

ONS-3020

COMPUTERIZED STITCHING MACHINE



Advanced computer controlled stitching Machine for excellent stitching performance

The ONS high-quality computerized stitching machine series is designed to cope with the most demanding and intensive production jobs of shoe upper parts for accurate joining operations as well as for sewing of decorative patterns. The machine is wheeled, enabling rapid repositioning. It is solid and compact in size, designed to facilitate the integration of flexible and fast deploying of lean production lines.

The use of advanced high-power AC servo system to move the pallet provides high accuracy and quieter operation. The control of the machine is driven by our new proprietary operating system: Lightning OS.

Sewing programs can be quickly prepared on the machine. Digitization of the sewing patterns can be done by using the machine positioning system. Complex patterns such as multiple parallel lines, arcs and curves are quickly generated by using simple commands. Sewing parameters, such as sewing speeds, stitch sizes, start and end back tack methods can be easily selected by the user.

Elaborated sewing geometries to create sewing programs can be imported from any commercial Pattern design Cad-Cam system via DXF format into our current Orisol SewCad® system, or to our new SEWCAD-SOLO® enhanced system, which also performs palettes design to be milled on the Orimill® machine.

The ONS Series can work either with a fixed clamp, or to have a pneumatically operated up/down cover, or with two exchangeable(removable) clamps.

The ONS machinery Series Advanced Sew Editor Screen enables the users to easily and quickly perform the following editing: Moving, deleting, reversing or rearranging the order of sew lines. The machine also has a comprehensive set of point editing commands to quickly adapt the stitched shape to the actual cut parts.

The ONS machinery series PDC (production data collection) enabled machines (optional) allow for full production recording and data transformation to the control center, allowing the production manager to view, understand and address production issues while upgrading efficiencies on the production floor.



SMALL MACHINE - BIG FEATURES:

- Computer processor: Intel® 3.0 GHz
- Lightning OS : proprietary Orisol software, LINUX OS based
- I/O: 2 USB ports. (USB 2.0 & USB 3.0) / WIFI /Ethernet
- AC 750W servo motor for all axis
- Friendly 10.1" WXGA touch screen control
- Easy to use integrated keypad.
- LED head-light
- On board Powerful graphic sewing program generator and editor.

TECHNICAL SPECIFICATIONS:

SEWING:

- Sewing area: 100-150 mm x 100 mm
- Jump: (non-sew) speed: 300 mm/sec
- Stitch size: 1-12mm
- Machine resolution: 0.05 mm
- Max. Sewing speed: 2800 RPM
- Sewing speed selection: 200-2800 RPM, 24 speed levels changeable.
- Sewing head: Orisol shuttle hook
- Upper thread break detector
- Thread wiper
- Changeable PF height
- Bobbin consumption counters
- Needles Type: DP x 17, size 70-160
- Thread size : 80-10. (Option: Size 5)
- Power consumption: 0.17KWH
- Air consumption: 0.6 L/min

CLAMPS:

- Interchangeable clamps.
- Open frame, activated by high power electromagnetic actuator.
- Electromagnet locked clamp
- Pneumatic locking clamp system

SEWING PROGRAM:

- Can be prepared on ONS-3020
- Programs loading: via USB device or network

INSTALLATION:

- Portable with locking wheels
- Floor area: 190 cm by 176 cm.
- Power supply: 220VAC 50/60 Hz, single phase/ 1.5 KVA
- Weight: 230 Kgs/ 506 Lbs
- Air supply : 4-6 bar

OPTIONAL:

- RFID • Heavy Thread Applications • Flip flop+2clamp • Flip flop device only
- Needle cooler • Monitor arm support • Fixing Support for Foot Switch
- Heavy duty extender kit (needle size) • Auto start sewing
- Ori2bro clamp adapter • PDC (production data collection) system

*The information in this document is subject to change by Orisol without prior notice.

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#Learn more about Orisol



ONS-3525

COMPUTERIZED STITCHING MACHINE



Advanced computer controlled stitching Machine for excellent stitching performance

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SMALL MACHINE - BIG FEATURES:

- Computer processor: Intel® 3.0 GHz
- Lightning OS : proprietary Orisol software, LINUX OS based
- I/O: 2 USB ports. (USB 2.0 & USB 3.0) / WIFI / Ethernet
- AC 750W servo motor for all axis
- Friendly 10.1" WXGA touch screen control
- Easy to use integrated keypad.
- LED head-light
- On board Powerful graphic sewing program generator and editor.

