

810K VE LARGE DIAMETER QUICK CHANGE NECKING SYSTEM



810K VE

 **Belvac
Production
Machinery, Inc.**
A  **DOVER** COMPANY

The Belvac 810K VE High Speed Necker/Flanger/Reformer System

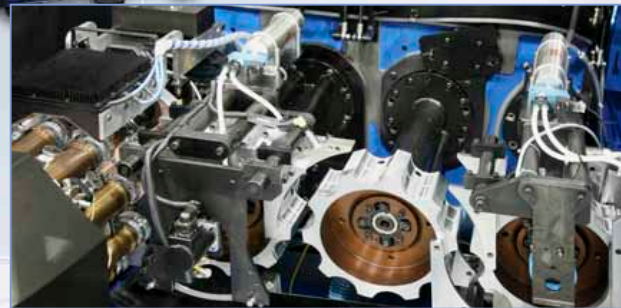
AMONG BELVAC'S TECHNICAL SUCCESSES is the Model 810K VE Necker System. This one modular machine has the ability to lubricate, neck, flange, re-profile, reform, and inspect large diameter cans. The modular design makes expansion quick and easy, and allows all the operations to be combined into a single system.

Quick change turrets are a standard feature on the 810K VE, a feature which greatly reduces change-over time when adjusting can height or diameter and provide better flexibility for can sizes. This also means that changing the height and diameter requires minimal tools and training.

The 810K VE Large Diameter Quick Necking System was designed on a modular base to handle a wide range of can body sizes from 211 to 300 to 307, with a can neck range from 206 to 300 and has a minimum can height of 307 to a maximum of 804. The 810K VE Quick Change Necking System is complete with a 450QC stand-alone Waxer, Flanging, Reforming, Reprofileing, Light Testing, and Inspection Station capabilities (Applied or Pressco). The quick change features reduce height and diameter change over time by up to 50%. The 810K VE is capable of running at speeds of 1600 CPM linear or 800 CPM recirculating.

Features

- Air assisted discharge trackwork
- Vacuum transfer starwheels
- Modular design also integrates Flanger, Reformer, Reprofiler, Light Tester, Necker and Belvac/Pressco or Applied Inspection Module
- Automatic lubrication
- Simple neck height adjustment
- Standard Quick Change features
- Optional Recirculation or Linear
- Proven process for reducing can bodies from 307 down to 200 neck diameters
- Hard chrome-plated can guides and starwheels



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Guard System

Equipped with 80/20 aluminum extruded guards that are CE and OSHA compliant the 810K VE runs both linear or with a unique recirculation system depending upon the dimensional configuration of the finished can.



Modular Necking

The Belvac modular necking system dramatically decreases floor space, can damage, labor and training by reducing the amount of can handling, eliminating the need for connecting tracks and conveyors. The reduction of costly space and power consuming trackwork, elevators and other redundant equipment offers the canmaker a simple process and significant savings while minimizing installation and platform costs.



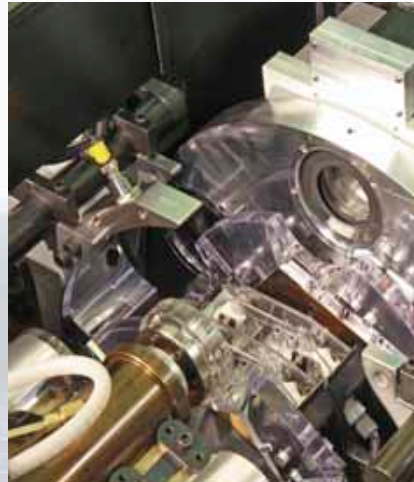
Necker Lubrication

Belvac can waxers are designed to apply oil or hot wax lubricant to the exterior of the open ends of cans prior to the necking operations. Waxing is accomplished by rolling the open ends of cans over a felt wick charged with lubricant by a series of adjustable injectors.



Flanger

The Belvac Flangers incorporate design engineering improvements that are essential for today's demanding flange width requirements for beverage and food cans. The Flanger has radial or axial spin heads that improve the formation of the flange and provide consistent flange width to meet demanding ultra-light can specifications.



Light Tester

The Belvac Light Tester uses proven SENCON technology to provide high speed light inspection for pin holes and gross split flanges with rejection rates of 100% on cans with 0.002 in. (0.051 mm) diameter pin holes. The cans are consistently rejected by an air jet eliminating unreliable mechanical rejection devices.

