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JSN

REF:JSN/OCT/SS114

**Automatic Vertical FFS Machine Equipped
With Servo Auger For Flour Packaging In
Laminated Bags**

DATE: 28/10/2022

Presented To,

**M/S. THE SHEMBALESHWAR FARMER
PRODUCER COMPANY LTD.**

**SHEMBAL PIMPRI TA.PUSAD DIST-
YAWATMAL**

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Kind: Attn.: Mr.

**Automatic Vertical High Speed FFS Machine Equipped With Servo Auger
For Flour Packaging In Laminated Bags**



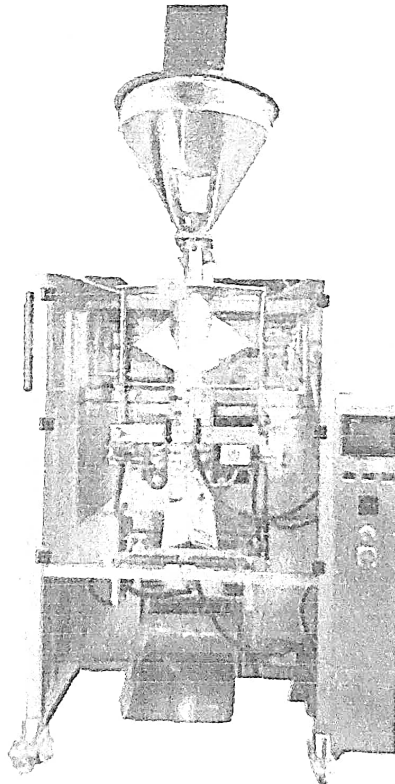
2022-23

Subject: Quotation of Automatic High Speed Vertical FFS Machine

Dear Sir,

This is in reference to your requirement of Automatic High Speed Vertical FFS Machine. We thank you for your valuable inquiry. We are pleased to furnish herewith our offer. This Offer covers Following: Description of the machines along with Technical specifications and terms & Condition.

Automatic High Speed Vertical FFS Machine



NOTE:- Accessories Shown in the image are only for representation purpose

Model No	JSN - AGL
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Product	Flour	500gm – 5kg.
Purpose of the Machine	Packaging of Flour to the required weight in online formed bags.	
<u>Scope of supply</u>	<p><u>Model JSN – AGL, (Intermittent Motion Type) Micro Controller Based Machine</u></p> <p><u>Filling Systems</u></p> <p># Servo Auger Filler</p> <p>Extra Facilities Attached to basic Machine:</p> <ul style="list-style-type: none"> • Batch Cutting Device. • Unwinding Assembly. • Paper Pulling Assembly. • Operator Interface Panel. 	

Technical Specifications

1. Bagging Machine	<ul style="list-style-type: none"> ➤ Equipped with PLC Controller. ➤ Mechanically operated longitudinal and cross sealing jaw assemblies suitable for laminates. ➤ Pneumatic quick engage/dis-engage arrangement with adjustable pressure for belt pressure draw-off system. ➤ Pneumatically operated vertical sealing system best suitable for laminates with stroke adjustment facilities.
2. Auto-Print Mark Sensor Assembly	<ul style="list-style-type: none"> ➤ Independent assembly used for tracking mark sensor unit rear and forward. ➤ Print Mark scanner used for scanning eye-marks for print registered bags. ➤ The minimum width of eye-mark should be 8mm and in contrast with print layout. <p>Note: The digital control also allows tracking the registration system directly from display. MMI – Main Machine Interface</p>

