Welcome to

Advanced Textiles EXPO®

ORGANIZED BY ATA



The Future of Advanced Manufacturing



November 3, 2026

1pm – 1:50pm

Advanced Textiles EXPO®

IN THE NEWS...

Humanoid Robots

In the near future, it's clear that robots will seamlessly coexist with us, taking on tasks like making our beds, managing our dry cleaning, walking our dogs, driving our kids to school, and playing a key role in operating our factories.





HOW WILL IT AFFECT TEXTILE MANUFACTURING?

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Humanoid Robots …Sewing





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ROBOT for T-SHIRT Shoulders and Side Seams









RESILIENCE THROUGH MANUFACTURING INNOVATION

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Automation to Manufacture Beanies



Beanie, Feed Cut & Turn



Beanie Robotic Auto Sew



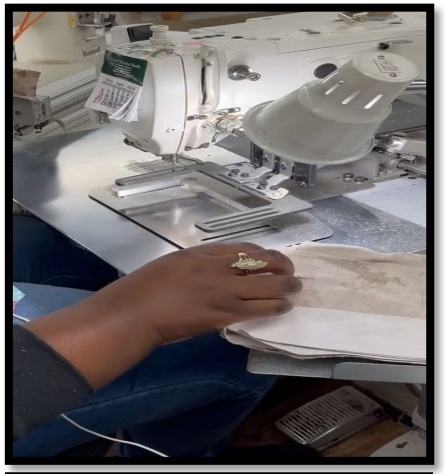
Beanie Robotic Auto Sew

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MANUFACTURING BREAST POCKET FLAPS…

