

V-Shapes®

Innovative unit-dose packaging



V-SHAPES® DIGITAL PRINT & PACK SOLUTION

alpha
Flex



FOOD



COSMETIC



MEDICAL/PHARMA



CHEMICAL



Printing buffer to align the different speed of the printing module to the production phase

Patented opening cut created through micrometric engraving pneumatic actuation



SIEMENS
Ingenuity for life

<p>✓</p> <p>INTUITIVE AND USER FRIENDLY HMI</p>	<p>✓</p> <p>HIGH QUALITY INTEGRATED PRINTING</p>	<p>✓</p> <p>MAXIMUM EFFICIENCY PRINT AND PACK ALL IN ONE</p>	<p>✓</p> <p>HIGH PERFORMANCE INDUSTRY 4.0 INTEGRATED DESIGN</p>
--	---	---	--

- > **Versatile**
Filling volumes from 0.2ml to 38ml with multiple sizes and shapes available way to pack any type of product, whether liquid or thick
- > **Accurate**
Up to 0.5% filling accuracy based on product type. Multiple precision filling and dispensing systems available
- > **High quality design**
Single-pass print solution with CMYK with resolution up to 1600 x 1600 dpi
- > **Easy change set**
Changeover time under 30 minutes
- > **Reliable**
The performance of Alpha packaging machine with an average output up to 16,000 units per hour
- > **Compliant**
To any industry: Cosmetic, Food, Chemical and Pharmaceutical

Our fully-automatic, multi-lane vertical form, fill & seal machine Alpha, combined with Memjet Duraflex printing technology evolves, becoming **AlphaFlex**.

AlphaFlex, with integrated digital high resolution printing and buffer system, will reduce time to market and cost for short-medium production runs of the innovative V-Shapes® unit-dose packs. In only one machine all the expertise in packaging of V-Shapes® together with Memjet high quality printing solutions.

AlphaFlex seamlessly integrates with ColorGATE Productionserver, automatically process incoming jobs, compliant with Industry 4.0.



Touch screen control operator panel 15" (HMI) with integrated recipe management

Volumetric Filling System

This system is capable of dosing fluids with low/medium viscosity with quantities ranging from 0.2-38ml with a sensitivity of 0.2gr

Composed by:

- One volumetric pump to load the product into hopper on top of machine
- 6 volumetric guns for filling with integrated speed closed loop control controlled directly from HMI

- 6 flow sensors can be integrated in the system for automatic flow control at speed change
- Integrated pressurized C.I.P. system (Cleaning-In-Place) which guarantees the cleaning and sanitization of the filling circuit
- The cleaning program can be set via HMI



Customized dosing systems

Tailor-made dosing systems are studied and created to meet customer needs (e.g. high precision, systems for pharma environments, high viscosities, etc.)



Direct Filling System

This is the standard dosing system supplied with the AlphaFlex machine. The system is capable of dosing fluids with high viscosity with quantities ranging from 5-38ml with a sensitivity of 0.5gr.

Composed by:

- One volumetric pump that transfers from the tanks to the dosing cannulas
- The product flow is controlled by 6 manual taps located above the cannulas.

HIGH QUALITY INTEGRATED PRINTING POWERED BY MEMJET FEATURES

AlphaFlex ensures high production performances at an incredible pace maintaining peak resolution of 1600x1600 dpi thanks to perfect integration with Memjet Duraflex performed by the buffer.

With the proprietary **RIP software and interface** it will be easy to reach high-quality print results, consistency between production batches, spot color handling and file processing speed. ColorGATE Productionserver also enables workflow integration of the printing systems, by REST API, JDF or hotfolders.

Friendlier for the environment DuraFlex ink **reduces production permit and waste handling costs**. Combination of water based dye inks, high capability print heads, low amount of coating needed for high performance, reduce production cost.



PACKAGING PHASE TECHNICAL DATA

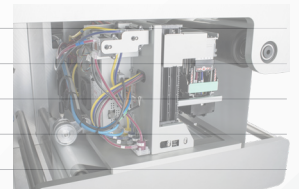
Production capacity	up to 300 units/minute
Max film reels dimensions	Left shaft 600mm/23.62" (Bottom semi-rigid reel) Right shaft 400mm/15.75" (Top flexible reel)
Max film reels weights	Left shaft 130kg/330.70 lb (Bottom semi-rigid reel) Right shaft 80Kg/176.37 lb (Top flexible reel)
Film reel consumption	up to 5000mm/min
Standard seals width dimensions	5mm
Max mechanical tolerance	+/-1mm
Electricals	Standard IP55, IP67 upon request
Electronic "On Board Equipment"	PLC Siemens S7 1500T - Rockwell PLC and Environment upon request 9 brushless motors 1 asynchronous for loading hopper or direct dosing Intelligent Power Management
V-Shapes® sachet dimensions	Height from 50 to 100mm / 1.969" to 3.937" Width from 40 to 100mm / 1.575" to 3.937"
Air pressure	8 bar, 600 NL/H
Power supply	24 Kw/h
Weight (maximum)	3900 kg / 8598 lb
Machine dimensions	4850 mm x 2100mm x 2000 mm (H) 190.9" L x 82.7" W x 78.7" H



alpha
Flex

PRINTING PHASE TECHNICAL DATA

Printing resolution	1600x1600 dpi or 1600x954 dpi
Printing speed	27.4 m/min (90 ft/min) or 45.7 m/min (150 ft/min)
Max media width	340mm / 13.4"
Max printing width	324mm / 12.75"
Max roll diameter	600mm / 23.6"
Core size	76mm / 3"
Material supported	V-Shapes® partner compliant material, PP, PET, PS with coating
Ink tank capacity	2L or 10L tank options available
Printing platform	high durability pigmented aqueous inkjet



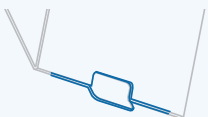
Powered by
memjet

ARTYSIO AQUEOUS DIGITAL PRINTABLE LAMINATES

- ✓ with best sealing properties
- ✓ suitable barrier performances
- ✓ certified for V-Shapes® packaging machine

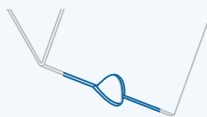
sihl
ARTYSIO
PACKAGING

OPENING PRE-CUT



SQUARED OPENING PRE-CUT

Ideal shape to dispense and spread products over any surface



HALF MOON OPENING PRE-CUT

Standard opening for thick or dense products




DROP OPENING PRE-CUT

Special opening to dispense liquid products through drops

ONE SUPPLIER FOR ALL

- ✓ SERVICE
- ✓ MATERIAL
- ✓ EXPERTISE

SEAMLESSLY INTEGRATES WITH COLARGATE
PRODUCTIONSERVER, AUTOMATICALLY
PROCESS INCOMING JOBS

 **V-SHAPES® Srl** | Via Persicetana, 20B - 40012 | Calderara di Reno (Bologna) | Italy | +39 051 0185079 | info@v-shapes.com
www.v-shapes.com

FOLLOW US: [f](#) [in](#) [v](#) [t](#)

MADE in ITALY



V-Shapes®

DISCOVER V-SHAPES® Srl

AlphaFlex Machine and 3D Configurator

