

Technology and Performance in Harmony





## A history of success

Atlas Converting Equipment Ltd. was established in 1976 and specialises in the design and manufacture of primary and secondary slitter rewinders for a wide range of flexible materials including plain and metallized plastic film, labelstock, paper & board.

The company's dramatic success has made it one of the most successful manufacturers and a world leader in slitting & rewinding technology for the global converting industry, with an installed base of over 1000 machines.

The majority of Atlas slitting machines are sold to customers outside the UK and as a result, the company has twice won the prestigious Queen's Award for Export Achievement.

Atlas is the only company to have designed and successfully installed the world's largest film slitters at 10 metres wide. The fastest machines run at up to 1500 metres per minute (m/min).

There are more than 200 Atlas primary film slitters in production worldwide exceeding 6 metres in width and more 2 metre wide Atlas slitter rewinders in the global labelstock industry than from any other manufacturer.

Atlas can also provide bespoke solutions for automated parent roll and finished roll handling systems, with turn-key systems including conveying and robotic palletisation to meet customers' specific requirements.

Over many years, Atlas expanded its operations with several company acquisitions in the converting industry, including Titan slitter rewinders. This added a highly successful range of secondary slitter rewinders to its portfolio with machines less than 2m

Atlas Converting Equipment Ltd., Kempston, Bedford, UK



# World Leader in Slitting Technology

Atlas has installed more than 200 primary film slitters world-wide, exceeding 6 metres in width. This includes the widest machines at 10 metres and the fastest at 1500 metres per minute.



Atlas 8m wide primary film slitter

wide for processing a wide range of substrates including plain, printed and laminated flexible packaging materials.

The most successful product in the Titan range of equipment has been the renowned SR series of highly versatile, twin-shaft cantilever slitter rewinder, now in its 8th generation. Other successful machine models have included a more recently introduced compact cantilever slitter and fully automated twin-turret rewinders for production high volume very applications. Titan now has more than 2,500 installations in over 80 countries.

Today, Atlas and Titan together employ approx. 200 personnel at the purpose-built production site in Kempston, near Bedford (UK) and continue to enjoy worldwide recognition as leading suppliers of primary & secondary slitter rewinder technology for a wide range of plastic film, labelstock, laminates, paper and other types of flexible materials, mainly destined for use in the global packaging industry.





Atlas secondary slitter rewinder for plain & metallized film



## Solutions for bi-oriented films (BOPP & BOPET)

There are more Atlas slitter rewinders in the polypropylene & polyester film production industry worldwide than from any other manufacturer.



Atlas 8.2m wide primary film slitter

Large rolls on an 8m wide film slitter



- Centre winder
- Computer control
- Automatic knife positioning
- Automatic rewind arm positioning
- Automatic cut-off at rewinds (option)
- Automatic rewind core presentation (option)
- Finished roll handling systems (option)
- AC motor technology
- Improved operator ergonomics
- Offline trim spoolers
- Choice of unwind options

# **Primary Film Slitters**



Atlas is the only company to have supplied 10m wide primary slitter rewinders for BOPP film.

Finished rolls on a 10m wide Atlas primary film slitter

- AC direct drives to pull rolls enhances performance & reliability
- Heavy duty rewind arms for optimum performance
- Radial tracking of rewind arms for consistent roll quality
- Improved ergonomics for operator access to machine
- Latest AC inverter controlled drives for efficient, accurate operation
- Compact drive technology requires much reduced space
- New geometric layon arms with quick release roller change
- Self centering layon rollers ensure contact alignment

Atlas has always maintained a highly proactive approach in developing its slitting and rewinding technology to improve machine performance, increase productivity and provide the highest quality finished reels, irrespective of width or rewind diameter.



Atlas 8.2m wide primary film slitter

## Specification

Web widths	4,200 – 10,000 mm
Unwind diameter	up to 1500 mm
Rewind diameter	up to 1400 mm
Machine speed	up to 1500 m/min
Slit widths	350 – 4,500 mm
Material thickness:	10 – 80 micron
Edge trim widths	50 - 200 mm



## Secondary film slitters

Atlas centre or centre-surface slitter rewinders in widths up to approx. 5m have provided solutions in secondary slitting technology for many years for many types of plain, metallized or coated films.

The most successful machine has been the Atlas CW800 slitter rewinder which is an individual station centre winder.

Its modular design enables easy change of unwind options, slitting systems and accessories like edge trim and finished reel handling.

Running speeds can generally be up to 1000 m/min with slit widths as narrow as 350 mm and rewind/unwind diameters up to 1200 mm.

There are more than 100 Atlas CW800 slitters working with metallizers, CPP & BOPP film lines worldwide and it has become the benchmark secondary slitter rewinder for plain and metallized film producers globally.



