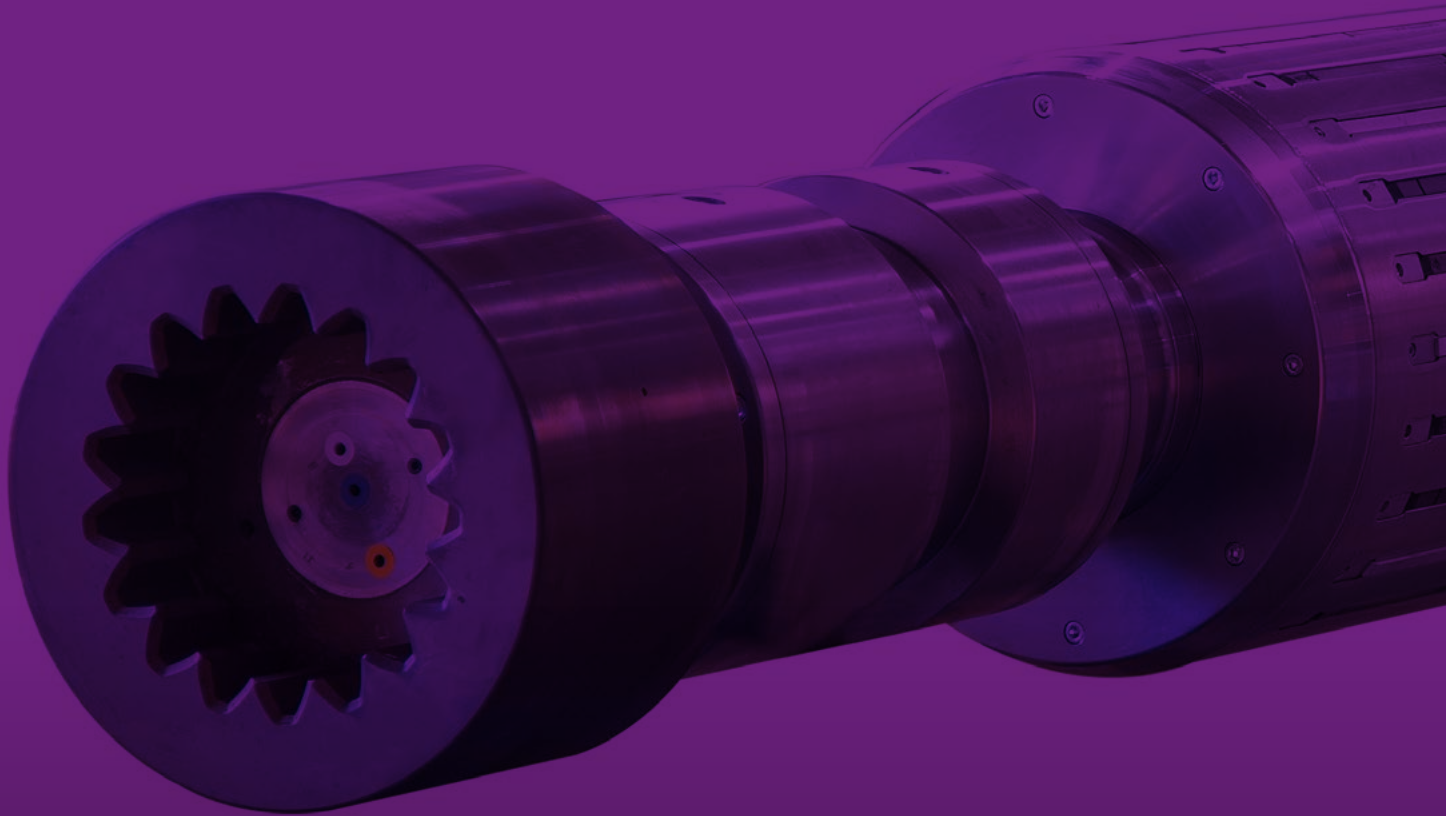


EXPANDING SHAFTS

**CONSTANTLY
EXPANDING.**



It is our history, since 1954.

It is the history of those who have always looked ahead with determination and courage, to create what is today one of the most important companies, worldwide, in the design and construction of expansion devices (shafts and chucks), safety chucks, handling systems (extractors, trolleys, lifting platforms) and rollers.

Vision

Winding and unwinding perfect reels with maximum efficiency.

Mission

Create user friendly, innovative and highly customizable winding and unwinding systems.

Values

Honesty and integrity
Constant work for customer satisfaction
Respect and recognition for people's value

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MECHANICAL EXPANDING SHAFTS WITH LUGS

MOD. 635 MK



drastically reduced the operating time of the machine due to maintenance repair such as rubber tubes, gaskets, valves etc.



reduced vibrations in the machine; high quality reels



chosen from time to time based on the application; 60 years of experience



greater carrying capacity capacity without affecting the shaft's performance



lower installation costs



12-month warranty ensures the quality of the product



The Model 635/MK is primarily recommended for unwinding and winding reels that have cores.

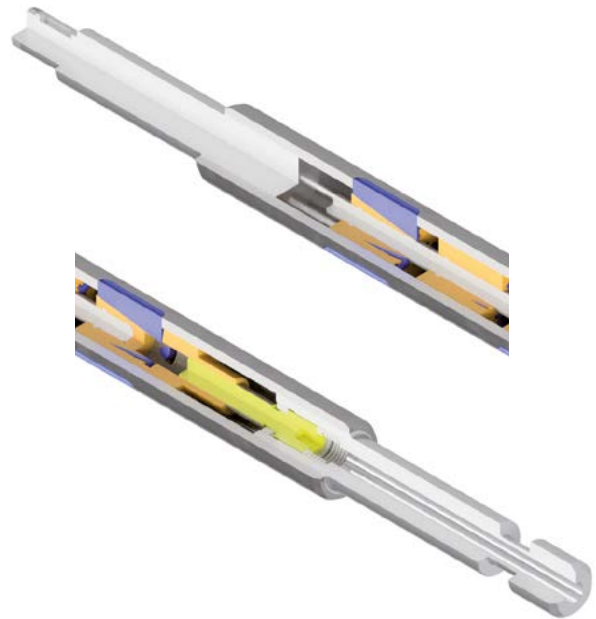
It may be used also for reels winding with a width larger than 500mm.

The body of the shaft is available in a variety of steels; the expanding lugs come in either steel,

plastic or rubber covered depending upon core material and torque requirements. The journal ends are also available in a variety of steels and are always custom-made. Expansion is accomplished mechanically by a square socket located in the end of one journal. The positive expansion and retraction that is gained results in self-centering of the roll and the ability to handle higher torque requirements.

FEATURES MOD. 635 MK

- Low maintenance required
- Excellent core centring
- Minimal flection
- No air required
- Quality components



DATA SHEET*		635/MK			
CORE DIAMETER	from 50 up to 300 mm				
TABLE LENGTH	from 800 up to 4000 mm				
EXPANSION	12 mm on diameter				
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	
NUMBER OF LUGS ON THE CIRCUMFERENCE	3	3	3	3	
MAX PAYLOAD IN N. (STEEL TABLE)	12000	17500	31700	39000	
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	12,2	16,0	21,6	25,5	
TRANSMITTABLE TORQUE ON STEEL CORES IN NM/CM	8,1	11,0	14,4	17,2	
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	2.28	2.70	3.90	4,25	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

MECHANICAL EXPANDING SHAFTS WITH LEAVES

MOD. 636 MS



drastically reduced operating time of the machine due to maintenance repair such as rubber tubes, gaskets, valves etc.



reduced vibrations in the machine; high quality reels



chosen from time to time based on the application; 60 years of experience



greater carrying capacity capacity without affecting the shaft's performance



lower installation costs



12-month warranty ensures the quality of the product



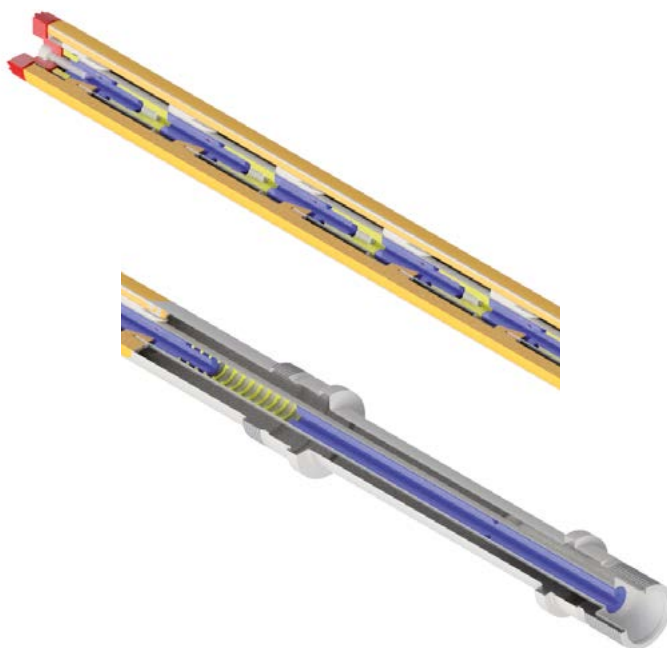
The Model 636/MS is recommended for winding or unwinding reels with and without cores.

