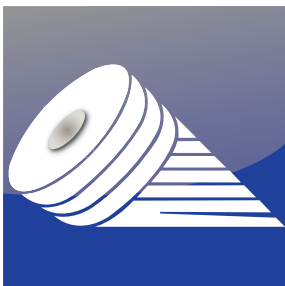


KEEP YOUR INVESTMENT UP-TO-DATE !



www.calemard.com



CALEMARD

by Spoollex

Your Customer Services contacts



Philippe Fraisse

Customer Service Manager
Tel +33 (0) 477 907 257
philippe.fraisse@spoolex.com



Salima Hanfi

Customer Service Assistant
Tel +33 (0) 477 907 271
salima.hanfi@spoolex.com



Dominique Mazille

Field Service Engineer
Tel +33 (0) 607 655 767
dominique.mazille@spoolex.com



Maxime Tondat

Field Service Engineer
Tel +33 (0) 607 655 633
maxime.tondat@spoolex.com



Benoît Béal

Field Service Engineer
Tel +33 (0) 680 595 840
benoit.beal@spoolex.com

Calemard has always strived to develop and improve the machine installed base. A detailed CIP (Continuous Improvement Process) has been developed to ensure the input of the customer is used to target actions to enhance machine performance.

Based on a modular design our equipment can be divided into 3 modules :

- Unwinding
- Cutting
- Rewinding

This leaflet present you all the Retrofits proposed by our Customer Service referenced by modules

Unwinding module :		Machine				
• Static reduction	Athena	Orion	Tucana/TW	Vega	3	
• Conical or banana shaped rollers	Athena	Orion	Tucana/TW	Vega	4	
• Analogic guiding	Athena/SM		TW	Vega	5	
• Pneumatic break	Athena		TW	Vega	6	
Cutting module :						
• Pneumatic cutters	Athena/SM		TW	Vega	7	
• Automated measuring system	Athena/SM	Orion	TW	Vega	8	
• Temperature control	SM	TF/TCF	TW	GT	9	
• BMT cutters	Athena/SM	TF/TCF	TW	Vega/GT	10	
Unwinding module						
• Selvage extraction	Athena/SM	Orion/ TF/ TCF	Tucana/TW	Vega/GT	11	
• Lay-on arm	Athena				12	
Security :						
• Laser scanner	Athena/SM	Orion/ TF/ TCF	Tucana/TW	Vega/GT	13	

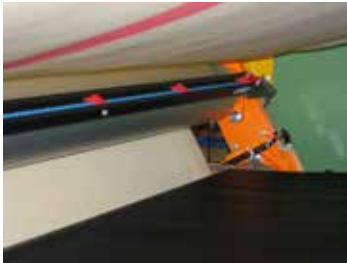
Unwinding module

Static reduction

As seen in many industries that involve machines moving rapidly, companies are faced with a familiar problem - static. The elimination of static during the manufacture of many products is very important to the process. Static can have a negative impact on production, quality control, overall efficiency and cleanliness – and, of course, health and safety of employees.

The Calemar machines are concerned, so we have developed a static reduction retrofit.

By installing a complete Anti Ionisation modification – including electrostatic bar, power unit and all necessary cabling – Calemar can provide a solution that will make static away from your machine.



The anti-static bar positioned along a roll.



The anti-static bar, showing an electrode and cabling.



The ionisation power unit mounted on the side of the machine.

MACHINES CONCERNED :

- Athena/SM
- Orion
- Tucana/TW
- Vega

Unwinding module

Conical or banana shaped rollers

Frequently we have feedback from our customers that the incoming bobbin is not fully even and the material has different tension, either in the middle, at the sides, or from side-to-side.

By installing either a conical or a banana-shaped unwinding bar, the incoming material can be fully controlled and evened-out before the cutting action, ensuring the final bobbin is completely even.

- Highly efficient unwinding action
- Easy to install
- Robust design, with known technology
- Fully tested – numerous retrofits already completed
- Calemar Quality – designed by Calemar.



Adjustement of the position of the curve of the banana roll

MACHINES CONCERNED :

- Athena
- Orion
- Tucana/TW
- Vega

Unwinding module

Analog guiding

Many older Calemard machines were equipped with oleo-pneumatic guiding systems. However, due to increased process requirements, the control required for guiding has become critical. Since a number of years, Calemard has used analogue guiding that is extremely well numerically controlled.

By installing a new guiding cell, electrical actuator and all necessary cabling in your older generation Calemard machine. The software will also be updated.