Typical operator desk with touchscreen



Superior design of the CW800 film slitter gives maximum versatility



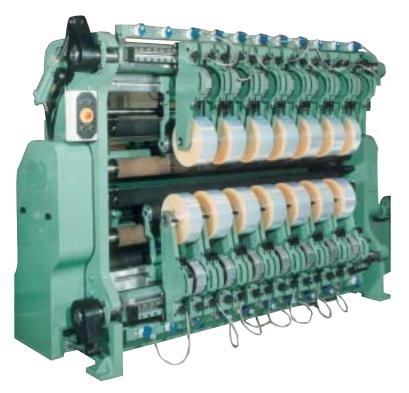
Atlas CW800 rewinding full width rolls

Features	Specification	CW800
Centre winder	Maximum web width	3500 mm
<ul> <li>Computer control</li> </ul>	Maximum unwind diameter	1200 mm
<ul> <li>Razor or rotary knives</li> </ul>	Maximum rewind diameter	1000 mm
<ul> <li>AC drive technology</li> </ul>	Minimum slit width	350 mm
<ul> <li>Manual or electrical arm positioning</li> </ul>	Maximum slit width	2500 mm
<ul> <li>Finished roll handling system</li> </ul>	Maximum speed	1000 m/min

# Secondary Film Slitters

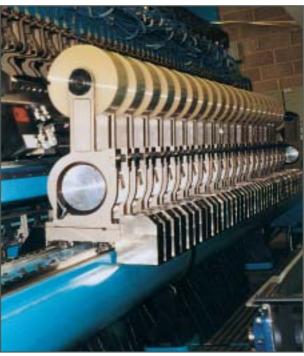
### Narrow width slitters

Secondary film slitters providing narrower slit widths are widely used in the tobacco industry for both cigarette carton overwrap and film for individual cigarette packs. The Atlas CW500 slitter rewinder has been the most successful machine sold in this market sector.

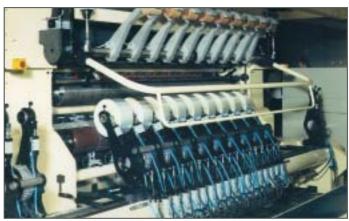


Atlas CW500 centre winding cigarette film

- Centre or centre surface winder
- Computer control
- Manual or fully automatic
- Various knife options
- Finished roll handling systems
- Weighing station
- Finished roll labelling
- Robot palletising
- Improved operator ergonomics
- Underfloor or overhead web path
- Choice of unwind options



Full automation on a 5.5m wide slitter for cigarette film



Automated unloading and core re-loading on a cigarette film slitter

Specification	CW500
Web width	5000 mm
Unwind diameter	1200 mm
Rewind diameter	up to 500 mm
Machine speeds	up to 800 m/min
Minimum slit width (tobacco)	90 mm
Slit width (overwrap)	220 mm



### OCS-2 slitter rewinder

A progressive and innovative product development strategy to increase machine productivity and to constantly improve the quality of rewind reels has enabled Atlas to install more slitter rewinders in the labelstock industry worldwide than any other manufacturer.

Atlas slitting & rewinding technology has become a benchmark process in converting 2 metre wide pressure sensitive adhesive (PSA) substrates, in all formats including the latest paper and filmic materials in various combinations.

Computer control technology combined with automated roll handling systems both in to and out of the machine for both centre and centre-surface winding, has been a major strength of the company and an important factor in its success.



Atlas OCS-2 slitter rewinders in full production

## Features

- Centre surface winder
- Computer control
- Fully automatic cut-off, tape down, unloading, core loading
- Automatic knife setting
- Choice of two differential systems Core sizes 70 to 152mm ID
- Choice of unwinds
- Advanced male blade cleaner



Internal rewind section of the Atlas OCS-2 slitter rewinder

The Atlas OCS-2 is the most successful 2 metre wide slitter rewinder, designed and developed specifically for the labelstock industry.

Key reasons for the machine's success are:

- ease of operation
- clear access to both male and female knives
- quick changeover of slit widths
- linear tracking for good winding conditions (weight of rewind roll does not affect rewind tension)
- Atlas developed linear differential rewind shafts
- · automation system



More than 50 Atlas OCS-2 slitter rewinders are in operation world-wide

## Specification

Maximum web width	2100 mm
Maximum rewind diameter	1150 mm
Maximum unwind diameter	1600 mm
Maximum speed (standard)	500 m/min
Minimum slit width	65 mm

# Slitter Rewinders for Labelstock

### Universal LS slitter rewinder

The Universal LS is the latest generation of Atlas centre surface slitter rewinders for pressure sensitive, self-adhesive materials and especially for all types of filmic labelstock. The machine features fully automated rewind stations (internal and external) - each station using two individual rewind arms. The rewind stations have electrically driven individual AC servo motors and a cylinder to provide contact pressure against the winding drum.

The unique design of the rewinding technology provided by Atlas includes a linear tracking system on the Universal LS slitter which is of particular benefit in rewinding filmic labelstock materials. The rewind contact pressure and winding tension is accurately controlled and not influenced by the increasing weight and diameter of the roll during rewinding.



External rewind section of the Atlas Universal LS slitter rewinder



The rewind arms remain in a constant vertical orientation with the roll of material being supported through the rewind arm pivot point. This system enables perfect rewinding geometry and helps to minimise adhesive 'bleed' with the additional benefit of winding 'softer' rolls.