It can be used with multi-slits also for very narrow web widths. The body of the shaft is available in steel or aluminum and the expansion leaves are available in steel, aluminum or with rubberized surface, depending upon core material and torque requirements.

The journal ends are also available in a variety of materials and are always custom-made. Expansion is accomplished by a square socket located in the end of one journal; the positive expansion and retraction that is gained results in self-centering of the roll and the ability to handle higher torque requirements.

FEATURES MOD. 636 MS

- Low maintenance required
- Excellent core centring
- Minimal flection
- No air required
- Quality components



DATA SHEET*		636/MS			
CORE DIAMETER	from 60 up to 300 mm				
TABLE LENGTH	from 600 up to 4000 mm				
EXPANSION	10/12 mm on diameter				
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	
NUMBER OF LUGS ON THE CIRCUMFERENCE	3	3	3	3	
MAX PAYLOAD IN N. (STEEL TABLE)	10000	17000	30000	38000	
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	10,7	14,2	18,1	21,7	
TRANSMITTABLE TORQUE ON STEEL CORES IN NM/CM	6,4	8,5	10,8	13	
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	2,8	3,7	4,5	4,6	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMECHEMICAL EXPANDING SHAFTS WITH LUGS

MOD. 638 PMK



economically
convenient



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



various application
possibilities and usage for
different core types



12-month warranty ensures
the quality of the product



The Model 638/PMK is recommended for unwinding and winding reels with cores.

It may be used also for reels winding with a width larger than 500mm.

The body of the shaft is available in steel or aluminum, depending on the reel weight. The expansion lugs come in either steel or rubber covered depending upon core material and torque requirements. The journal ends are also available in a variety of steels and are always custom-made.

Expansion is accomplished by one (or more) air activated pistons that mechanically engage the expandors self-centering the core. Expansion can be spring-activated so as to grant the core is gripped also in case of air leakage in the machine.



FEATURES MOD. 638 PMK

- Simple and tested system
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*		638/PMK			
CORE DIAMETER	from 70 up to 500 mm				
TABLE LENGTH	from 800 up to 4000 mm				
EXPANSION	10/12 mm on diameter				
BALANCING UP TO	1300 giri/min				
OPERATING PRESSURE	5 bar min. (6 bar suggested)				
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	
NUMBER OF LUGS ON THE CIRCUMFERENCE	3	3	4	6	
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	12000	17500	31700	39000	
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	2.28	2.70	3.90	4.25	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LUGS

MOD. BUTLER



drastically reduced operating time of the machine due to maintenance repair such as rubber tubes, gaskets, valves etc.



low maintenance required



chosen from time to time based on the application; 60 years of experience



locking guaranteed also in hard operating conditions



12-month warranty ensures the quality of the product



The pneumatic expanding shaft BUTLER type model is primarily recommended for unwinding and winding reels that have cores when a high torque to be transmitted and heavy working conditions is required.

The body of the shaft is available in a variety of high-strength steels; the expanding lugs come in either steel with an aggressive profile or plastic depending upon core material and torque requirements. The journal ends are also available in a variety of steels and are always custom-made.

Expansion is accomplished by a single inflatable tube which push on the expandors when air is applied.

An exclusive tube protector works to substantially reduce wear and potential rubber tube leakage.

Models ordered with journals bigger than 50 mm diameter can be fitted with the SVECOM quick-change air tube, which will allow you to change rubber tubes without removing the shaft from the roll or the machine.



FEATURES MOD. BUTLER

- Excellent core centring
- Quality components
- High resistance rubber tube
- Multiple choice for expandable elements

DATA SHEET*	BUTLER
CORE DIAMETER	from 70 up to 300 mm
TABLE LENGTH	from 600 up to 4000 mm
EXPANSION	8 mm on diameter
OPERATING PRESSURE	5 bar min. (6 bar suggested)

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LUGS

MOD. 638 PK



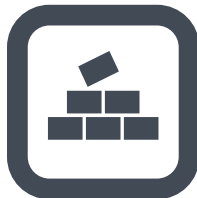
economically
convenient



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



various application
possibilities and usage for
different core types



12-month warranty ensures
the quality of the product

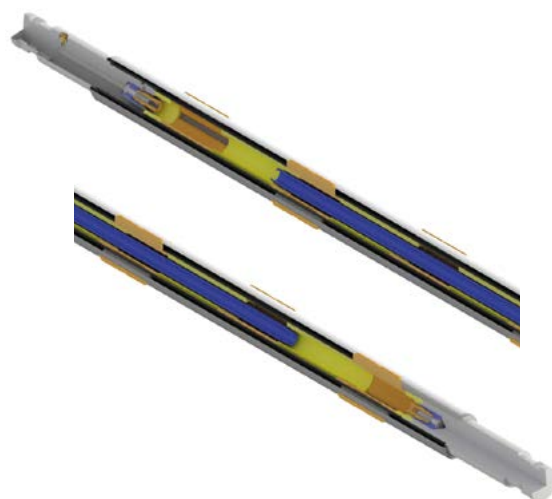


The Model 638/PK is primarily recommended for unwinding and winding reels that have cores.

It may be used also for reels winding with a width larger than 500mm.

The body of the shaft is available in a variety of steels or light alloys; the expanding lugs come in either steel, plastic or rubber covered depending upon core material and torque requirements. The journal ends are also available in a variety of steels and are always

custom-made. Expansion is accomplished by a single inflatable tube that exerts pressure to engage the expandors when air is applied. An exclusive tube protector works to substantially reduce wear and potential rubber tube leakage. Models ordered with journals bigger than 50 mm diameter can be fitted with the SVECOM quick-change air tube, which will allow you to change rubber tubes without removing the shaft from the roll or the machine.



FEATURES MOD. 638 PK

- Simple and tested system
- High resistance rubber tube with internal protection
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*					638/PK			
CORE DIAMETER	from 70 up to 200 mm							
TABLE LENGTH	from 800 up to 2500 mm							
EXPANSION	10 mm on diameter							
BALANCING UP TO	1300 rpm							
OPERATING PRESSURE	5 bar min. (suggested)							
	STEEL				LIGHT ALLOY			
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	70/76	100	120	150
NUMBER OF LUGS ON THE CIRCUMFERENCE	3	3	4	6	3	3	4	6
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	11000	18500	33500	37000	7000	9500	15000	19000
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	4.4	5.7	9.8	16.0	4.4	5.7	9.8	16.0
TRANSMITTABLE TORQUE ON STEEL CORES IN NM/CM	2.8	3.7	6.6	11.0	2.8	3.7	6.6	11.0
WEIGHT SHAFT (JOURNALS EXLUDED) IN LINEAR N/CM	1.91	2.30	3.0	3.8	1	1.5	2.0	2.30
SHAFT WEIGHT (JOURNALS EXLUDED) IN LINEAR N/CM	1.91	2.30	3.0	3.8	1	1.5	2.0	2.30

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMECHEMICAL EXPANDING SHAFTS WITH LEDGES