- Highly efficient and accurate guiding technology
- Easy to install
- No maintenance required
- Robust design, with known technology - standard hardware for many years
- Fully tested – numerous retrofits already completed
- Calemard Quality – designed by Calemard



Guiding



Electrical cylinder and connection

MACHINES CONCERNED :

- Athena/SM
- TW
- Vega

Unwinding module

Pneumatic break

By simply adding a pneumatic break instead of the 2 powder cluches you could replace your old technology, get an appropriate tension :

- Easy to use
- Reduced maintenance
- Break capacity increase
- Modular (from 160 Nm to 960 Nm)

Pneumatic break



Manual pressure adjustment

MACHINES CONCERNED :

- Athena
- TW
- Vega

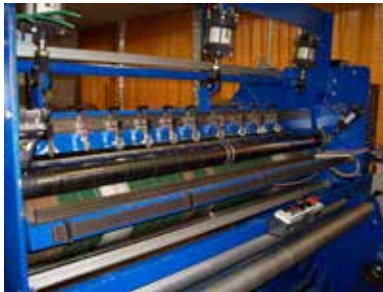
Cutting module

Pneumatic cutters

For some older generation slitting machines the standard Mechanical Crush Cut (FE2) was used. For more than 10 years Calemard has been using exclusively Pneumatic Crush Cutting (AO2C) technology. These cutters have a much improved life-time for the cutting wheels and have much better accuracy.

We provide all components necessary to supply the correct air pressure and we replace the mechanical FE2 crush cutters with pneumatic cutters.

- Improved slitting tolerance
- Easy to install
- Improved cutting wheel lifetime
- Adjustable pneumatic pressure (up to 6 Bars)
- Quick disconnect air supply allows the machine to use only the cutters requested and necessary
- Robust design, with known technology
- Fully tested – numerous retrofits already completed
- Calemard Quality – designed by Calemard



Before Retrofit



After Retrofit



Pneumatic cutters

MACHINES CONCERNED :

- Athena / SM
- TW
- Vega

Cutting module

Automated measuring system

During your production chagement you need to reduce downtimes. Easy to use and to install, the automated measuring system, allows quick and precise cutter adjustments.

By simply adding an automatic measuring system with display and digital lineal, you could get many advantages such as :

- More accurate and reliable positioning
- Save time for adjustment



Display

Lineal

Cursor

MACHINES CONCERNED :

- Athena/SM
- Orion
- TW
- Vega

Cutting module

Temperature control

On hot cutting machines, cutter temperature and its control is crucial for the slitting quality. Moreover the temperature control increases life time for the heating components.

This retrofit uses a temperature controller coupling with a power controller.

- More production
- Life time heating elements increase
- Energy savings



MACHINES CONCERNED :

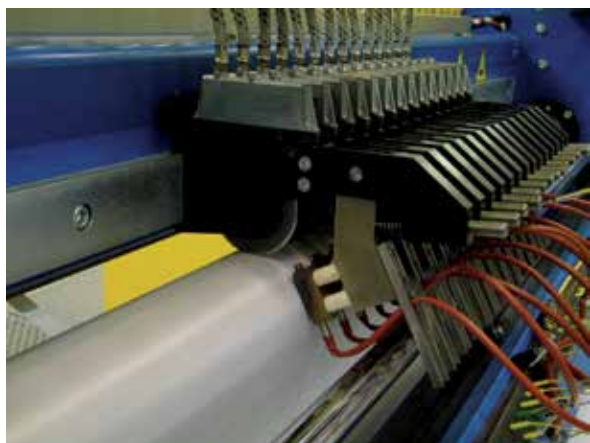
- SM
- TW
- TF/TCF
- SM
- GT

Cutting module

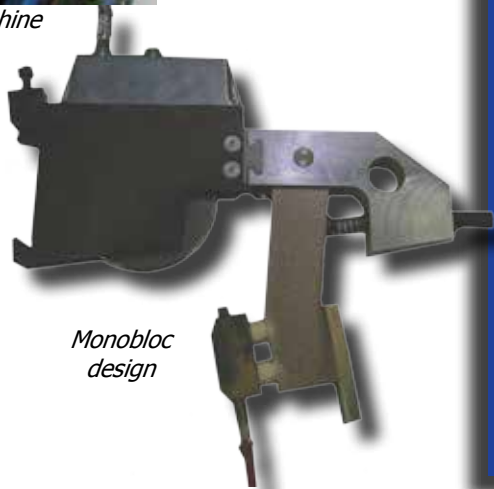
Combined cutters type tied BMT

We have upgraded our famous combined cutter (hot sealing track + crush cutting). The size of our combined cutters has been significantly reduced, allowing now, narrow slitting down to 17 mm wide ! Before, this narrow cutting could be performed only by using separated hot and crush cutters, implying risks of gap between the sealed track and the cutting during cutter's set-up. Our new monobloc system has 2 main advantages :

- Precise hot and crush cutters adjustment in only single operation
- Narrow slitting



BMT cutters installed on machine



Monobloc design

MACHINES CONCERNED :

- Athena / SM
- TW
- TF/TCF
- GT
- Vega

Rewinding module

Selvages extraction

To reduce width selvages to save product but also to ease waste recycling, the slitter could be equipped with selvages extractors.