Manual Operations

MAKE



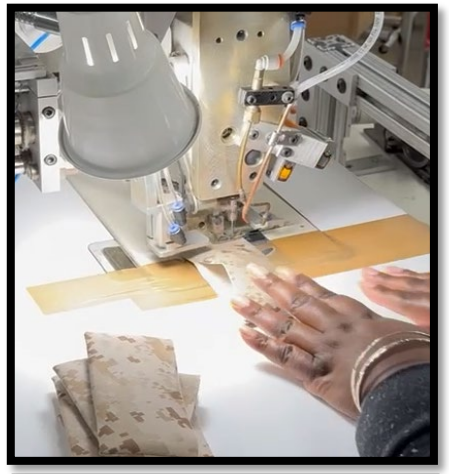


TURN





TOP STITCH





OVERLOCK

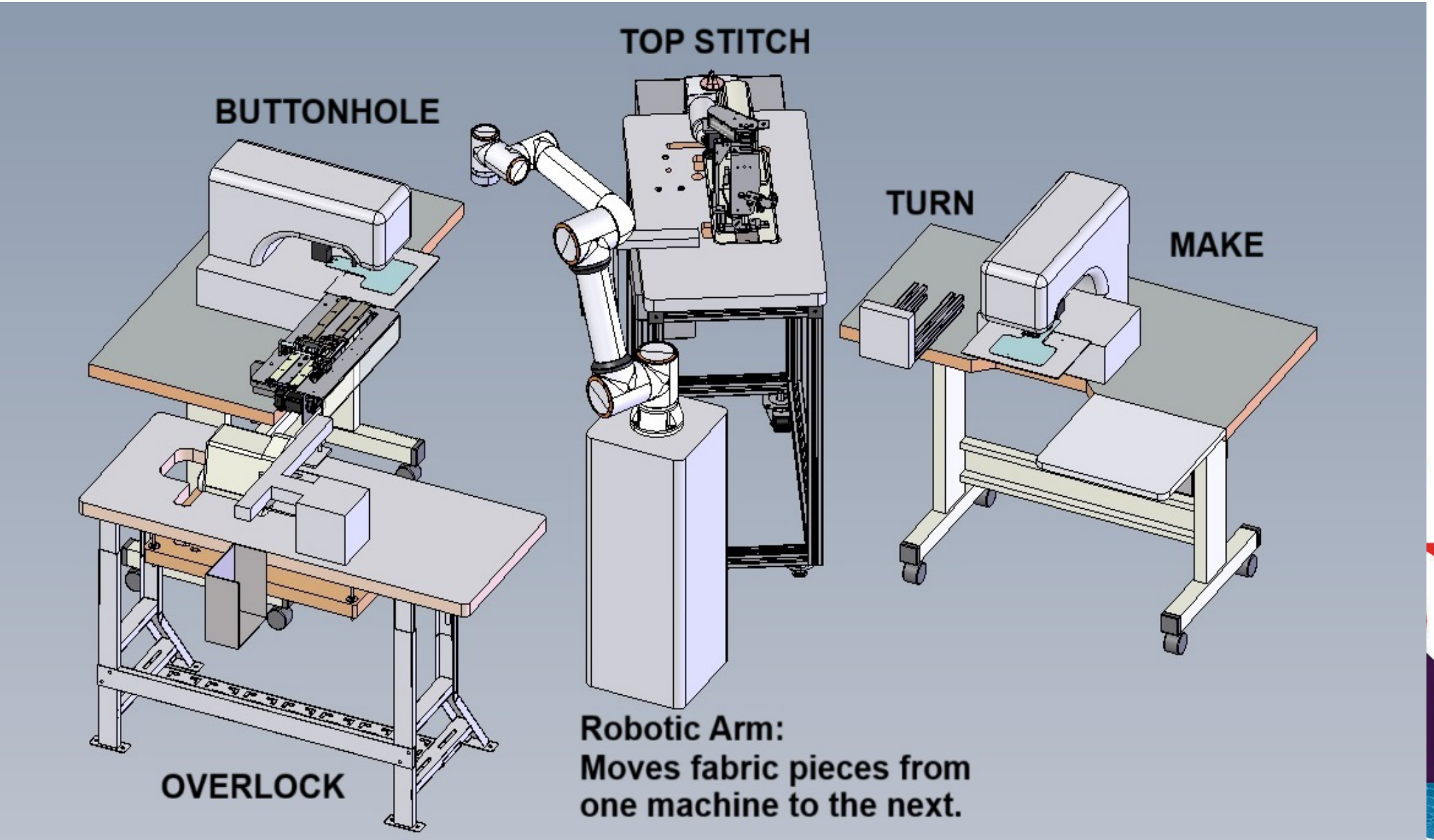




These Manufacturing Steps Can be Robotic Operated

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Robotic Manufacture of Textile Components