WITH LATERAL MOVEMENT

MOD. 638 PLA



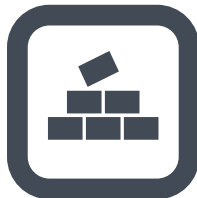
economically
convenient



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



various application
possibilities and usage for
different core types



12-month warranty ensures
the quality of the product

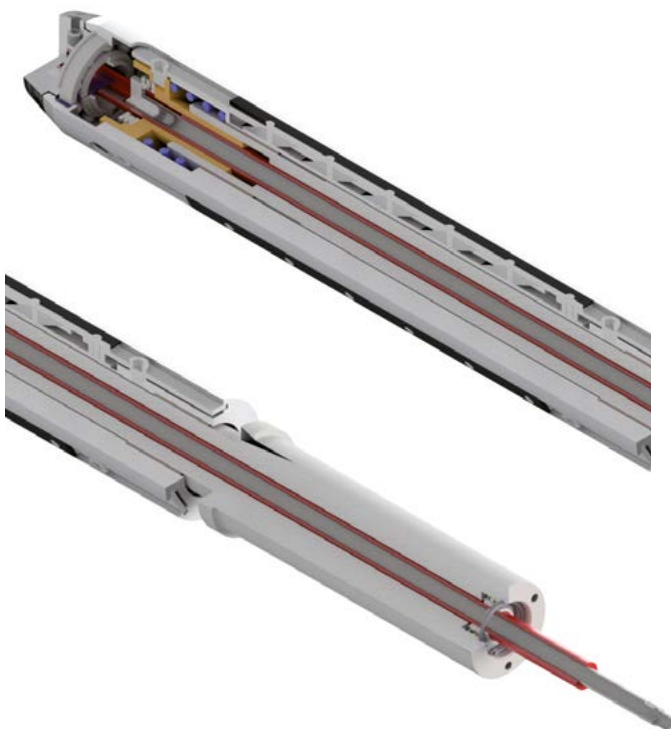


The Model 638/PLA is recommended for unwinding and winding reels with cores.

It may be used also for reels winding with a width larger than 500mm.

The body of the shaft is available in steel or aluminum, depending on the reel weight and the expansion ledges come in metal covered by rubber.

The journal ends are also available in a variety of steels and are always custom-made. Expansion is accomplished by spring mechanical actuation that, by acting on inclined planes, engage the expandors by blocking the core. Designed for line-up of material even during unwinding through the manual rotation of a knob.



FEATURES MOD. 638 PLA

- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*		638/PLA
CORE DIAMETER		from 70/76 up to 150 mm
TABLE LENGTH		from 200 up to 1500 mm
EXPANSION		8 mm on diameter

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LEAVES

MOD. 639 PS



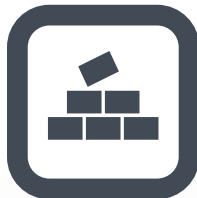
economically
convenient



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



various application
possibilities and usage for
different core types



12-month warranty ensures
the quality of the product



The Model 639/PS is recommended for unwinding or rewinding reels with and without cores.

It can be used with multi-slits also for very narrow web widths. The body of the shaft is available in steel and the expansion leaves come in either steel or rubber covered depending upon core material and torque requirements. The journal ends are also available in a variety of steels and are always custom-made. Expansion is accomplished by

a single inflatable tube that exerts pressure to engage the expandors when air is applied. An exclusive tube protector works to substantially reduce wear and potential tube leakage.

Models ordered with journals bigger than 50 mm diameter can be fitted with the SVECOM quick-change air tube, which will allow you to change tubes without removing the shaft from the roll or the machine



FEATURES MOD. 639 PS

- Simple and tested system
- High resistance rubber tube with internal protection
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*		639/PS			
CORE DIAMETER	from 70 up to 300 mm				
TABLE LENGTH	from 600 up to 4000 mm				
EXPANSION	8 mm on diameter				
OPERATING PRESSURE	5 bar min. (suggested)				
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	
NUMBER OF LEAVES ON THE CIRCUMFERENCE	3	3	4	4	
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	8000	15000	20000	30000	
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	4.2	6.7	10.8	12.9	
TRANSMITTABLE TORQUE ON STEEL CORES IN NM/ STARTING FROM	2.5	4	6.5	7.7	
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	1.6	1.9	2.1	2.4	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LEAVES

MOD. 639 PSC



it allows to work with reels of big dimensions and weight, at high speed



reduced vibrations in the machine; high quality reels



chosen from time to time based on the application; 60 years of experience



greater carrying capacity capacity without affecting the shaft's performance



designed according to required weight and carrying capacity



12-month warranty ensures the quality of the product



The Model 639/PSC is recommended for unwinding or winding reels with and without cores.

It can be used with multi-slits even with very narrow web widths. The body of the shaft is available in steel or aluminum, depending on the reel weight and the expansion leaves come in either steel, aluminum or rubber covered depending upon core material and torque requirements.

The journal ends are also available in a variety of steels and are always custom-made. Expansion is accomplished by one (or more) air activated pistons that mechanically engage the expandors. Expansion can be spring-activated so as to grant core is gripped also in case of air leakage in the machine.

An automatic web clamping device can be fitted for a quicker and easier winding start to customer's request.



FEATURES MOD. 639 PSC

- Excellent core centring
- Minimal flexion
- High performances
- Various materials for table and journals
- Quality components

DATA SHEET*		639/PSC			
CORE DIAMETER	from 70 up to 500 mm				
TABLE LENGTH	from 800 up to 4000 mm				
EXPANSION	10/12 mm on diameter				
OPERATING PRESSURE	5 bar min. (suggested)				
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	
NUMBER OF LEAVES ON THE CIRCUMFERENCE	3	3	4	6	
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	10000	17000	30000	38000	
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	2,8	3,7	4,5	4,6	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LEDGES

MOD. 640 PL



always in contact with the cores, reduced downtime, increased productivity; easy repair



designed to prevent and avoid breakdowns



chosen from time to time based on the application; 60 years of experience



designed according to required carrying capacity



various application possibilities and usage for different core types



12-month warranty ensures the quality of the product



high performances, precise winding



The Model 640/PL is recommended for unwinding or winding reels with cores.

It can be used for all types of cores, multiple reels, and larger diameter requirements. The body of the shaft is available in a variety of light alloys or in a variety of steel, and expandors in steel, rubber, plastic or in combination, depending from the applications. The journal ends are also available in a variety of steels and are always custom-made. Expansion is obtained by a system of inflatable tubes that

are located beneath each row of expandors. Each tube exerts pressure steadily to engage the expandors when air is applied. This system results in greater self-centering qualities than other pneumatic shafts presently available. On request, tubes can be independent; this way, any leakage in one tube deflates only the broken one whilst the adjacent tubes continue to hold the core. Tube changes are quick and easy, accomplished without journal removal. Hex sockets free both expandors and tube for a quick procedure.

FEATURES MOD. 640 PL

- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements



DATA SHEET*					640/PL			
CORE DIAMETER	from 25 up to 800 mm							
TABLE LENGTH	from 100 up to 7000 mm							
EXPANSION	8 mm on diameter							
BALANCING UP TO	2200 rpm							
OPERATING PRESSURE	5 bar min. (suggested)							
	STEEL				LIGHT ALLOY			
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	70/76	100	120	150
NUMBER OF LEAVES ON THE CIRCUMFERENCE	5	6	7	9	5	6	7	9
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	13000	19000	34000	38000	7000	12000	22000	30000
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	6,2	9,8	14,4	22	6,2	9,8	14,4	22
TRANSMITTABLE TORQUE ON STEEL CORES NM/CM	6,7	10,6	15,7	24	6,7	10,6	15,7	24
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	1,94	2,57	3,28	5,43	1,05	1,35	1,9	2,3

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LEDGES WITH LATERAL MOVEMENT

MOD. 640 PLA



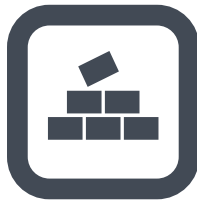
always in contact with the cores, reduced downtime, increased productivity; easy repair



designed to prevent and avoid breakdowns



chosen from time to time based on the application; 60 years of experience



designed according to required carrying capacity



various application possibilities and usage for different core types



12-month warranty ensures the quality of the product



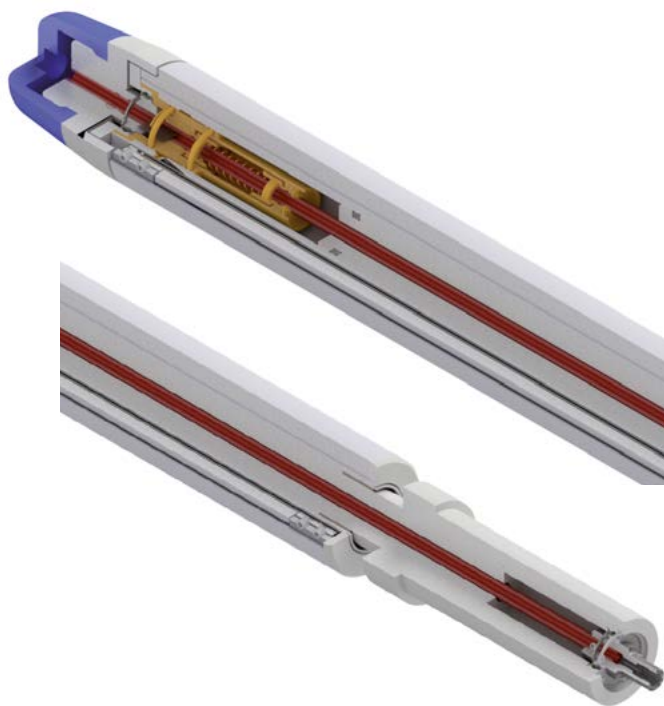
high performances, precise winding



The Model 640/PLA is recommended for unwinding and winding reels with cores.

