

SKM TWIN CENTRE WINDER PSG /2A-VI



SKM's automatic twin centre winder PSG is developed for efficient winding of heavy technical film e.g. flat extruded film, laminated plastics, rubber, glass weave, cotton and Kevlar fibres from 45 to 1000 g/sqm on large rolls and with a film tension up to 4000 N.

The PSG winder is designed to meet extremely strong requirements for accurate film tension control at low as well as at high film speeds.

The PSG is available as a true walk-away-operation with touch screen from where all handling and winding automatically takes place.

SKM's automatic twin centre winder type PSG

FEATURES & BENEFITS

- PSG is standard built as a twin centre winder and enamelled to the customers' choice
- PSG is a stand alone facility with integrated nip and external entry nip type KP/EP
- Simple and clear programming and control by black/white or multi coloured touch screen
- Available with full or semi automatic winding shaft handling
- Prepared for hydraulic handling of the finished roll
- Speed and torque controlled film tension through use of load cells
- The centre winder PSG is adaptable to future demands by its unique open soft ware
- Integrated motorized nip roller equipment on guided moving system with pneumatic opening and closing operation to facilitate roll change
- Improved film tension control and winding quality through efficient interaction between load cells and the integrated nip rollers
- Optimal use of raw material through efficient and exact film handling due to its external entry nip
- Digital display of film speed and film tensions in the various film locations
- Built with taper function for film tension reduction with increase of diameter of finished roll
- Edge guiding optional with edge sensors integrated between entry nip and winder



PSG comes with external entry nip type KP/EP for optimal film tension control

The winding quality is of optimal uniform quality for each winding operation due to efficient interaction between load cells, external entry nip and the twin centre winder

DESCRIPTION OF PSG

- PSG is a dual turret centre winder with semi automatic roll change and integrated knife system. The turret is automatically positioned at the automatic roll change
- Film accumulation optional in case automatic roll change is not selected
- The winder has chucks for winding shafts
- The winder is equipped with speed and tension signals which together with calculation of the roll diameter provides a signal for film tension correction. This combinations provides an efficient and reliable reduction of the film tension with increased roll diameter
- 9" control touch on operator screen
- Lay on rollers with manual adjustment of start up pressure. The pressure is reduced with increased roll diameter through an IP converter.
- Hypalon coated entry nip with pneumatic opening and closing operation of the integrated nip in the PSG

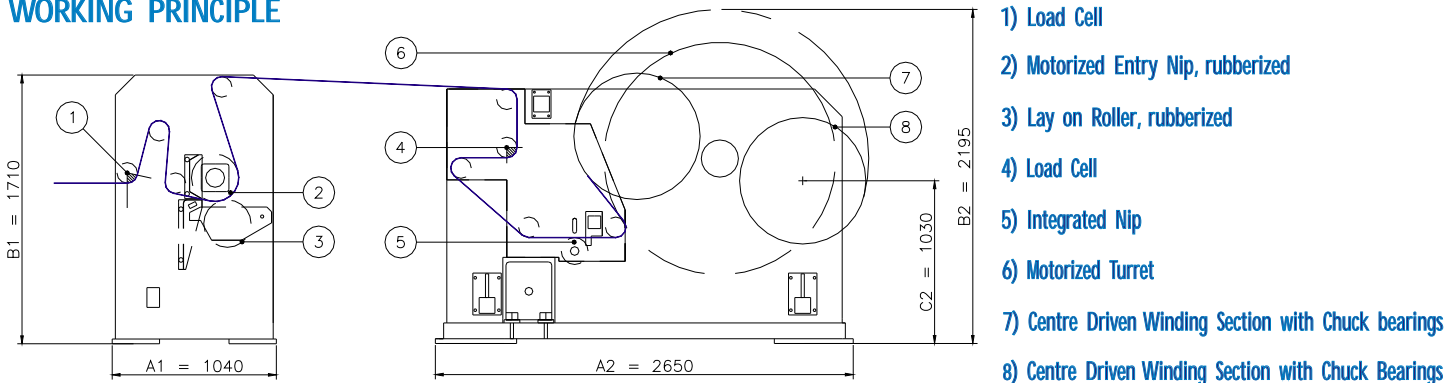
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Specialized machines & equipment for the Plastic Processing Industry



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WORKING PRINCIPLE



The combination of demands for extreme pulling force and perfect winding ask for complete control of the film tension at low as well as at high winding speeds.

In order to maintain a really efficient and reliable film tension control throughout the entire field of operation between the winding section and the extruder or other source of material for the entire range of operation, it is necessary to implement a motorized entry nip system. It is necessary that the motors operate at different speeds from those of the winding sections' at acceleration as well as at de-acceleration of the film. The speed difference between the material supply, the entry nip and the winding section creates the real film tension.

The entry nip section constitutes a heavily designed construction that can resist the extreme physical forces from the dual centre winder. The external entry nip, type KE/EP, constantly makes sure that the real film tension is fully consistent with the selected value.

The interaction between the entry nip KP/EP and the dual centre winder constitute together the control of the application and offer numerous advantages, production wise or human.

The control takes place from a multi coloured display from which all operations are executed and controlled. The software is Windows® based assuring easy and simple operation eliminating need for time consuming learning.

SKMs' PSG series is designed to wind technical films with extreme characteristics. The dual centre winder is manufactures in what ever width and height adapted to the customers needs and tailor made to the environment of the production facility.

Regarding choice of software and electrical components, the winder will be customer applied to meet individual preferences. This helps to assure swift training of operators and maintenance staff.

The frame of the winder is built from 30 mm steel late with durable horizontal supports from box section steel profiles with triple support of the turret for the 2 winding sections.

The integrated nip with pneumatic opening/closing is monitored by help of a film speed signal from the entry nip KP/EP assuring the selected values for film tension and film speed.

Film cutting in connection with roll change is made swiftly and with high precision by the pneumatic flying knife system. The finished roll is removed from the chuck bearings, which can be either manual or automatic. The final result is perfectly wound rolls- every time!

TECHNICAL SPECIFICATIONS FOR PSG /2A-V WINDER WITH EXTERNAL KP/EM INLET NIP ROLLER

• Winder Type:	Stationary dual centre winder	• Material/Film Types:	Designed for winding of technical films
• Max. Roll Dia.:	1000 mm	• Winding Shaft Dia.:	10"/6"/3" 254 mm/152 mm/76 mm
• Max. Roll Width:	3000 mm	• Max./Min. Steel Tube Dia.:	10"/6"/3" 254 m /152 m /76 mm
• Max. Roll Weight:	2200 kg	• Air Required:	7.0 bar - 110 PSI
• Line Speed:	0-100 m/ min.	• Winding Principle:	Centre winder - AC Flux vector surface drive
• Film Tension:	0 - 4000 N		

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