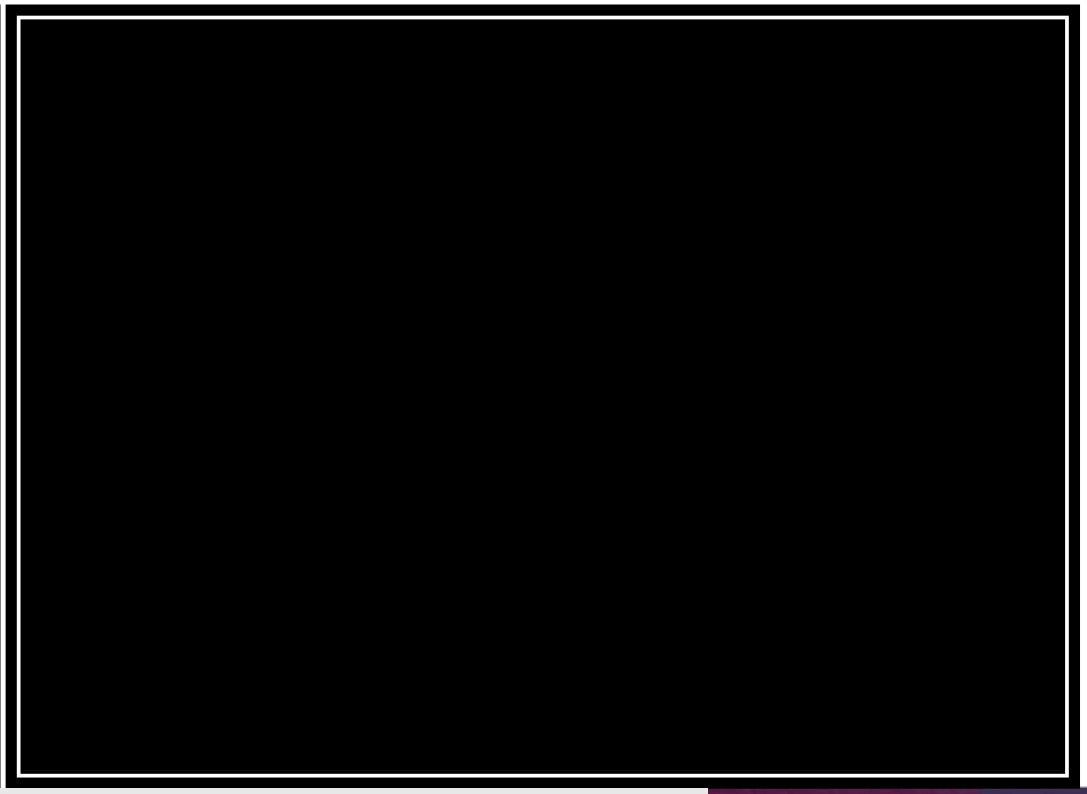


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FASTSEWN

SEW, CUT, & FEED on SAME PLATFORM



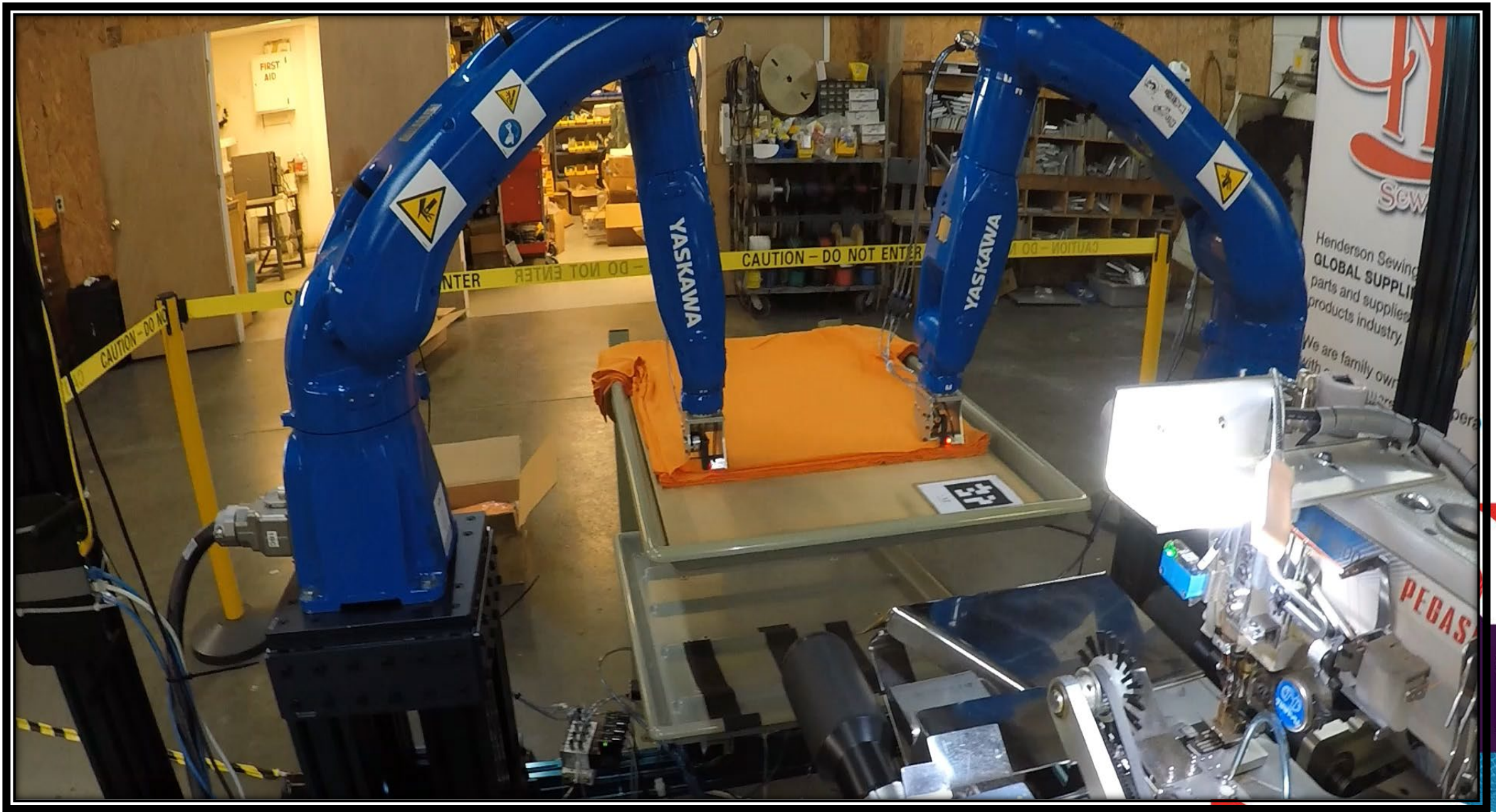


Rapid, Agile and Adaptive Automation