The body of the shaft is available in steel or aluminum, depending on the reel weight and the expansion ledges come in either metal or rubber covered depending upon core material and torque requirements.

The journal ends are also available in a variety of steels and are always custom-made. Expansion is accomplished by a pneumatic valve air activated or rotary union that engage the expandors by blocking the core. Designed for line-up of material even during unwinding through the manual rotation of a knob.



FEATURES MOD. 640 PLA

- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*	640/PLA
CORE DIAMETER	from 70/76 up to 150 mm
TABLE LENGTH	from 200 up to 1500 mm
EXPANSION	10 mm on diameter
OPERATING PRESSURE	5 bar min. (6 bar suggested)

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC SELF-CENTERING SHAFTS WITH LEDGES

MOD. 640 PQL



always in contact with the cores,
reduced downtime, increased
productivity; easy repair



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



various application
possibilities and usage for
different core types



12-month warranty ensures
the quality of the product



high performances,
precise winding



The 640/PQL shaft grants perfect unwinding and winding with cores at high linear speeds. It is equipped with the tested SVECOM self-centering air system, with metal centering ledges and rubber gripping ledges.

Dynamically balanced to the requested speed, it ensures a great productivity increase.

It can be used for all types of cores, multiple reels and larger diameter requirements.

The shaft body is available in a variety of steels and light alloys. The journal ends are also available in a variety of steels and are always custom made. Expansion is obtained by a system of inflatable tubes that are located beneath each row of expandors. Tube changes are quick and easy, accomplished without journal removal.



FEATURES MOD. 640 PQL

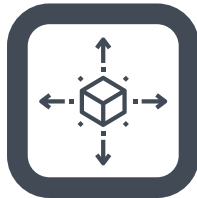
- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*					640/PQL			
CORE DIAMETER	from 50 up to 800 mm							
TABLE LENGTH	from 100 up to 7000 mm							
EXPANSION	8 mm on diameter							
OPERATING PRESSURE	5 bar min. (suggested)							
	STEEL				LIGHT ALLOY			
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	70/76	100	120	150
NUMBER OF LEAVES ON THE CIRCUMFERENCE	6	6	8	9	6	6	8	9
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	13000	19000	34000	38000	7000	12000	22000	30000
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	4,5	7	10	15	4,5	7	10	15
TRANSMITTABLE TORQUE ON STEEL CORES NM/CM	4,7	7,5	11	17	4,7	7,5	11	17
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	1,9	2,6	3,2	5,5	1	1,4	1,8	2,4

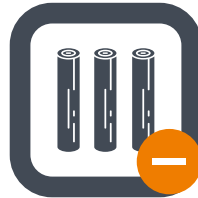
* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH SELF-CENTERING LEDGES FOR CONTINUOUS MACHINES

MOD. 640 PQL POPE



non stop production of continuous machines with only 4 expandable shafts



great reduction of cylinder stock



chosen from time to time based on the application; 60 years of experience



reel stock with cardboard cores, without shafts



12-month warranty ensures the quality of the product



The shaft, designed to ensure perfect wrapping of the material at high peripheral speeds, is suitable to withstand heavy load stresses.

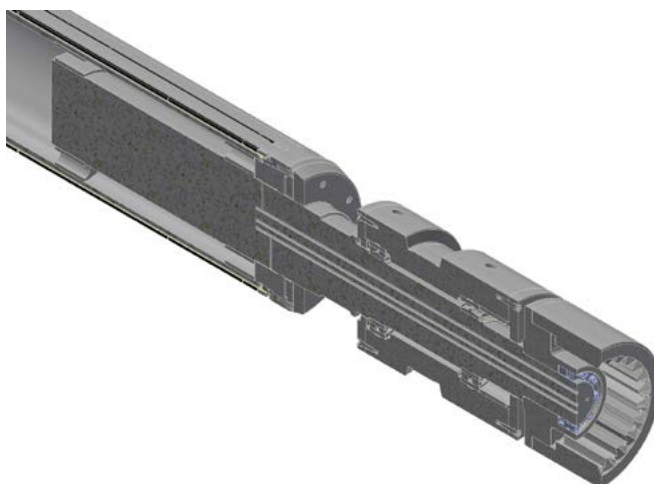
It adopts the tried and tested SVECOM system in groups of air chambers with aluminum centering expanders and rubber locking devices.

Dynamically balanced at the required speed, complete with supports and tow couplings, it can be made with diameters and lengths as per the specifications listed below.

Equipped with multivalve system: each air chamber has its own valve to ensure expansion, and if one gets damaged, the whole stays inflated; or the single valve: each air chamber is connected to the other through a hole to ensure an equal expansion.

FEATURES MOD. 640 PQL POPE

- Diameter up to 800 mm
- Length up to 12.000 mm
- Self-centering expandable elements
- Dynamic balancing
- Independent air chambers
- Equipped with bearings and bearing housing
- Equipped with drums or brake drums



DATA SHEET*		640/PQL POPE		
CORE DIAMETER	from 200 up to 800 mm			
TABLE LENGTH	from 2000 up to 10000 mm			
EXPANSION	8 mm on diameter			
OPERATING PRESSURE	5 bar min. (suggested)			
	STEEL			
INTERNAL DIAMETER OF THE CORE IN MM	250	300	400	450
BALANCING DEGREES	from G1 up to G2,5			

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC EXPANDING SHAFTS WITH LEDGES WITH ROTATING BODY

MOD. 641 PR



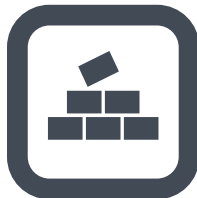
always in contact with the cores,
reduced downtime, increased
productivity; easy repair



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



high performances, precise
winding, high quality reels



12-month warranty ensures
the quality of the product



Model 641/PR is recommended for winding of plastic material that should not be stretched.

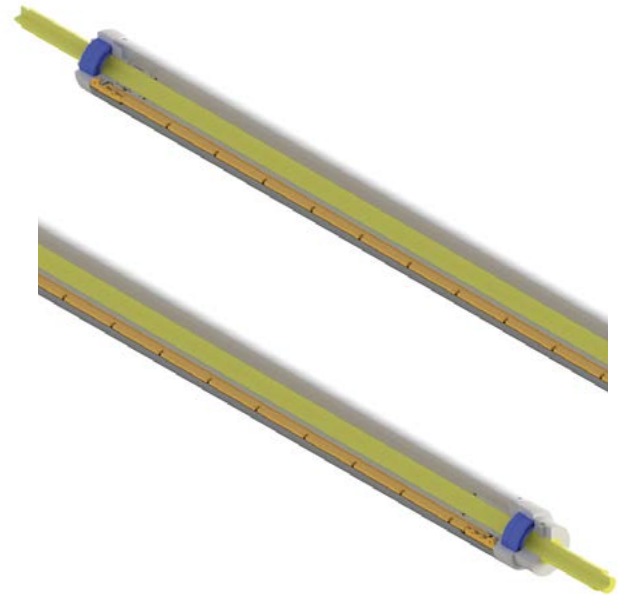
It can be used for all types of cores and for multiple reels. The body of the shaft is available either on light alloy or on steel, and expandors are usually in rubber, to grant the perfect core gripping.

The journal ends are also available in a variety of steels and are always custom-made; as they are mounted on roller bearings and connected through a passing bar, they rotate simultaneously and grant therefore a uniform winding.

Expansion is obtained by a system of inflatable tubes that are located beneath each row of expandors. Each tube exerts pressure equally to engage the expandors when air is applied.

This system results in greater self-centering qualities than other pneumatic shafts presently available.

