health.

#### **Safety Information**

#### **Guarding and Doors**

Equipment must not be operated if any safety devices, including guards and doors are removed, disconnected or damaged.

Guard doors are equipped with electrical interlocks. When opened they interrupt the air supply and de-energize all outputs to the motion control devices on the wrapper. They do not shut off the main drive motor, the seal bar temperature controller or any of the tunnel functions.

Personnel shall not reach into the equipment for any reason, including maintenance, adjustment or clearing of jams, while the equipment is in the cycle mode. The cycle mode stops when the guard doors are opened or when the cycle stop button is pressed. This process may take a couple of seconds. Do not reach into the machine until the machine has stopped.

Anyone entering the machine for maintenance, troubleshooting or any procedure entailing the removal of guards or performing work at any point of operation, shall be required to observe all applicable lockout requirements.



**NOTE:** Because companies tend to tailor the lockout/tagout program to their specific needs, we advise all users to refer to their company's procedure manual.



**DANGER:** Machine devices may move when the air is turned on or off, when the electrical power is turned on or off or when the guard doors are opened or closed.

#### **Interfacing Equipment**

Observe all applicable codes when interfacing this equipment to other equipment. Specific attention must be paid to any pinch points that may be created and the prevention of an unintended restart of the equipment when the electrical interlocks shut it down.

#### **Warning Labels**



This label indicates a pinching device (i.e., canopies or doors).



This label indicates a clamping pinch point (i.e., diverter).



This label indicates a spring-loaded pinch point (i.e., pinch rollers).



This label indicates high voltage.



This label indicates a cutting device (i.e., knife).

#### **Warning Labels**



This label indicates unseen energy hazards (i.e., electrical or pneumatic).



This label indicates the necessity of reinstalling guards and covers after cleaning or maintenance of the machine.



This label indicates a solid pinch point (i.e., gear or sprocket).



This label indicates mechanical moving parts (i.e., carriage, chains, sprockets and cylinders).

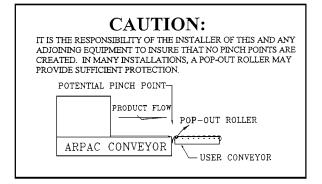


This label indicates that no product should be left in the tunnel. Any fallen products should be removed from the tunnel immediately.

#### **Warning Labels**



This label indicates the presence of moving conveyor belts, which may be moving through the tunnel.



This label indicates a downstream pinch point (equipment connecting to the exit conveyor).