



## KS-DSUP-400

The Thermal - KS-DSUP-400 (Digital Stand-up-Pouch) is a compact single lane, quick changeover pouch machine, designed for short/medium-run high performance production of:

**2-side-seal pouches with/without zipper**

**3-side-seal pouches with/without zipper**

**Stand-up pouches with/without zipper**

### Machine Specifications

Description	Specs
Machine useful working width, mm (inches)	420mm (16.53")
Main reel width, mm (inches)	Max. 840mm (33.07")
Main reel core int. diam, mm (inches)	76mm (3") (optional 152mm - 6")
Main reel ext. diam, mm (inches)	800mm (31,49")
Materials specs*	PET, ALU, PA laminated with PP or PE
Material thickness, $\mu$	55 $\mu$ - 200 $\mu$
Installed power, Kw	3ph + N, 400V, 50/60Hz – 32 Kw
Air requirement, L/min	6Bar/90PSI 15L/min
Area of installation (LxWxH), mm	~ 8700x2000x2200mm
Mechanical speed / production speed, cpm	200cpm / ~ 130cpm
Machine compliance	CE (UL/CSA upon request)

\* Other laminate structures are possible and should be discussed with Karlville team

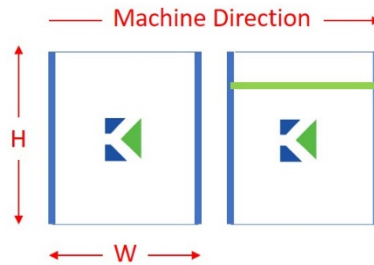
## Main features

- Compact machine (short and narrow), resulting in increased productivity for small and medium jobs.
- Easy to use machine; easier for new-to-the-job operators to learn.
- Very low scrap rate during machine start-up. Machine has integrated ramp speed that is controllable through the HMI. This allows the machine to run at high speeds consistently after being setup at lower speed (reducing waste). Also, provides maximum film control when starting and stopping at high speeds.
- No maintenance flying knife (no-tool, fast blade replacement); guillotine available as optional for paper pouches production.
- Machine equipped with independent servo motor for each film feed drive (standard is 3 servo system).
- One servo motor for longitudinal sealing/cooling section and one servo motor for cross sealing/cooling section; alternatively (as option on specific request) all stations can be independently servo controlled.
- Low maintenance requirements; easy access to all stations for maintenance.
- Initial reject discard function to prevent operator confusion with badly sealed pouches on start-up, film is discarded by double feeding for a selected distance after the cutter.
- Digital printing friendly, compliant to Industry 4.0, CE Certified (UL/ CSA upon request).

## Pouches

Pouches that can be manufactured on the machine:

### 2-side-seal pouches (from 1 web folded)

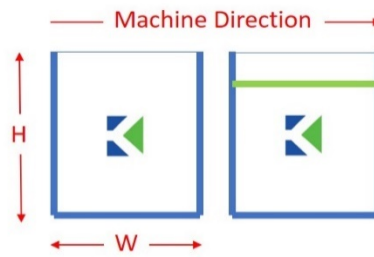


	Metric (mm)		Imperial (inch)	
	Min.	Max.	Min.	Max.
○ 1-up without zipper				
○ 1-up with zipper				
○ Width range (W)	80	350*	3,14	13,77*
○ Height range (H) without zipper	80	400	3,14	15,74
○ Height range (H) with zipper	160**	400	6,29**	15,74

\* Width can be increased with skip sealing function (included in the software)

\*\* Min. height 100mm (3,93") with adjustable V board position

### 3-side-seal pouches (from 1 web folded)

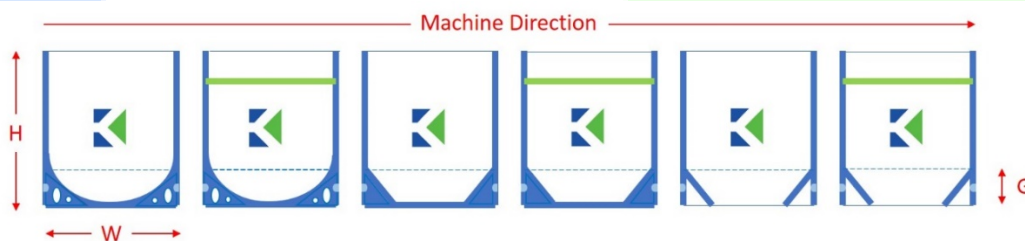


	Metric (mm)		Imperial (inch)	
	Min.	Max.	Min.	Max.
○ 1-up without zipper				
○ 1-up with zipper				
○ Width range (W)	80	350*	3,14	13,77*
○ Height range (H) without zipper	100	400	3,93	15,74
○ Height range (H) with zipper	160**	400	6,29**	15,74

**\* Width can be increased with skip sealing function (included in the software)**

**\*\* Min. height 100mm (3,93") with special tool for bottom seal and adjustable V board position**

### Stand-up pouches (from 1 web folded)



	Metric (mm)		Imperial (inch)	
	Min.	Max.	Min.	Max.
○ 1-up without zipper				
○ 1-up with zipper				
○ Width range (W)	80	350	3,14	13,77
○ Height range (H) without zipper	100	375	3,93	14,76
○ Height range (H) with zipper	160**	375	6,29**	14,76
○ Gusset depth (G) folded	25	65	0,98	2,55

**\*\* Min. height 100mm (3,93") with special tool for bottom seal and adjustable V board position**

## Advantages

- Very compact machine not only in terms of dimensions, but also due to the limited amount of material (linear meters) in the machine bed.
- All the stations and modules are very accessible.
- Reduced scrap rates during machine start-up, changeovers and roll changes.
- Machine with a very intuitive software and simple HMI. Once the distance between the various stations has been set the operator can move them all at once in the right position, ready to initiate next job.
- All temperatures are controlled via the HMI touchscreen. Machine can store hundreds of preset recipes for quick changeovers.

- Tool-less machine: Replacing sealing and cooling dies does not require tools which allows for easy and fast job changeovers.
- Splicing table for ease of operation during roll change, with integrated pneumatic film clamping system to maintain film tension throughout the machine.
- Motor driven unwind with tension control to maintain constant tension throughout the unwind station.
- Ultrasonic edge guide system for smooth and consistent web tracking.
- Nip rollers are servomotor driven and pneumatically adjustable for excellent film control as it passes through the machine. 3 Servo driven draw rollers.
- Machine has eye mark sensor for precise positioning of sealing and punching. Machine has linear potentiometer-controlled dancer arms in conjunction with the nip rollers to adjust for print repeat issues.
- Pouch general tolerance  $\pm 1$  mm (length / width / height).

## Layout