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ROBOTIC LOADING T-SHIRT

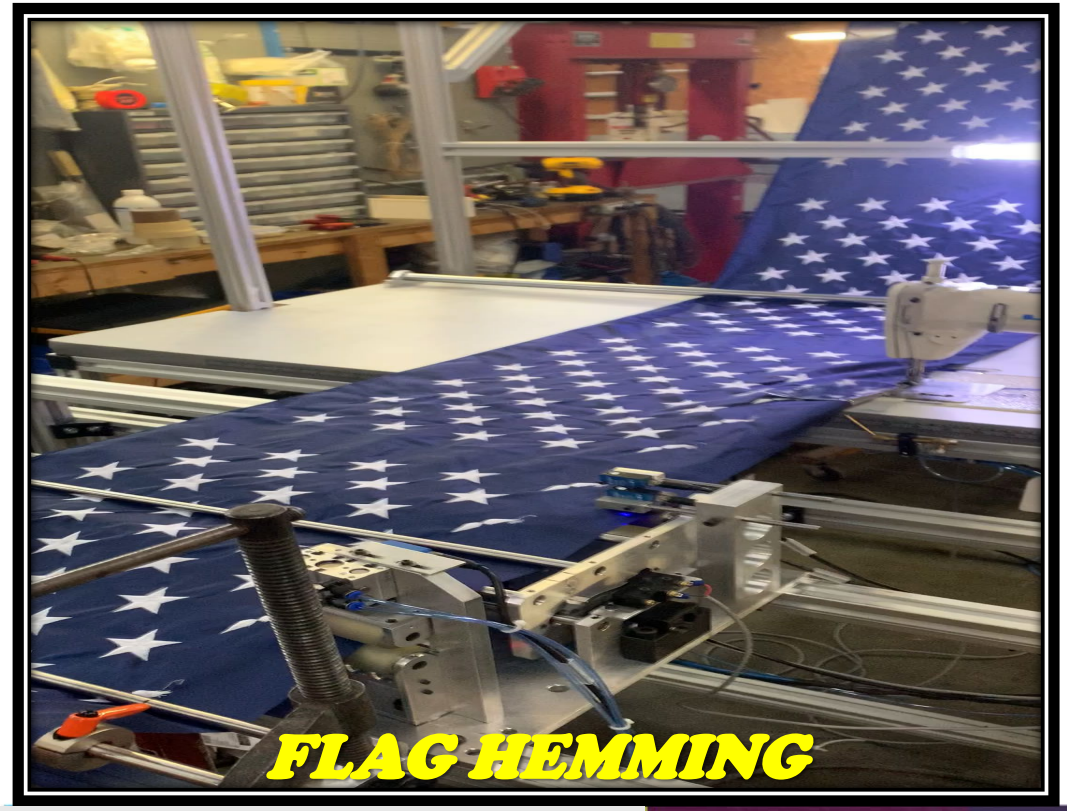
Bottom Hem



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ROBOTS and Automation Integrated into SEWING