Design Features

MAIN BASE, DRIVE AND GENERAL:

- Cast ductile iron modular bases
- Modular bi-fold guards, CE and OSHA compliant
- Speed rated at 160 rpm = 1600 cpm
- New tapered roller bearing on drive side
- Elimination of the “ram block-to-cam support” tool to reset for can heights
- Standardized front and rear bearing design as on proven 595 product line
- Size range extended to include 211–307 diameter
- Height range extended to include 307– 804
- One set of quick change size parts included
- Aluminum extruded bifold guarding
- Flanger tooling included
- Necker tooling and electrical logic panel optional extra
- Q.C. adjustable infeed and discharge airtracks
- Q.C. similar to the 595 product line

TURRETS:

- Adjustable upper and lower guide
- Self protected transfer guide sensors built into upper guides
- 10 pocket transfer starwheel timed to turrets, long can starwheels
- Doweled to starwheel hub: Plug timing not required after initial timing

Technical Specifications

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Can Body Size Range		211 (66.2mm) to 307 (83.8mm)		Machine Overall Dimensions	Length	[31" (787.4mm) + 27" (685.8mm) x # Modules]	
Can Neck Size Range		211/200	307/209		Width (Non-Cradle Mount)	115" (2921mm)	
Maximum Can Height		8.31" (211mm)			Width (Cradle Mount)	140" (3556mm)	
Minimum Can Height		3.50" (89mm)			Height	107" (2718mm)	
Number of Pockets per Working Turret		10		Maximum Neck Shoulder Dimension	Approx. 1.81" (30mm)		
Number of Pockets per Transfer Turret		10		Maximum Neck Length	1.060" (26.9mm)		
Pocket-to-Pocket Integrity		Yes		Minimum Neck Length	0.23" (5.8mm)		
"Active" Pockets (Linear)		10		Effective Push Cam Stroke (Less BIS) Max	2.500" (63.5mm) « New RDC Profile		
Shaped Can Option Capable		Not Applicable		KO Cam Stroke Max	1.681" (47.2mm) « New RDC Profile		
"Active" Pockets (Recirculation)		5		Cam Dynamics	Reduced Dynamics Cam (RDC)		
Rated Speed (CPM) (Linear Machine)		1600 CPM (160 RPM Max Turret Speed)		Cam Style	Matched Velocity		
Rated Speed (CPM) (Recirculation Machine)		800 CPM (160 RPM Max Turret Speed) Staged Infeed Only		Cam Working Arc	180 degrees		
Required Utilities: Dual Compressor Setup	Pressure Requirements	Flow Requirements		Diameter Change Capability	One QC parts kit per can diameter		
	50 psig (3.4 BAR) Process Air	<ul style="list-style-type: none"> • 100 SCFM (48 SLPS) per Necking Turret • 40 SCFM (19 SLPS) per Flanger or Light Tester Turret • 50 SCFM (24 SLPS) per Reformer or Reprofiler Turret 		Height Change Capability	"Quick Change"		
Required Utilities: Single Compressor Setup	80 psig (5.5 BAR) Brake Circuit			Ram Assembly Style	Cast Iron Bushing with Dual Cam Followers		
	80 psig (5.5 BAR)	<ul style="list-style-type: none"> • 100 SCFM (48 SLPS) per Necking Turret • 40 SCFM (19 SLPS) per Flanger or Light Tester Turret • 50 SCFM (24 SLPS) per Reformer or Reprofiler Turret 		Main Shaft Style	Horizontal		
Required Utilities: Inspection Blow-Off (Lt/V)	80 psig (5.5 BAR) minimum	100 SCFM (24 L/s) Per Blow-Off		Guard Style	Aluminum Extruded Modular Bi-Fold		
Required Utilities: Vacuum	8-10 In/HG @ 30 ACFM (203mm-254mm HG @ 14.2 SLPS)			Main Drive Motor and Gearbox	Single or Multiple Drive: Configuration Dependent		
				Gearbox	Helical Bevel		
				Drive Gearing	Spur Gear, Inline Steel Oil Bath Lubed		
				Transfer Shaft Assembly	Quick Change Modular		
				Blowers	Floor Standing		
				Infeed Star Wheel	Quick Change Modular		
				Waxer	Optional 450QC Waxer - Stand Alone		
				Transfer Starwheel	Quick Change Modular		
				Discharge Starwheel	Quick Change Modular		
				Face Seal Manifold	Modular FSM with HyComp Lining		
				Main Drive Side Bearing	Tapered Roller Bearing		
				Pusher Side Bearing	Radial Roller Bearing		

ABOUT BELVAC

Belvac is the clear choice for sustainable competitive advantage and the best option for new and innovative manufacturing processes.

BELVAC IS THE PREFERRED CHOICE OF THE world's two piece can makers and the most trusted source for canmaking technology world-wide. Belvac leads the industry with its design and production of continuous motion rotary technology. Belvac provides beverage canmakers with high-speed trimming, necking, base reprofiling and reforming, bottom rim coating, flanging and inspection technology. Belvac has enabled their customers to steadily increase line speeds and improve quality and productivity, while significantly reducing materials costs. Belvac customers have a sustainable competitive advantage in their market.

With nearly half a century of experience developing cutting edge machinery and almost 100% of its machines still in use, Belvac is the best option for new and innovative manufacturing processes. A testament to Belvac's dedication to quality, defect free products and precision engineering is that nearly all their machines are still in service — the oldest was made in the 1970s. Belvac engineers design their machines with industry leading precision. This technology is backed by Belvac's highly trained engineers who have installed and serviced machines in 49 countries.



Belvac...*the* choice for all your can making needs.

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