

SKM SURFACE WINDER CSG-L



SKM's automatic surface winder is developed to carry out efficient winding of heavy films on large rolls respecting substantial demands for film speed, accuracy and efficient film tension control.

The CSG-L series is designed and developed to wind very heavy tube extruded laminated films, asymmetric co-extruded films and in-line preconditioned or printed films from 10 to 1500 micron.

The CSG-L surface winder features a "true walk away operation" because all handling and winding is fully automated.

FEATURES & BENEFITS

- CSG-L comes as standard as surface winder, but can also be supplied in a gap winder version
- CSG-L is delivered in stand alone version, storey winder, front to front or back to back
- Simple and clear programming and operation by either black/white or multi coloured touch screen, alternatively with press buttons
- Available with manual, semi- or fully automatic handling of winding shaft before, during and after finished wound roll
- CSG-L is prepared for hydraulic handling and lowering of the finished roll to floor level
- Speed and torque monitored film tension control of the winding roller by means of load cells
- The CSG-L surface winder is adapted to future needs due to its open programmable logic
- Integrated motorized secondary nip mounted on guideways with pneumatic opening/closing function.
- Enhanced film tension control and winding quality through an efficient interaction between the integrated entry nip and the relevant load cells.
- Optimal use of raw materials due to efficient and accurate film handling
- Digital display of film speeds and film tensions in the various film locations
- Optional taper function for efficient and reliable film tension reduction with increase of diameter of finished roll
- Delivered in stand alone version the CSG-L series is designed and fully prepared for a complete integration of all film handling functions such as:
 - fully integrated motorized secondary nip
 - chill-roller system
 - knife systems for central slitting
 - micro perforation or film mark systems
 - and much more conversion equipment

In short: All qualities in one and the same winder!

DESCRIPTION OF CSG-L



At roll change the finished roll will continue to be wound whilst a new prepared winding shaft is introduced.

Thereafter the film is cut by the CSG-L integrated flying knife system.

Winding shafts from SKM come as expansion shafts in steel, aluminium or carbon fibre.



Depending on the selected width of the winder the frame plates are made from either 25 or 30 mm steel plate supported by durable box section steel profiles.

The steel winding drum comes either as plain or in a cross profiled rubber coated version.

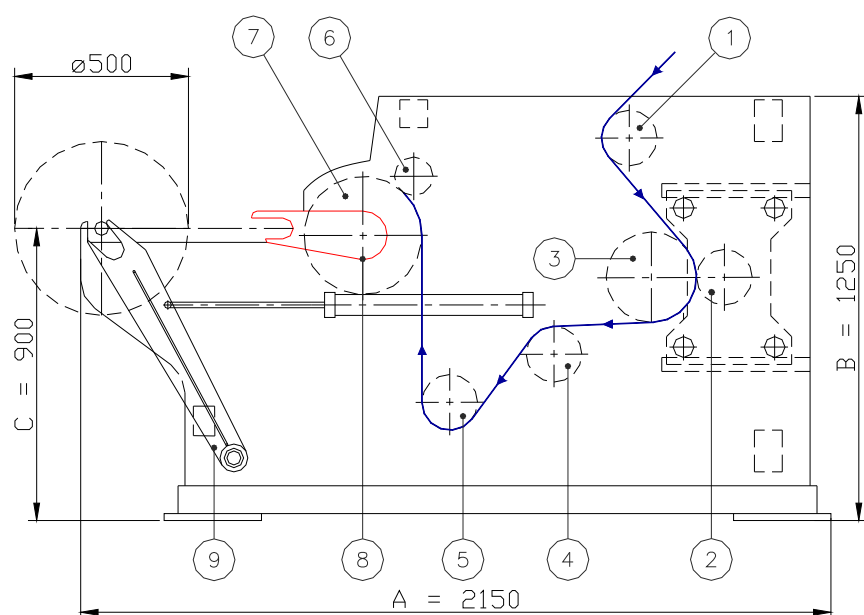
Integrated secondary nip together with the load cell assure perfect film tension of the finished roll.

www.sk-machinery.com

Svend Knudsen Machinery
Specialized machines & equipment for the Plastic Processing Industry



SKM SURFACE WINDER CSG-L



- 1) Inlet Roller
- 2) Lay on Roller for Entry Nip - rubberized
- 3) Motorized Secondary Nip - rubberized
- 4) Tension Control - Load Cell
- 5) Roller
- 6) Lay on Roller for Secondary Nip - rubberized
- 7) Winding Drum, Plain or Cross Profiled
- 8) Motorized Arm for Winding Shaft Automatics
- 9) Pivot Arms for Winding Shaft

Roll diameter [mm]	Max. weight [kg]	A [mm]	B [mm]	C [mm]	D* [mm]
500	700	2150	1250	900	4800
1000	2200	2400	1300	950	3800
1500	4850	2650	1400	1050	3800

* Total width of equipment

The technical data for the finished roll are guide lines only. The CSG-L winder is manufactured to individual customer requirements.

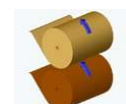
TECHNICAL SPECIFICATIONS FOR CSG-L WINDER WITH INTEGRATED SECONDARY NIP

- Winder Type: **Stationary surface winder**
- Max. Roll Dia.: **1500 mm**
- Max. Roll Width: **4000 mm**
- Max. Roll Weight: **4850 kg**
- Line Speed: **0-120 m/ min.**
- Film Tension: **0-750 N**
- Materials/Film Types: **Designed for all LD or LLD films**
- Winding Shaft Dia.: **10"/3" - 254 mm/76 mm**
- Max./Min. Steel Tube Dia.: **10"/3" - 254 mm/76 mm**
- Air Required: **7.0 bar - 110 PSI**
- Winding Principle: **AC Flux vector surface drive**

Configurations for CSG-L:



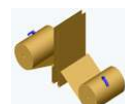
"Stand-alone"



"Stack Winder"



"Front to front"



"Back to back"

Electrical data and specifications for 500 mm:

- Rated voltage: **3 x 400 Volts + N/PE**
- Rated Frequency: **50 Hz**
- Rated Current: **32 Amps**
- Fuse Max.: **63 Amps**
- Max. Short Circuit: **6 kAmps**

www.sk-machinery.com

Svend Knudsen Machinery
Specialized machines & equipment for the Plastic Processing Industry