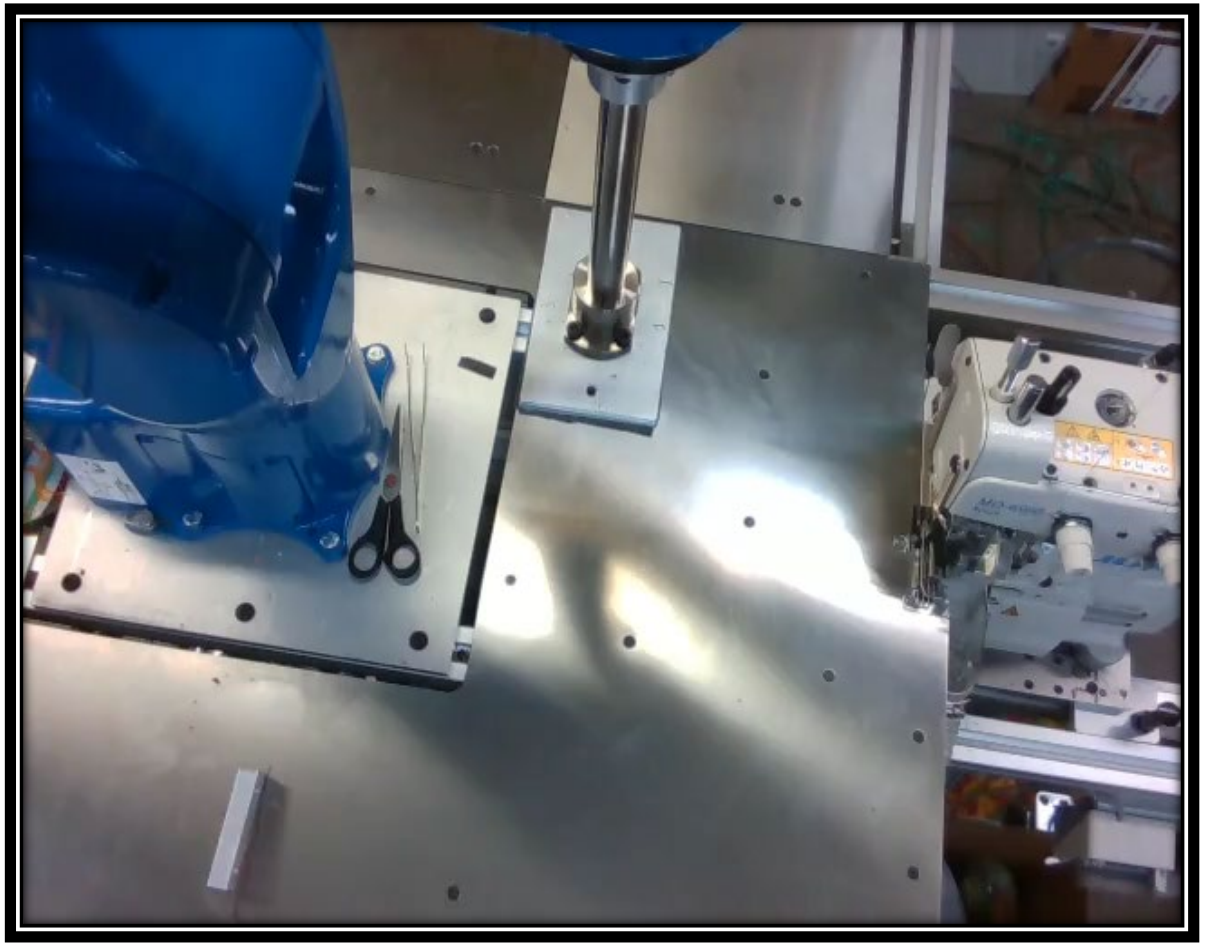


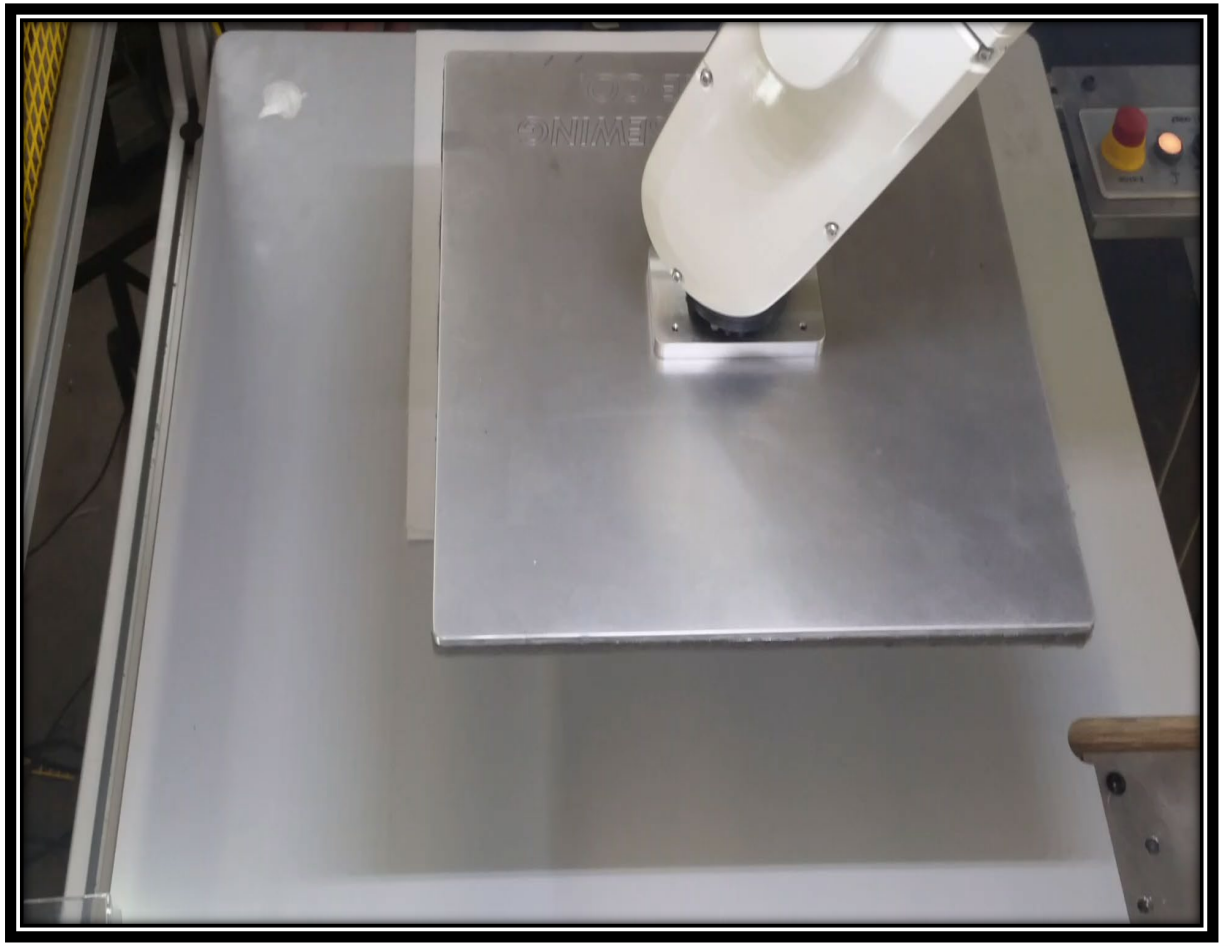


Capitalize on Change

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ROBOTS Integrated into SEWING