We propose to install an independent system.

- Earn operator labour
- Increase production
- Reduce waste
- Only one location waste treatment



Extraction system

MACHINES CONCERNED :

- Athena / SM
- Orion / TF / TCF
- Tucana / TW
- Vega / GT

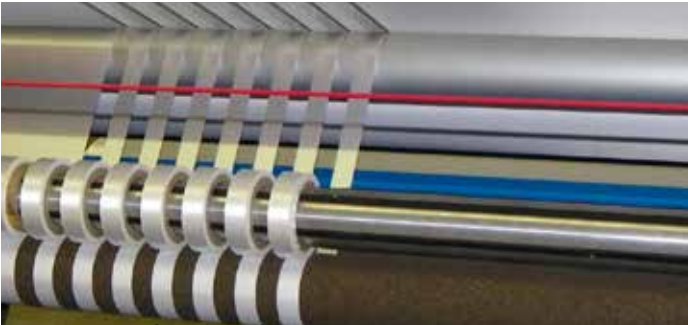
Rewinding module

Lay-on arm

With reduced cost, center winding is the standard technology used on numerous slitter / rewinder. Improve your rewinding quality on this kind of slitters doesn't mean, invest in the more expensive center surface rewinding technology! We offer to upgrade your center rewinder with Calemar lay-on arm. Each arm, individually equipped with 2 cylinders with adjustable pressure, presses the slit strips on the rewinding shaft.

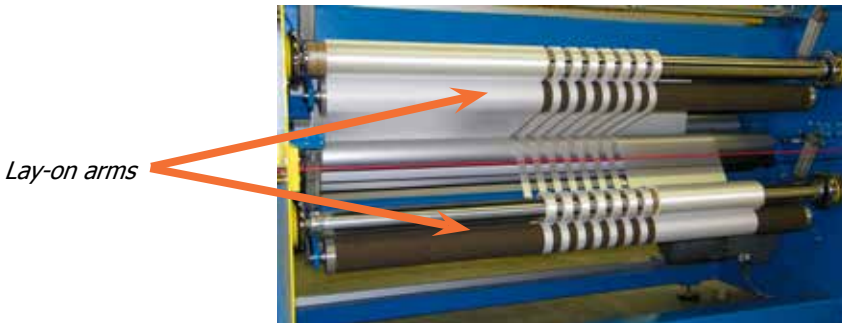
Thus, strips even with edge over-thickness will not slide and pancake walls will be perfectly flat.

- Better rewinding quality
- Easy to install
- Coated rollers install on pivoting arms
- Pression adjustment for a best compacting control without tension increase



Before Retrofit

After Retrofit



Lay-on arms

MACHINES CONCERNED :

- Athena / SM

Security

Laser scanner

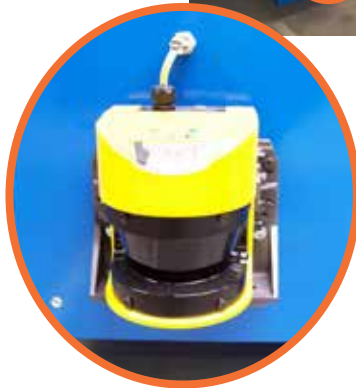
To reduce safety curtains breakdown and to delimit safety area on demand, we propose to install a laser scanner which meets last regulations safety norm for your machine.

We could replace safety curtains and safety cables by a laser, on unwinding or/and rewinding module.

- Save place
- No possibility to break it



Laser scanner



MACHINES CONCERNED :

- Athena / SM
- Orion / TF / TCF
- Tucana / TW
- Vega / GT

Calemard's Customer Services missions

- Demonstration equipment for product trials and process feasibility. Don't hesitate to send us your products or to submit your modification requests
- Start up and commissioning of equipment worldwide. Our engineer start up for an optimal production of our equipments.
- Training of customer's operators. Our Service propose training of your operators to optimize our machine use and increase your productivity.
- After sales service for maintenance and spare parts supply.
- Equipment performances evaluation and retrofit to keep your investment up-to-date.

Calemard's and other machines improvement

CALEMARD

by Spoolex

Contacts



**7 Rue de la Poudrière - ZI du Buisson
42230 Roche la Molière - France
Tel. +33 (0) 477 900 034
Fax +33 (0) 477 903 683
E-mail : calemard@spoolex.com
www.calemard.com**