TECHNICAL SPECIFICATIONS:

SEWING:

- Sewing area: 350mm X 250mm.
- Jump: (non-sew) speed: 500 mm/sec
- Stitch size: 1-12mm
- Machine resolution: 0.05 mm
- Max. Sewing speed: 2800 RPM
- Sewing speed selection: 200-2800 RPM, 24 speed levels changeable.
- Sewing head: Orisol shuttle hook
- Upper thread break detector
- Thread wiper
- Changeable PF height
- Bobbin consumption counters
- Needles Type: DP x 17, size 70-160
- Thread size : 80-10. (Option: Size 5)
- Power consumption: 0.17KWH
- Air consumption: 0.6 L/min

CLAMPS:

- Interchangeable clamps.
- Open frame, activated by high power electromagnetic actuator.
- Electromagnet locked clamp
- Pneumatic locking clamp system

SEWING PROGRAM:

- Can be prepared on ONS-3525
- Programs loading: via USB device or network

INSTALLATION:

- Portable with locking wheels
- Floor area: 204cm by 201cm
- Power supply: 220VAC 50/60 Hz, single phase/ 1.5 KVA
- Weight: 380Kgs/ 837 Lbs
- Air supply : 4-6 bar

OPTIONAL:

- RFID • Punch device • Heavy Thread Applications • Flip flop+2clamp
- Flip flop device only • Needle cooler • Monitor arm support
- Fixing Support for Foot Switch • Heavy duty extender kit (needle size)
- Auto start sewing • Ori2bro clamp adapter
- PDC (production data collection) system

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Orisew R

Advanced Stitching Machines



■ New Advanced Stitching Machines

Sewing area (cm): 50 x 35, max speed 2,800 SPM, auto tension control, programmable presser foot, bobbin changer to ensure performance & high productivity.

It's designed with perfect synchronization between its X-Y ball bearing, high torque based moving table and the heavy-duty sewing head. Enables very low Drag and thread tension. Resulting in smooth even stitching with no pulling or stretching of the material.

■ Intuitive HMI Operation Interface

10.1" WXGA touch screen is the largest size in the Shoe Industry, and with up to x50 magnification, it enables faster and much more accurate editing precision.

■ Sew Pattern Editor

Using the touch screen, the handheld keypad, and the built-in pattern edit function, performing the interactive operation of the software and the sewing machine, either the sewing patterns can be edited quickly or the sewing parameters can be adjusted in time.

■ RFID / QR Code Program Detection

RFID / QR code device (alternative) supported for sew pattern loading to link up the patterns and sew work efficiently.

■ Smart Manufacturing

Compatible with OPC UA standards and protocols. Enable connectivity to the cloud to collect, store, and analyze production data.

Specification

Model Name	ONS-5035-R
Max. sewing area [cm]	50 x 35
Computer processor	4th Intel® Core™ 3.0 GHz
Max. sewing speed [SPM]	2,800
Speed changing steps during sewing	24
Feed mechanism	Intermittent feed, servo motor drive
Stitch length [mm]	0.05 - 12.0
Machine resolution [mm]	0.05
Max. number of stitches per sewing pattern	9,998
Max. number of sewing patterns	Unlimited
Work clamp drive	Pneumatic automatic interchangeable 2 pallet clamps
Max. clearance of loader [mm]	50 (standard), 80 (optional)
Tension control	Programmable tension control (by solenoid control 0-127 steps, max. 750g)
Levels of presser foot [mm]	0-8.1 (0.1/step)
Height of stepping presser foot [mm]	18
Touch screen	10.1" WXGA
I/O	USB 3.0 x 1 / USB 2.0 x 1 / WiFi / Ethernet
Hook	Large size oscillating shuttle hook
Data storage	SSD-64GB
Bobbin changer	Optional (ONS-5035-R-RS)
Bobbin counter	Standard
Motor [W]	750
Weight [kg]	950
Power supply	220VAC, 50/60 Hz, single phase
Air pressure supply [L/min]	4-6
Air consumption [L/min]	22
Safety	CE compatible

Optional Accessory



QR code
Reader
(alternative)



RFID
Reader
(alternative)



Bobbin
Changer

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