KARLVILLE

KS-DSUP-400-GSW

Compact, single lane, quick changeover pouch machine, designed for short/medium run high performance production of:

2-side-seal pouches from 1 web, with/without zipper
3-side-seal pouches from 1 web, with/without zipper
Stand-up pouches from 1 web, with/without zipper
3-side-seal pouches from 2 independent web, with/without zipper
Stand-up pouches from 3 independent webs, with/without zipper

Machine Specifications

Description	Specs
Machine useful working width, mm (inches)	420mm (16.53")
Main side reel width, mm (inches)	Max. 840mm (33.07")
Main side reel core int. diam, mm (inches)	76mm (3") (optional 152mm - 6")
Main side reel ext. diam, mm (inches)	800mm (31,49")
In-Line reel width, mm (inches)	Max. 420mm (16,63")
In-Line reel core int. diam, mm (inches)	76mm (3") (optional 152mm - 6")
In-Line reel ext. diam, mm (inches)	600mm (23,62")
Materials specs*	PET, ALU, PA laminated with PP or PE
Material thickness, μ	55μ - 200μ
Installed power, Kw	3ph + N, 400V, 50/60Hz – 37 Kw
Air requirement, L/min	6Bar/90PSI 15L/min
Area of installation (LxWxH), mm	~ 10700x2300x2200mm
Mechanical speed / production speed, cpm	200cpm / ~ 130cpm
Machine compliance	CE (UL/CSA upon request)

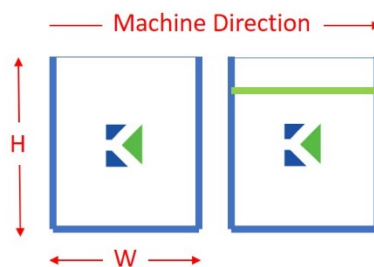* Other laminate structures are possible and should be discussed with Karlville team

Main features

- Compact machine (short and narrow).
- 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:


3-side-seal pouches from 2 (printing sync) webs				
o **2-up without zipper**	Metric (mm)		Imperial (inch)	
o **1-up with zipper**	Min.	Max.	Min.	Max.
o **Width range (W)**	80	350	3,14	13,77
o **Height range (H) without zipper*****	100	400	3,93	15,74
o **Height range (H) with zipper*****	160**	400	6,29**	15,74
** Min. height 100mm (3,93") with special tool for bottom seal and adjustable V board position				
*** Minimum web width in this case must be 180mm				

## ◩ Stand-up pouches from 3 webs 1-up (front/back with printing sync+inserted gusset)
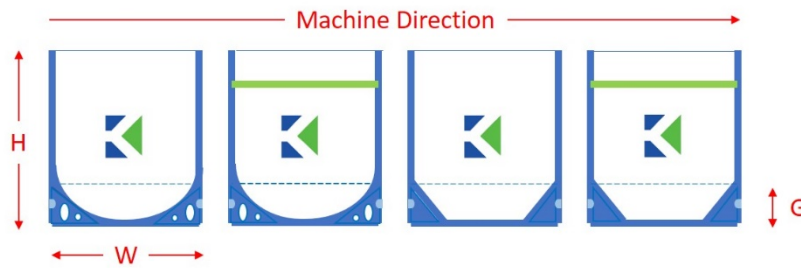
○ 2-up without zipper	Metric (mm)		Imperial (inch)	
○ 1-up with zipper	Min.	Max.	Min.	Max.
○ Width range (W)	80	350	3,14	13,77
○ Height range (H) without zipper 1-up***	100	380	3,93	14,96
○ Height range (H) with zipper***	160**	380	6,29**	14,96
○ Gusset depth (G) inserted 1-up	15	65	0,59	2,55
** *Min. height 100mm (3,93") with special tool for bottom seal and adjustable V board position*				
*** *Minimum web width in this case must be 180mm*				