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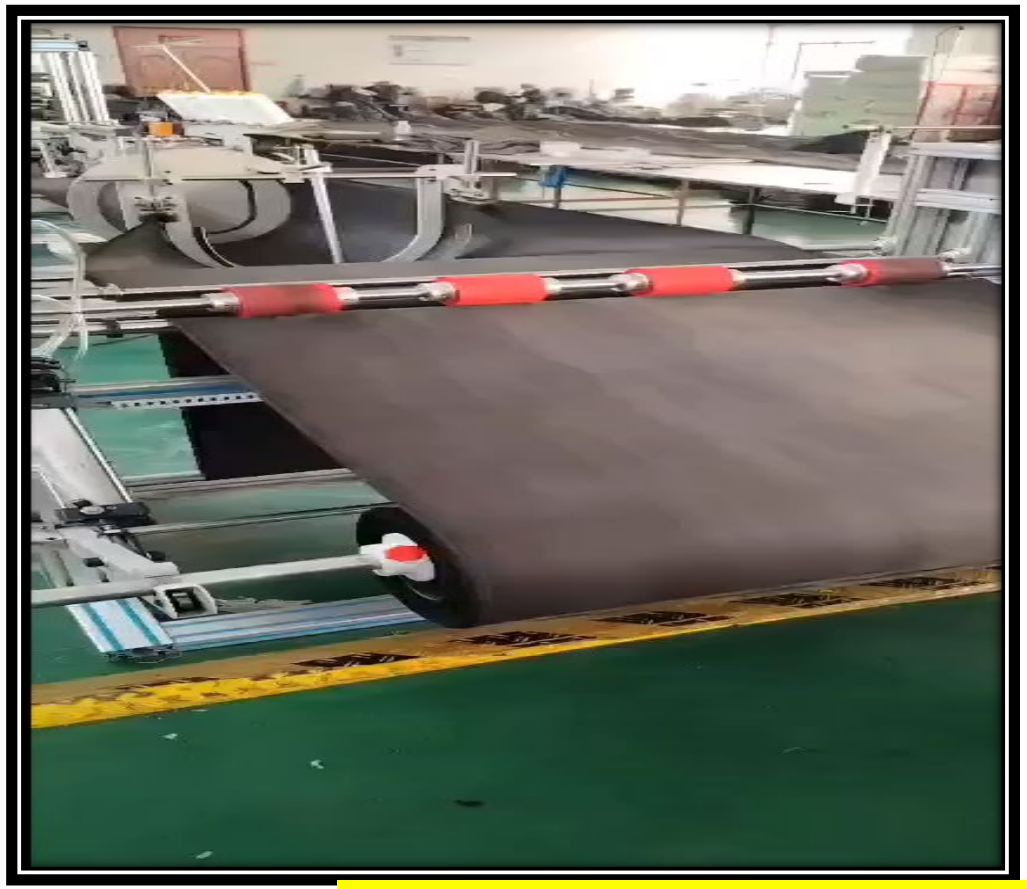
Synchronized Sewing Heads