Tube changes are quick and easy, accomplished without journal removal. Hex sockets free both expandors and tube for a quick procedure.



FEATURES MOD. 641 PR

- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components

DATA SHEET*		641/PR			
CORE DIAMETER	from 50 up to 150 mm				
TABLE LENGTH	from 800 up to 2500 mm				
EXPANSION	8 mm on diameter				
INTERNAL DIAMETER OF THE CORE IN MM	70/76	100	120	150	
NUMBER OF LEAVES ON THE CIRCUMFERENCE	5	6	7	9	
MAX CARRYING CAPACITY IN N. (STEEL TABLE)	6000	10000	15000	20000	
TRANSMITTABLE TORQUE ON CARDBOARD CORES IN NM/CM	/	/	/	/	
TRANSMITTABLE TORQUE ON STEEL CORES IN NM/CM	1,43	1,7	2,25	2,65	
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	2,32	/	/	/	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PNEUMATIC SLITTER SCORER SHAFTS

MOD. 642 PM



it drastically reduces downtimes due to knives positioning and handling; sage locking; easy and fast maintenance



designed to prevent and avoid breakdowns



chosen from time to time based on the application; 60 years of experience



easy knives handling and positioning; warranty against corrosion



12-month warranty ensures the quality of the product



The Model 642/PM is recommended as a drive shaft for slitter, scorer, or slitter chucks and represents an alternative to the traditional non-expanding drive shafts.

The body of the shaft is available in chromed grinded steel only, and expanding ledges are in rubber.

The journal ends are also available in a variety of

steels and are always custom-made. Expansion is obtained by a system of inflatable tubes that are located beneath each row of expandors. Each tube exerts pressure equally to engage the expandors when air is applied, granting this way a perfect core gripping.

Tube changes are quick and easy, accomplished without journal removal. Hex sockets free both expandors and tube for a quick procedure.

FEATURES MOD. 642 PM

- Multiple chamber system
- High resistance rubber tube
- Chromed and grinded surface
- Quality components



DATA SHEET*		642/PM			
CORE DIAMETER	from 60 up to 400 mm				
SURFACE RUGOSITY	ra = 0.8				
TABLE LENGTH	from 1000 up to 7000 mm				
EXPANSION	8 mm on diameter				
BALANCING DEGREES	from G1 up to G2,5				
OPERATING PRESSURE	5 bar min. (suggested)				
SHAFT DIAMETER IN MM	100	120	150	180	200
NUMBER OF LEDGES ON THE CIRCUMFERENCE	3	5	6	6	6
RADIAL LOCKING FOFRC E IN LINEAR N/CMTRASSMISSIBILE	270	360	540	540	540
SHAFT WEIGHT (JOURNALS EXCLUDED) IN LINEAR N/CM	5,5	8,1	12,5	18,6	23,3

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

DIFFERENTIAL SHAFTS WITH LEDGES

MOD. 650 PLF



always in contact with the cores,
reduced downtime, increased
productivity; easy repair



designed to prevent and
avoid breakdowns



chosen from time to time
based on the application;
60 years of experience



designed according to
required carrying capacity



various application
possibilities and usage for
different core types



12-month warranty ensures
the quality of the product



high performances,
precise winding



Differential expanding shaft with ledges mod. 650 PLF can wind materials with different width cores and very low tension. Core loading, unloading and positioning is quick and easy.

This differential shaft, thanks to its (patented) torque transmission, is the most innovative system offered on the market.

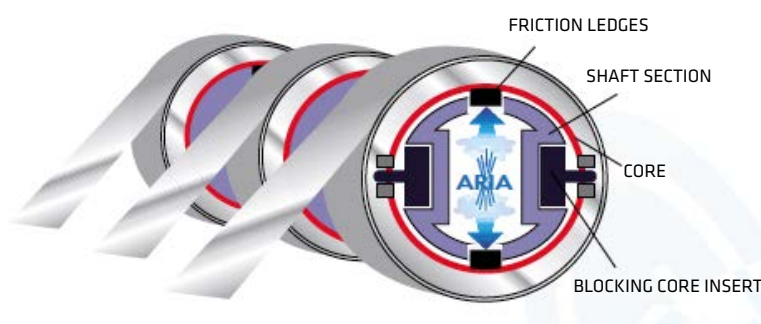
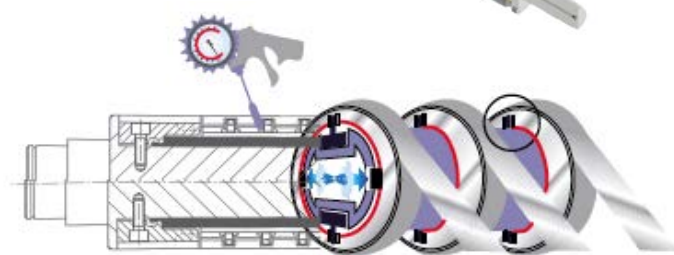
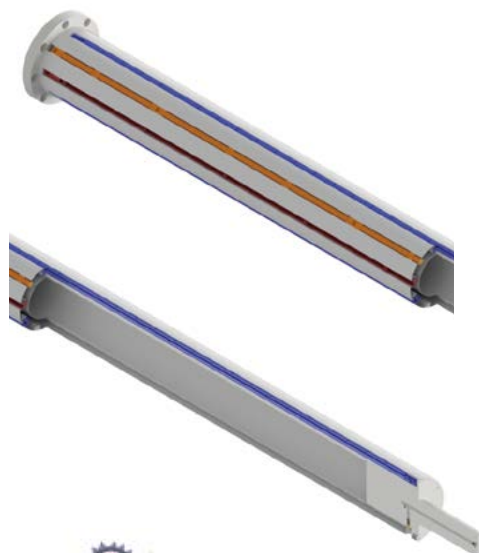
As the core lock block expands to the outside it locks the reels in predetermined positions along the entire shaft. When deflated the ledge retracts inside the diameter of the shaft body and permits the reel to be removed.

Each individual core can slide at controlled speed when the proper pressure is maintained. Winding of all cores is done at the same tension rate. The segments expand to the outside when inflated, generating resistance against the inside of the cores.

This resistance is proportional to the area that is involved and permits cores with different widths to be wound on the same shaft.

FEATURES MOD. 650 PLF

- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements



DATA SHEET*	650/PLF
CORE DIAMETER	from 50 up to 300 mm
OPERATING PRESSURE	0/2 bar min.
TABLE LENGTH	up to 4000 mm

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

CAM LOCK DIFFERENTIAL SHAFTS

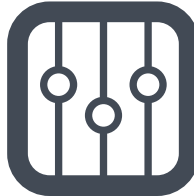
MOD. 650 PLS



independent and uniform winding of multiple reels with different widths



no spacers



2 different ledges sets in order to friction at high or low tension



high winding speed



easy replacement of friction ledges



quick operations in cores/reels loading and unloading



The cam lock differential shaft is composed by a series of self-expanding rings able to wrap independently several reels with different width, maintaining the same settled tension during the wrapping.

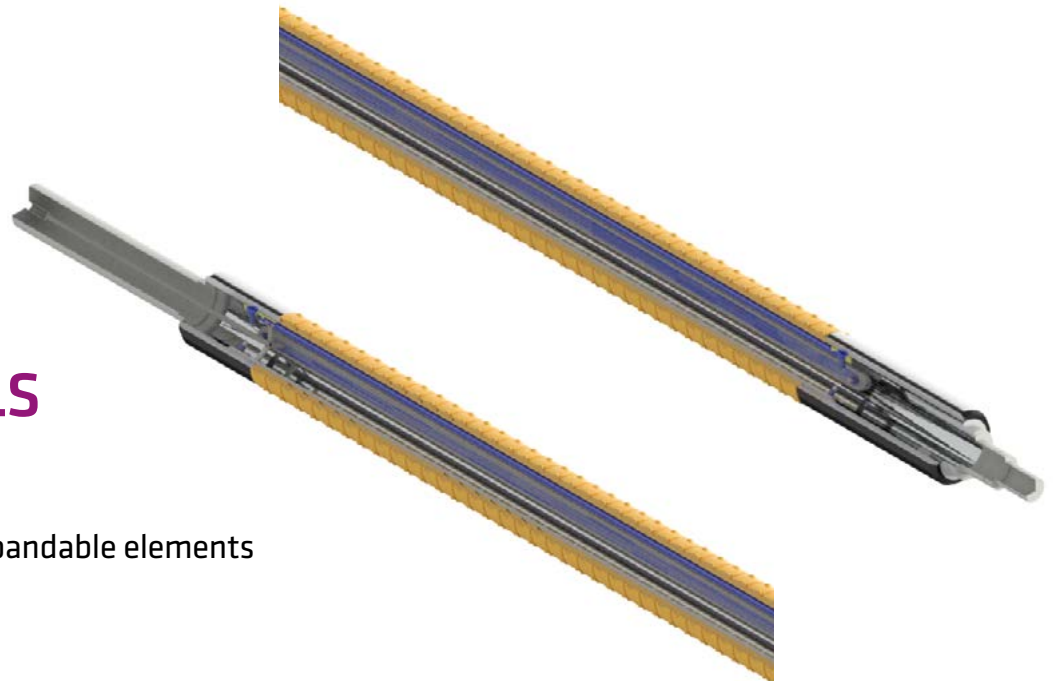
The self-expanding rings assembled on the chromium plated and grinded shell body will block the rigid cardboard core by expanding shortly on the rotating direction.