The fully automatic knife positioning system is able to reset up to 21 male and 30 female blades in less than 3 minutes.

The automatic, computer controlled rewind arm positioning system for typical job changeovers can re-set the rewind arms in approx. 30 seconds which makes the machine particularly versatile for short production runs with reduced machine downtime.

## Specification

Machine width: 2100 mm

Machine speed: 750 m/min.

Max. rewind diameter: 1250 mm

Max. unwind diameter: 1600 mm (5000 kg)

Min. slit width: 65 mm

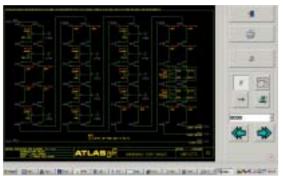
Material thickness range: 30 – 350 micron

- Shaftless Unwind
- Anti-telescoping control
- Pivoting static eliminator
- Vacuum splice table
- Web edge guiding system
- Full width male knife cleaning system
- Advanced machine diagnostics
- Automatic knife positioning
- Automatic rewind arm positioning

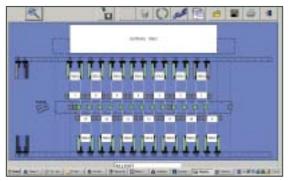


## Computer Control Systems

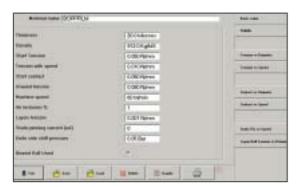




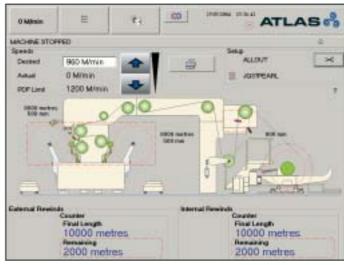
Drawings for fault diagnostics



Rewind configuration screen



Product data file



Main operator screen



Trending screen

- Touch screen computer control technology for easy operation & set-up
- Siemens S7 PLC technology
- Windows XP Operating System
- Fully programmable system software
- Modem for remote fault diagnostics
- Data retrieval for shift monitoring & analysis
- Recipe driven product & machine parameters
- Slitting patterns, rewind arm & knife positioning
- Operator & machine manuals on CD

# Computer Control & Roll Handling

### Automated Roll Handling Solutions



Finished rolls leaving the slitter via conveyors and turntables

Atlas provides the latest technology in fully automated roll handling solutions for various types of flexible materials. A range of custom-built systems are available to complement both primary & secondary slitting operations to meet the specific requirements of the converter.



Slit reels being unloaded automatically on to trolleys



Fully automated robotic vertical roll packing and palletising

Systems can include numerous processes including reel weighing, automatic internal core and external labelling of packages, hygienic reel bagging, robot palletising and pallet wrapping systems which together provide the ultimate solution in fully automated slit reel production.

Modular designs enable the future development and upgrading of existing installations to meet increasing production volumes. Such levels of automation, when combined with a fully automated slitter provide maximum productivity for high volume slitting lines for flexible materials.



Transporting large rewind rolls of film



Labelstock reel transfer on automated trolleys

# Service & Customer Support



The principle in providing service and support packages is not only to improve customers' productivity but also to improve process quality.

These packages will also help maintain troublefree machine operation with Product Support Engineers based in the Service Centre to offer

advice on technical difficulties.

In addition to machine installation & commissioning the global customer service organisation can also provide the following service products:-

### Machine Inspections

Machine inspections are available to establish the current machine status and efficiency of the converting operation. After inspection, technicians give recommendations for additional maintenance and advise customers on available upgrades and retrofits. Information can also be provided on enhancing older equipment to meet the demanding production requirements of today.

### Annual Service Contracts (ASC's)

The ASC is intended to be an integral part of a preventative maintenance programme, designed to keep a machine



running efficiently throughout the year. The contract provides for planned interventions by e x p e r i e n c e d , professional engineers to meet specific requirements and ensure machine reliability and minimum downtime.

#### Spare Parts

Atlas has a dedicated team of technical sales engineers for providing spare parts and giving a rapid response to spare parts enquiries. Machine parts are delivered either from the UK Service Centre or from regional locations globally.

### **Upgrades & Retrofits**

Standard machine upgrades are available across the range of equipment, as well as replacements for obsolete parts. In addition, customised machine upgrades and retrofits can be provided, including computer control and hardware to meet customers' specific production requirements.

### In-house & On-site Training

Customer training packages will not only improve the operating performance production staff, but also enhance their skills in basic machine maintenance thereby relieving pressure on the customer's maintenance team. Training can be provided in conjunction with machine trials &



testing at the Atlas UK production facility or service centre, or at the customer's own premises.

#### Machine Re-location

Atlas can provide machine relocation services including machine de-commissioning, removal and transportation to a new site, re-installation, re-commissioning and training of new operators.



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