◩ 2-side-seal pouches (from 1 web folded)
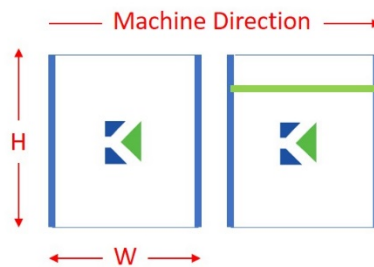
○ 1-up without zipper	Metric (mm)		Imperial (inch)	
○ 1-up with zipper	Min.	Max.	Min.	Max.
○ Width range (W)	80	350*	3,14	13,77*
○ Height range (H) without zipper	80	400	3,14	15,74
○ Height range (H) with zipper	160**	400	6,29**	15,74
* *Width can be increased with skip sealing function (included in the software)*				
** *Min. height 100mm (3,93") with adjustable V board position*				

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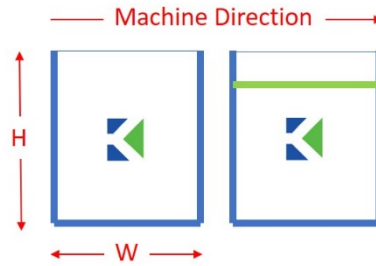
1-up without zipper	Metric (mm)		Imperial (inch)	
1-up with zipper	Min.	Max.	Min.	Max.
Width range (W)	80	350*	3,14	13,77*
Height range (H) without zipper	100	400	3,93	15,74
Height range (H) with zipper	160**	400	6,29**	15,74

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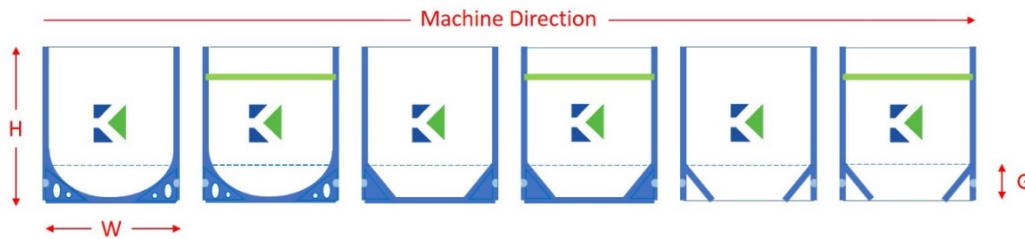
1-up without zipper	Metric (mm)		Imperial (inch)	
1-up with zipper	Min.	Max.	Min.	Max.
Width range (W)	80	350	3,14	13,77
Height range (H) without zipper	100	375	3,93	14,76
Height range (H) with zipper	160**	375	6,29**	14,76
Gusset depth (G) folded	25	65	0,98	2,55