A pneumatic rotary joint secured at the shaft end is adjusting the air pressure injected into the differential shaft. The air pressure range is from 0 to 6 Bar connected to the external reel diameter and to the settled tension.

The differential ledges under the rings can be manufactured in different type of material according to the client's need, therefore are interchangeable.

The force of friction produced between the differential ledges and the self-expanding rings generates a perfect and independent reels rewinding. To get the best rewinding on reels you must assure that the differential shaft speed will be higher than the machine speed. The rewound reels can be easily re-moved by a small rotation on rewinding opposite direction.

The friction force generated between the friction strips and the self-expanding rings provides the perfect independent winding of the reels. To allow optimal winding, the number of rpm of the differential shaft must be higher than the machine speed. After a small rotation in the opposite direction to winding, the wound reels can be easily decharged.



FEATURES MOD. 650 PLS

- High performance
- Quality components
- Multiple choice for expandable elements

DATA SHEET *		650/PLS
CORE DIAMTER	from 50 up to 300 mm	
TABLE LENGTH	up to 4000 mm	
OPERATING PRESSURE	0/2 bar min.	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

ROLLERS

Made of steel, stainless steel, aluminum or carbon fiber.

On request we can apply to the rollers different types of covering:



tungsten



rubber



polyurethane



thick chrome



zinc



ceramic



teflon



CERTIFICATIONS



We build cylinders in steel, stainless steel, aluminum and carbon fiber, with different types of coating (e.g. polyurethane, ebonite, etc.) and treatment (e.g. chrome plating, galvanizing, etc.).

The rollers are used in all those commodity sectors where there is the need to wind or unwind a rolled material: from the converting industry to the paper and paper converting industry, from plastics to aluminium, from printing to packaging, up to the world of packaging and tissue.

The cooling and heating cylinders allow respectively to lower or raise the temperature by means of a cavity system in which, depending on the specific requirement, a cold or hot liquid is released.

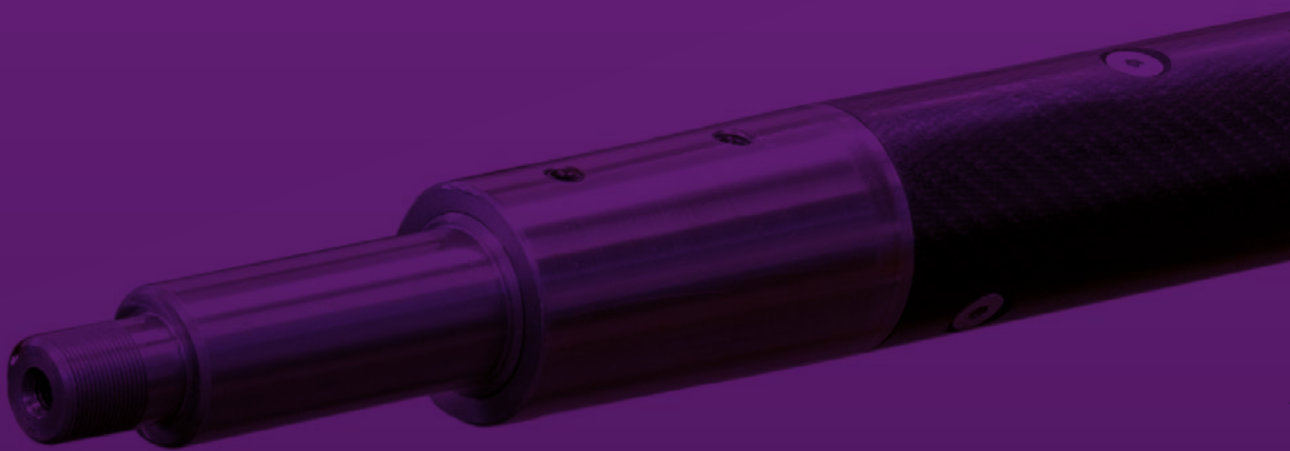
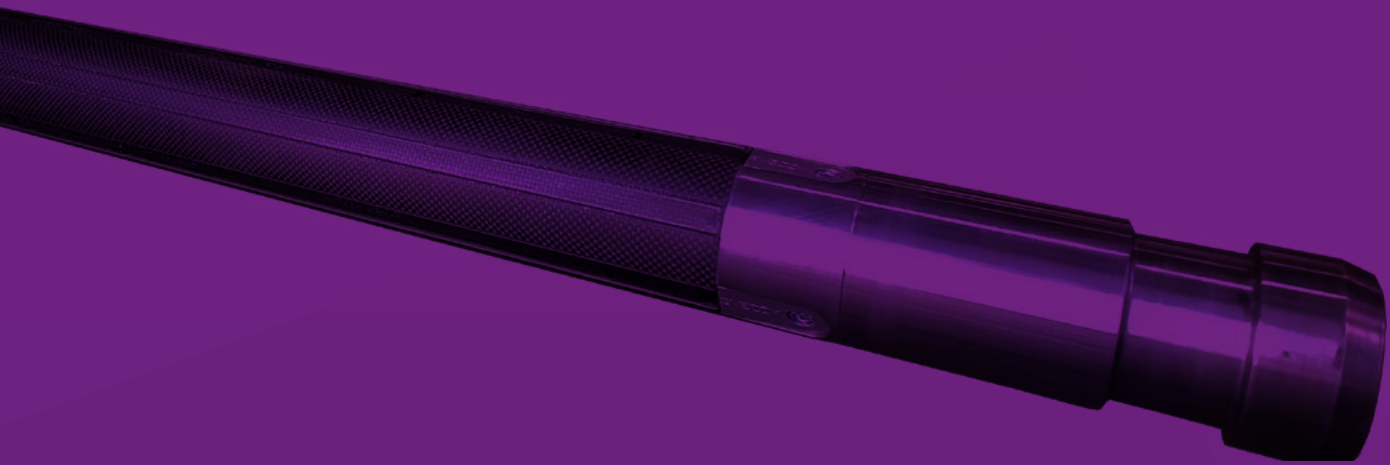
These cylinders can be manufactured with an external surface both in polished stainless steel or with a scratch-proof teflon or chromed surface.

TYPE OF ROLLERS

- Idle, idle or contact rollers
- Steel, stainless steel, aluminium rollers
- Carbon fiber rollers
- Cooling and heating rollers
- Rollers for cliché
- Blade holder rollers and against hardened knives
- Chromed and ground rollers
- Rollers for calenders
- Spreaders rollers
- Special rollers for specific needs

DATA SHEET*		ROLLERS
DIAMETER	up to 1000 mm	
LENGHT	up to 10.000 mm	
STATIC AND DYNAMIC BALANCING	up to 2.200 rpm	

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests



EXPANDING...

CARBON FIBER

Svecom P.E. has created a new business unit, SVECOM CARBON FIBER that combines the experience of over 60 years of production of expandable shafts with the advantages of carbon fiber.

This results in a solution that maximizes mechanical performance and lightness.

The production takes place in a new production complex where shafts of various sizes are produced according to customer requests.

The fibers are obtained through a process whereby the carbon atoms are tied together in crystals aligned parallel to the longitudinal axis of the fiber itself. The alignment of the crystal confers high resistance in relation to the volume of the fiber. Several thousand carbon fibers are tied together to form a filament that can be used alone or in a fabric.