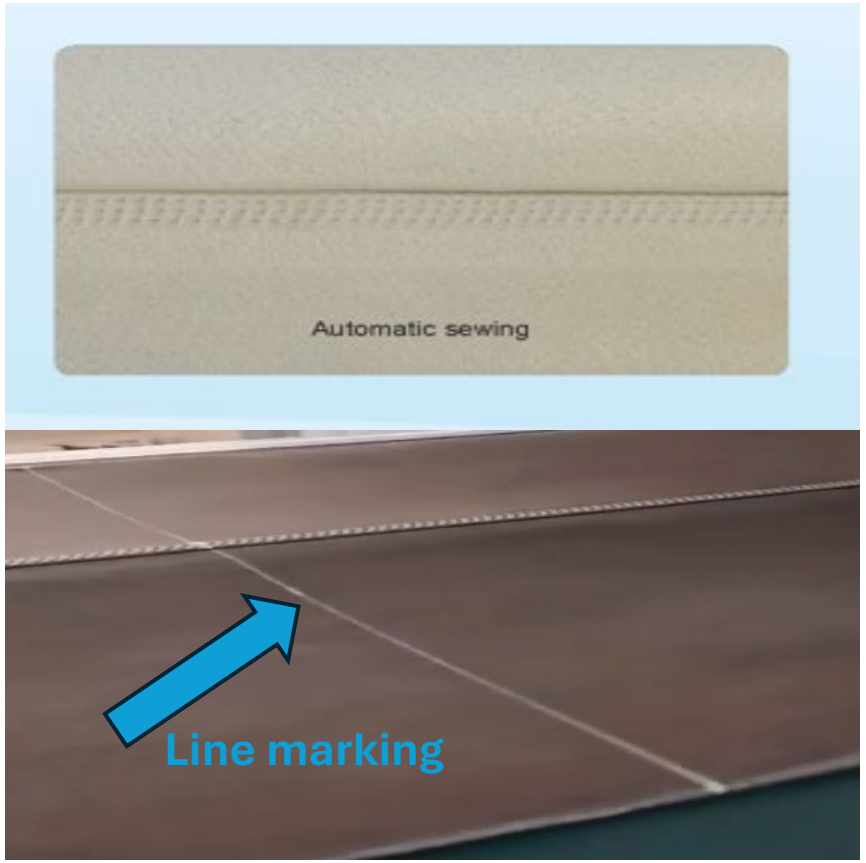


AIR BAG PRODUCTION

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AUTOMATIC FILTER PRODUCTION





ACTIONABLE STRATEGIES

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ROBOTIC MACHINES



FURNITURE GANTRY ROBOT



ULTRASONIC CUT & SEAL

Material Handling ...

WITH Robot Handling

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AUTOMATION *and* TECHNOLOGY



Beckett Line Cord Automation



ZIPPER ATTACH

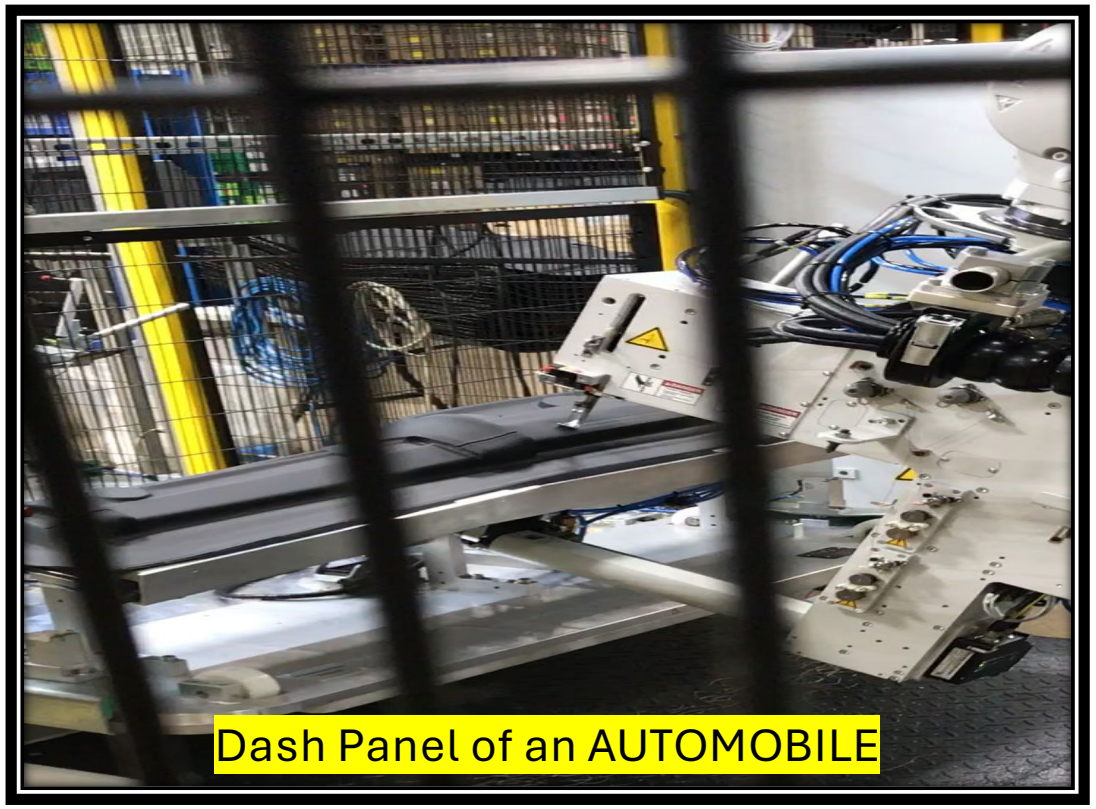


JEANS Pocket Hemmer

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ROBOTS Integrated into SEWING