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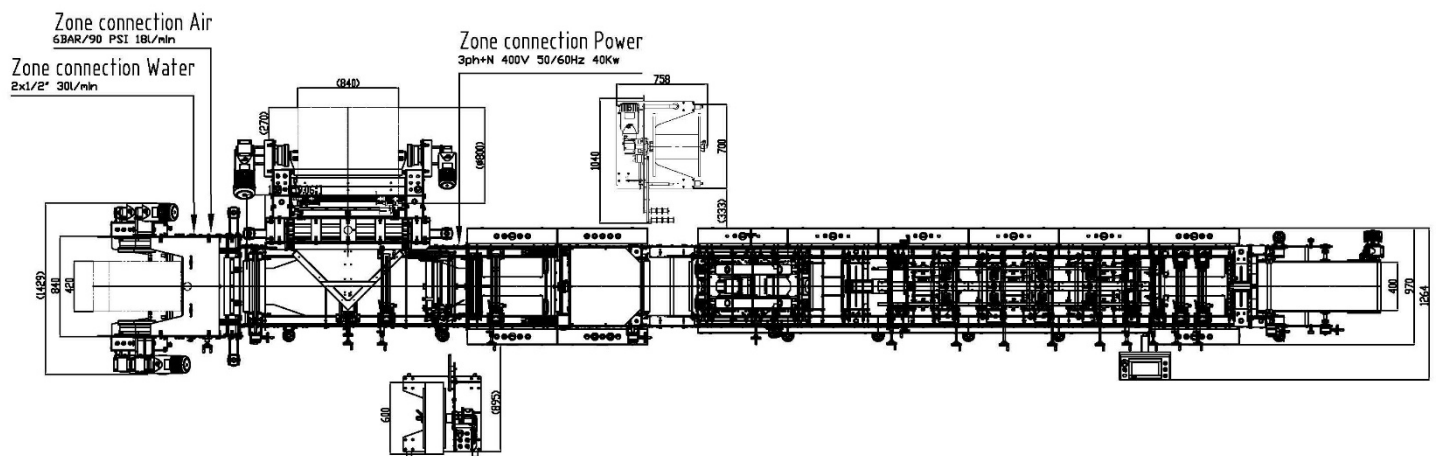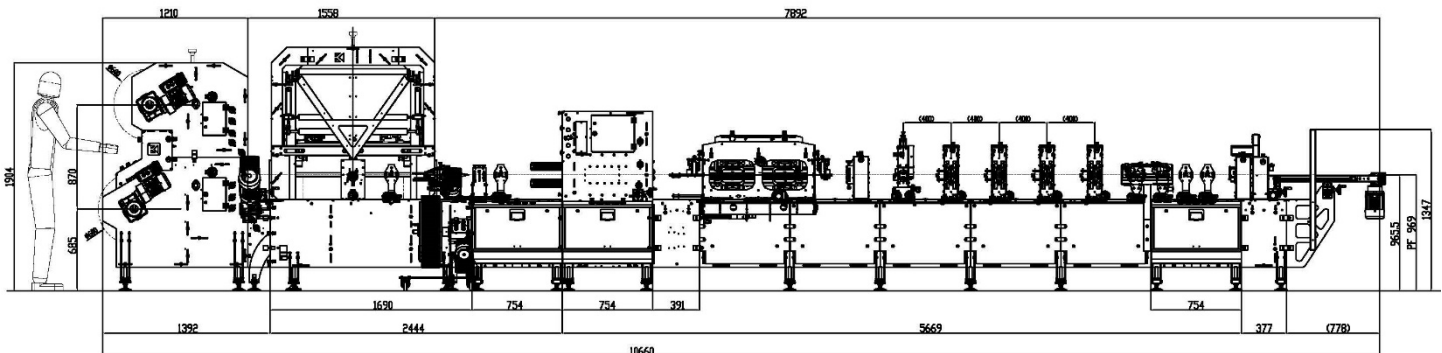
Advantages

- The ideal machine for narrow web printers that would like to enter the flexible packaging field, allowing them to manufacture 3-side-seal pouches, stand-up pouches and zipper pouches from multiple reels up to 420mm width.
- Very compact machine not only in terms of dimensions, but also due to the limited amount of material (linear meters) in the machine bed.
- Increased productivity for small and medium jobs.
- Ease to operate and control with very accessible stations and modules.
- Reduced scrap rates during machine start-up, changeovers and roll changes.

- Better material tension control due to the locations of the feed rollers.
- Tool-less machine for fast change over: Replacing sealing and cooling dies does not require tools which allows for easy and fast job changeovers.
- Machine with an intuitive software and simple HMI. Once the distance between the various stations has been set (all stations are mounted on linear guides), the operator can move them all at once for easy and quick setting in the right position to initiate next job.
- All temperatures are controlled via the HMI touchscreen. Machine can store hundreds of preset recipes for quick changeovers.
- 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. This equates to very little movement and ability to help correct bad repeats for consistent pouch production.
- Pouch general tolerance ±1mm (length / width / height).
- Printing tolerances between top/bottom webs registration +0-2mm/lm.

Layout