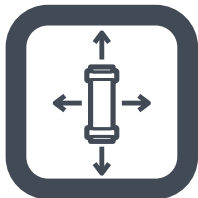
The properties of carbon fibers, such as high hardness, high tensile strength, low weight, high chemical resistance, high temperature tolerance and low thermal expansion make them very useful in the field of expanding shafts.



CARBON FIBER PNEUMATIC EXPANDING SHAFTS WITH LUGS

MOD. 638 PK

“Filament winding” advantages:

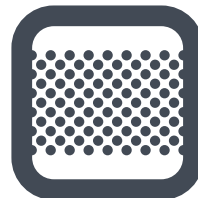


- Highly automated and repeatable process



- Possibility of making large tubes

“Wrapping” advantages:



- Possibility of arranging the fibers exactly at 0 degrees to obtain the maximum axial stiffness



- Better surface finish obtainable from grinding



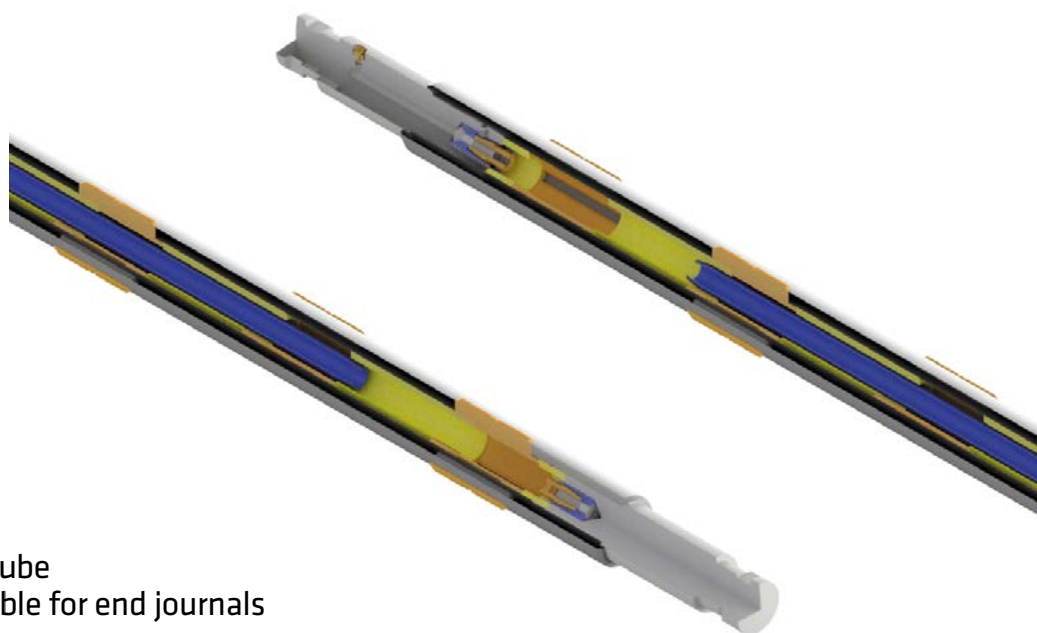
The carbon fiber pneumatic expanding shaft with lugs is recommended for unwinding and winding of coils with cores.

The shaft body is made of high resistance carbon fiber, fabricated through filament winding technology and, on request, it can be protected externally by a steel casing. This shaft is extremely light compared to traditional solutions and it allows a better productivity because:

- it can work at higher speed
- it can be managed by a single operator without assistance
- it does not require the use of lifting systems for its insertion into the coil and for extraction from it

The expansion is obtained thanks to a single rubber tube which, once inflated, pushes the lugs outwards and allows the locking of the cores. The protection system ensures a longer life of the pipe, reducing the possibility of breakage. The journal ends are always made according to the customer's drawing.

On models with side journal ends with a diameter bigger than 50mm, it is possible to provide a system for the quick disassembly of the rubber pipe in the event of breakage, allowing to repair the shaft in minimum time.



FEATURES MOD. 638 PK

- High resistance rubber tube
- Various materials available for end journals
- Quality components
- Multiple choice for expandable elements

DATA SHEET*	ROLLERS
CORE DIAMETER	76,2 mm (3"), 152 mm (6")
TABLE LENGTH	up to 6.000 mm (236,2")
OPERATING PRESSURE	5-6 bar

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

PULTRUDED CARBON FIBER PNEUMATIC EXPANDING SHAFTS WITH LEDGES

MOD. 640 PL



Extreme lightness

Its low weight allows to easily move it without resorting to the use of handling systems.



Better resistance

Carbon fiber is completely protected on all sides by aluminum, preserving it from cuts or damage and giving it greater longevity.



High speed

Thanks to low inertia, the shafts can accelerate quickly and rotate at extremely high speeds, unreachable with steel or carbon fiber lugs models.



Easy maintenance

The multiple cavity design allows operators to replace the air chambers in a few minutes (a traditional shaft with lugs repair of the air chamber requires usually 3/4 hours).



We have developed and patented, with the help of our American subsidiary Goldenrod Corporation, an extremely rigid, light and handy shaft with multiple cavity design. It is recommended for the winding and unwinding of reels with cores.

Hundreds of carbon fiber bundles, wet with epoxy resin, are aligned and inserted into the cavities of an aluminum profile. After drying,

the fibers are oriented at zero degrees so as to give the pneumatic shaft high rigidity. The "Pultrusion" model can be used for different needs, but it is particularly suitable for those applications that exceed the yield point of aluminum or in cases where it is impossible to use conventional steel or carbon fiber shafts. Stiffness, lightness and maneuverability.

FEATURES MOD. 640 PL

- Multiple chamber system
- Excellent core centring
- High resistance rubber tube
- Various materials for table and journals
- Quality components
- Multiple choice for expandable elements

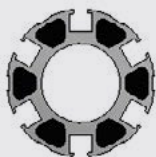
Aluminum completely surrounds the carbon



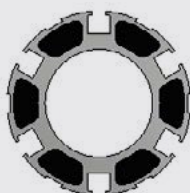
3"
(76,2 mm)
3 ledges



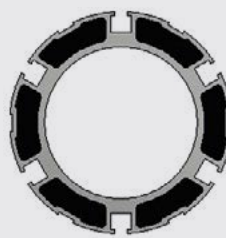
3"
(76,2 mm)
4 ledges



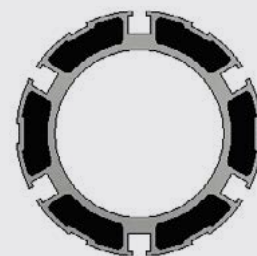
4"
(101,6 mm)
6 ledges



5"
(127 mm)
6 ledges



6"
(152 mm)
9 ledges



6,75"
(171,45 mm)
6 ledges

DATA SHEET*

640/PL

CORE DIAMETER

76,2 mm (3"), 101,6 mm (4"),
127 mm (5"), 152 mm (6"), 171,45 mm (6,75")

TABLE LENGTH

up to 6.000 mm (236")

OPERATING PRESSURE

5-6 bar

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests

100% CARBON FIBER PNEUMATIC EXPANDING SHAFTS WITH LEDGES

MOD. 640 PLC



Extreme lightness

Its low weight allows to easily move it without resorting to the use of handling systems.



Better resistance

Thanks to the elastic module of 250 Gpa.



High speed

Thanks to low inertia, the shafts can accelerate quickly and rotate at extremely high speeds.



Easy maintenance

The multiple cavity design allows operators to replace the air chambers in a few minutes.



Svecom has filed the patent (Patent Pending) for a shaft made entirely of carbon fiber.

The new expanding shaft with three ledges is a real revolution in the world of expandable systems: its mechanical properties are unique in the sector.

The solution developed by Svecom allows to range widely with the geometry of the project and to satisfy all the customer's needs.