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<p>3. Web Aligning Assembly.</p>	<ul style="list-style-type: none"> ➤ Trolley based aligning of web at higher speeds to maintain precision in pouch geometry or ease in aligning center. ➤ Floating unwind or web path to provide smooth operation. ➤ Small displacements allows controlling entire web.
<p>4. Web Unwind Assembly.</p>	<ul style="list-style-type: none"> ✓ Motor carrying aluminum roller with rubber rings for peripheral rotation around the web. ✓ Aluminum roller used to decrease the wear and rubber rings support the grip of web roll. ✓ This unit is used to maintain the constant tension in entire web at any point. ✓ Consistency in tension leads to lesser slippage of paper driving belts. ✓ The paper pulling torque decreases and increases the operational life of pulling belts appreciable. ✓ Limit switches to operate the motor and to ensure stop in case of film jam or at the end of film roll. <p>IMP: Even though the unwind works with two sensing devices, PLC also controls the unwind time for safety measures.</p>
<p>5. Bag Draw Down Mechanism</p>	<ul style="list-style-type: none"> ✓ Packaging material draw down with belts, driven separately by motor. ✓ Self-aligning couplings support drive belts in better motion. ✓ Belt pressure adjusted pneumatically.
<p>6. Perforation or Batch Assembly</p>	<ul style="list-style-type: none"> ✓ Pneumatically activated knife for cutting the streamer at desired count. ✓ The count is controlled digitally by PLC. ✓ The activation of coil for activation of cylinder is transistor based. ✓ Unit cylinder used for action of perforation. ✓ Horizontal Sealing Jaw for laminates.
<p>7. Set of Front & Rear Sealing Jaws complete with pneumatically activated knife.</p>	<ul style="list-style-type: none"> ✓ Standard design is V-groove in 2mm pitch. ✓ The integrated tool is capable of achieving Bottom Seal and the Top Seal of the next bag in a single cycle.
<p>8. Longitudinal Sealing Jaw for laminates.</p>	<ul style="list-style-type: none"> ✓ Longitudinal Sealing tool suitable for vertical seal. ✓ Jaw width 12.5mm. <p>Sealing tool is complete with cartridge heater and thermocouple</p>

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(B) Pouch/Bag Forming Assembly.	Every Individual Paper Setting will contain: <ul style="list-style-type: none">✓ Individual Top and Bottom Plate.✓ Former Pipe and Pouch Former/Collar.✓ Screw and Screw Funnel.
(C) Machine Control Panel.	<ul style="list-style-type: none">✓ Powder coated full size control panel.✓ The MMI (operator interface) with keyboard, temperature indicators, controllers, and other machine control buttons and emergency stop switches.✓ The panel is protected against poor power supply quality or in other words the machine stops in case of over load, under voltage and single phasing and surges.✓ All wires and terminals are numbered inside the panel.✓ The temperature controls and setting are provided in the operator interface.
(E) Filling System – Auger Filler (# Servo Auger)	<ul style="list-style-type: none">✓ Light in weight for ease in installation.✓ In built internal resolver provided for accuracy of positioning of axis.✓ Clamping resistors are used for instant breaking.✓ Built in EMC Filter for reduction in noise effect.✓ In built stirrer used for stirring of powder to avoid formation of lumps

The above provided data verifies the working parameters and design systems.

(Depending upon the physical and flow characteristics of the product)

- ✓ SMP 1 Kg @ 25-20 packs/min @ filling accuracy of +/- 1%
- ✓ SMP 500 gm @ 35-30 packs/min @ filling accuracy of +/- 1%
- ✓ SMP 5 Kg @ 15-12 packs/min @ filling accuracy of +/- 1%

The above stated speed can be met subject to:-

- a) Uninterrupted product flow.
 - b) Uniformity of the machine to an effective air pressure system.
 - c) Connection of the machine to an effective air pressure system.
- Strict Maintenance of the machine as per our Instruction Manual.

**Other specifications:**

Pouch size:	To be confirmed
Sealing type:	Center Seal
Filling system:	Servo Auger filling system
Weight adjustment:	Online with digital control.
Packaging film:	Heat seal able laminated film in roll form.
Maximum film roll width:	680mm.
Sealing mechanism:	Intermittent for horizontal sealing
Machine body:	Fabricated (GMP Model)
Product contact parts:	SS-304
Hopper type:	SS-304 food grade
Safety covers:	Al section frame with PC sheet.
Electrical components:	Standard quality.
Mechanical parts"	EN series.
Photo cell:	P & F MAKE
Batch coding:	Optional.
Batch cutting:	Assembled with horizontal sealer.
AC drive:	DELTA (JAPAN)
PLC:	DELTA (JAPAN)
Micro view:	DELTA (JAPAN)
Pneumatic cylinders:	FESTO (JAPAN)
Pouch collection:	SS tray
Temperature controllers:	PID based
Quick speed control:	By AC drive
Servo Make:	DELTA (JAPAN)
Bearing Make:	SKF & NACHI (JAPAN)
Sensor Make:	DATALOGIC (GERMANY)
MCB Make:	HAVELLS
Compressed air require:	12 CFM @ 8 BAR.
Electrical Supply:	440V AC/ Three Phase
Power Consumptions:	7-8 KW
Net Weight of Machine:	1100 Kg (Approx.)
Gross Weight of Machine:	1250 Kg (Approx.)

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