It is lighter than all other types shafts:
 -65% compared to steel shaft
 -15% compared to aluminum shaft
 -37% compared to carbon shaft with steel inserts

Thanks to the lower weight and high elastic module, the time to reach machine speed has drastically decreased and critical speeds have values that are unique in the market:
 +98% compared to steel shaft
 +119% compared to aluminum shaft
 +35% compared to aluminum shaft with carbon inserts

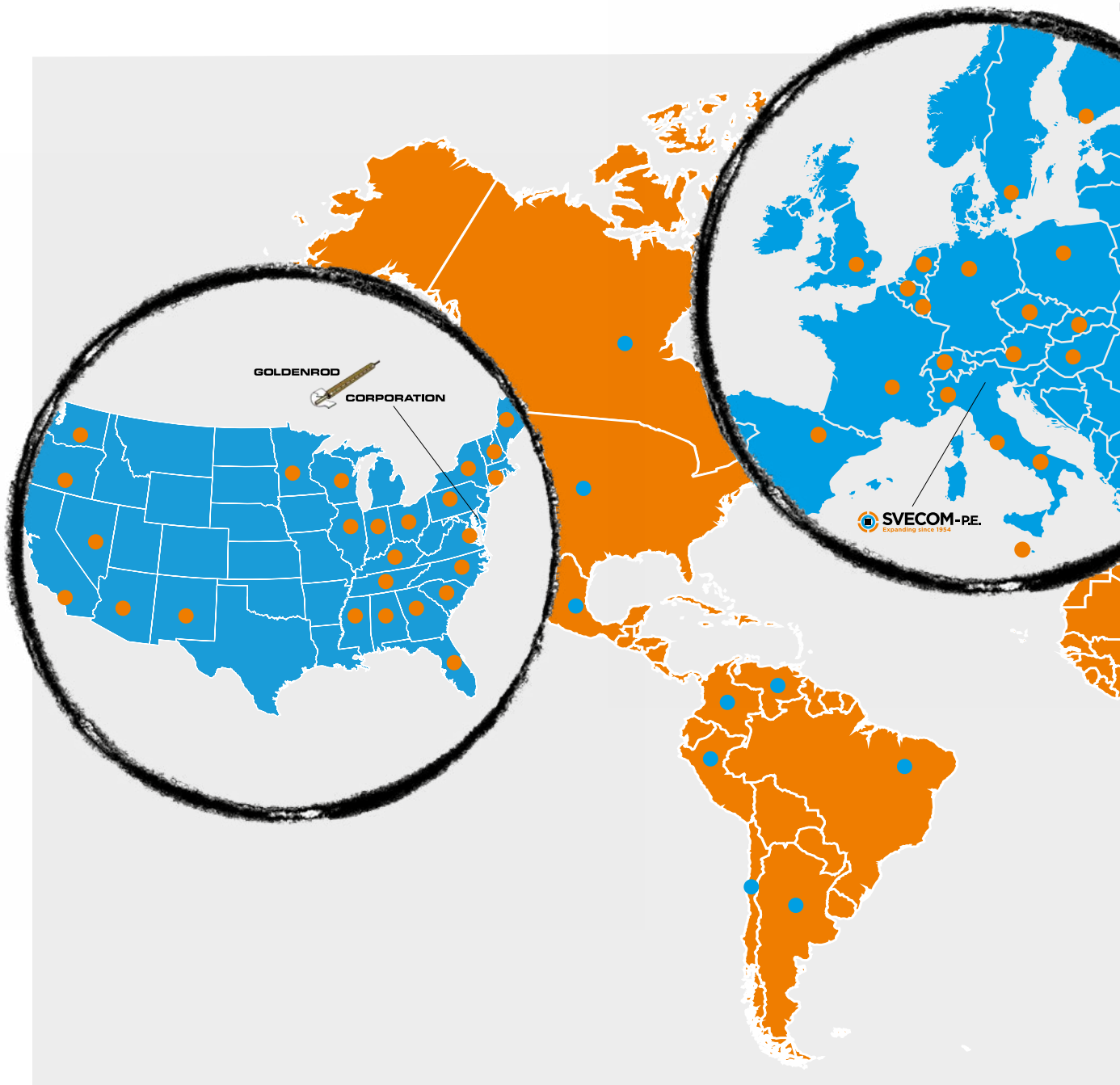


FEATURES MOD. 640 PLC

- Increased critical speeds
- Faster acceleration
- Drastically reduced time to reach machine speed

DATA SHEET*	640/PLC
CORE DIAMETER	76,2 mm (3")
TABLE LENGTH	up to 6.000 mm (275")
OPERATING PRESSURE	5-6 bar

* The technical data are purely indicative. Contact Svecom - P.E. for customized requests



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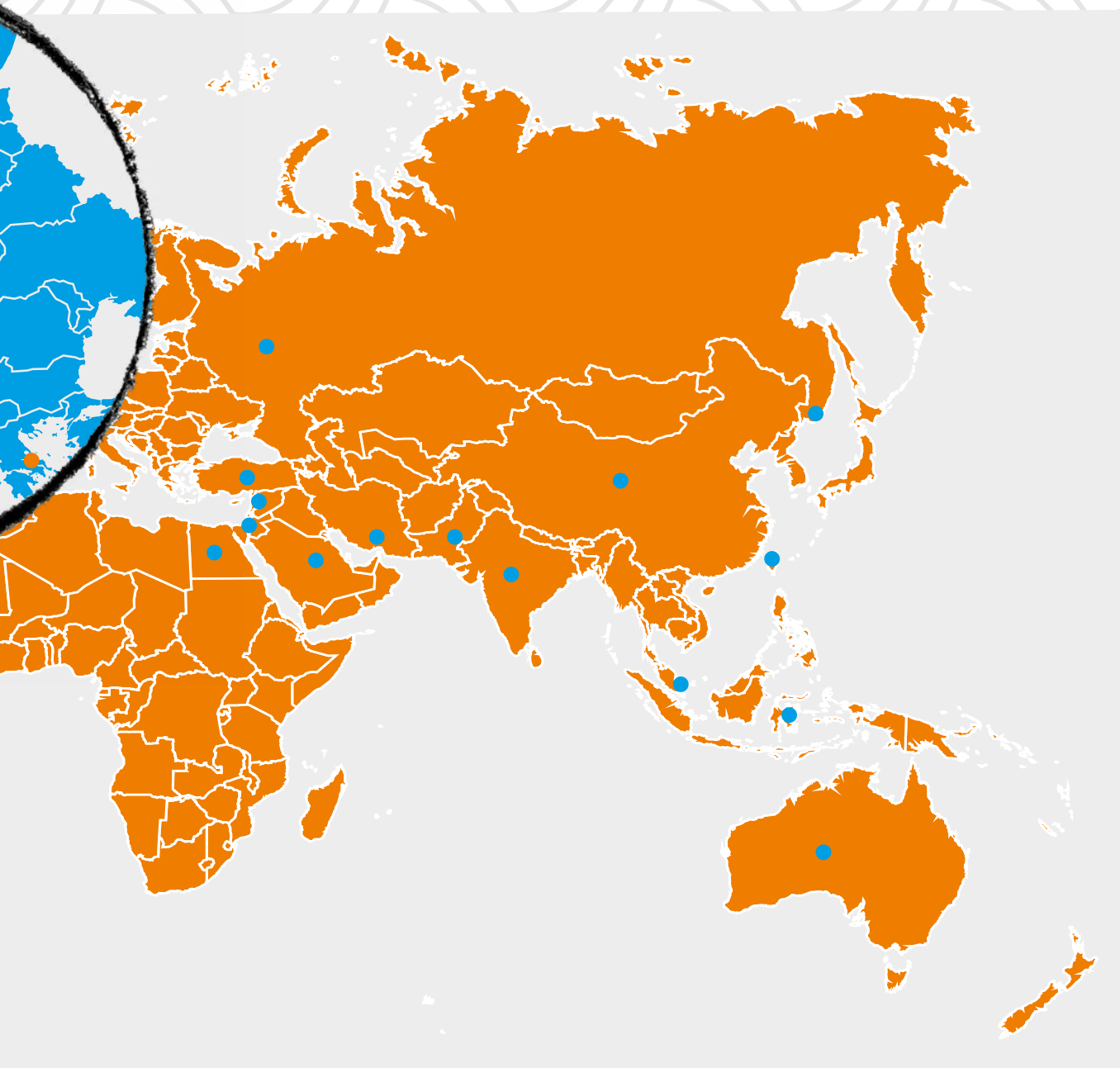
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Tel: +39 0444 746211 - Fax: +39 0444 498098 - www.svecom.com - svecom@svecom.com



BRANCH USA GOLDENROD CORPORATION -25 Lancaster Dr, Beacon Falls, CT 06403, USA



SVECOM - P.E., A GLOBAL PRESENCE.



We are certified **UNI EN ISO 9001:2015** as a warranty of quality, reliability, technical experience, and attention to the needs of each individual customer. Aim of the certification: design, production, and assistance for mechanical and pneumatic expansion devices for the winding and unwinding of materials in reels. Thermal treatments.



Our cooling/heating rollers are designed, tested and built on the basis of the latest regulations and are certified according to PED 2014/68/UE and ASME.