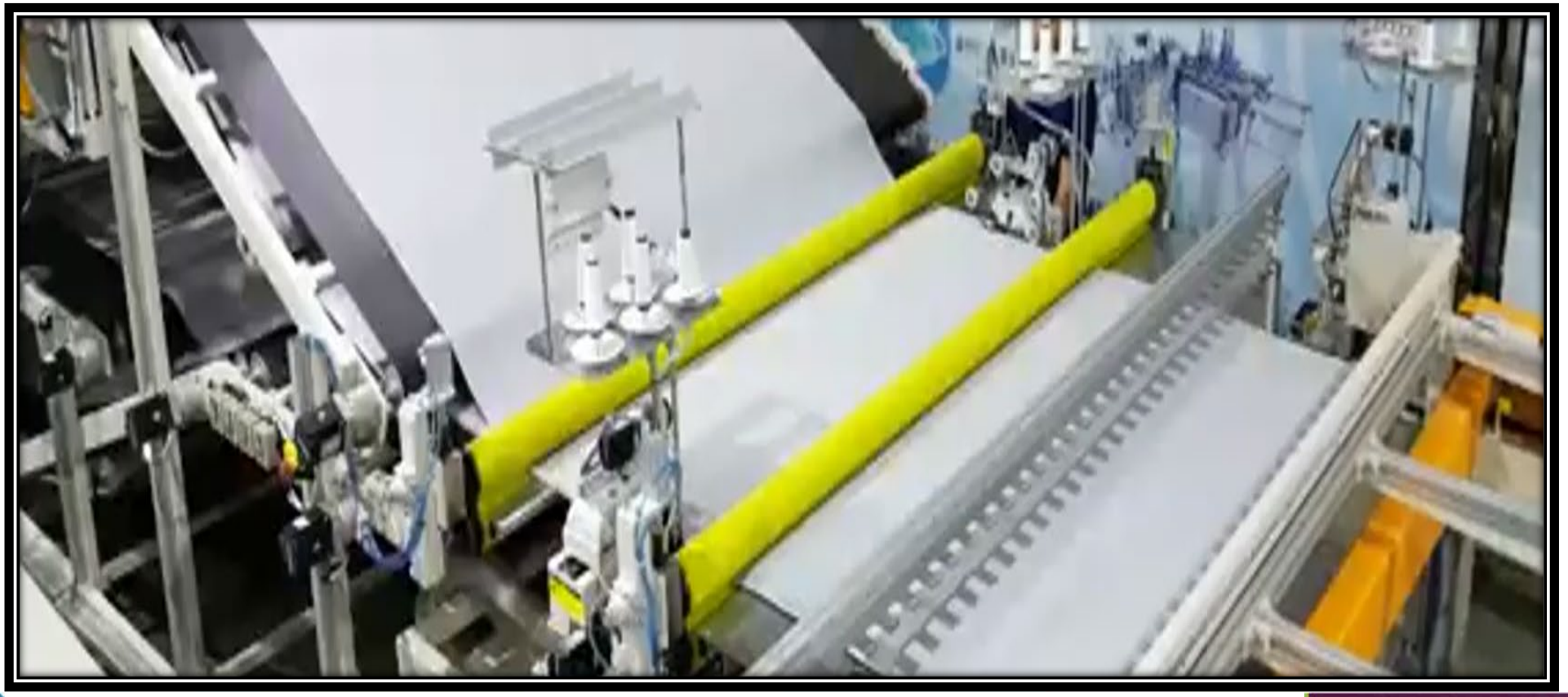


Dash Panel of an AUTOMOBILE



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Sewing the Width of a Tubular Panel... Without an Operator



Real Implications of Manufacturing in 2025

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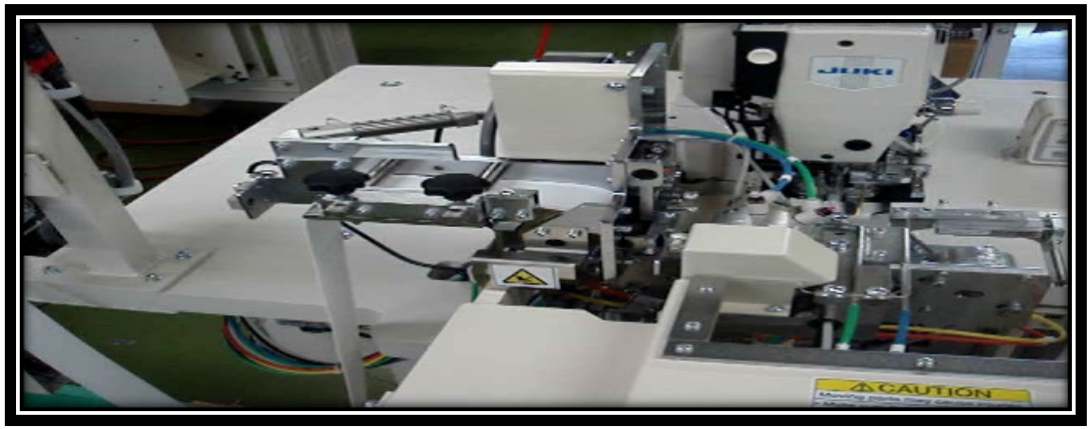
Automated Machines and Robots



ROBOT - Ironing Board Covers



ROBOT - Auto Air Bag Operation

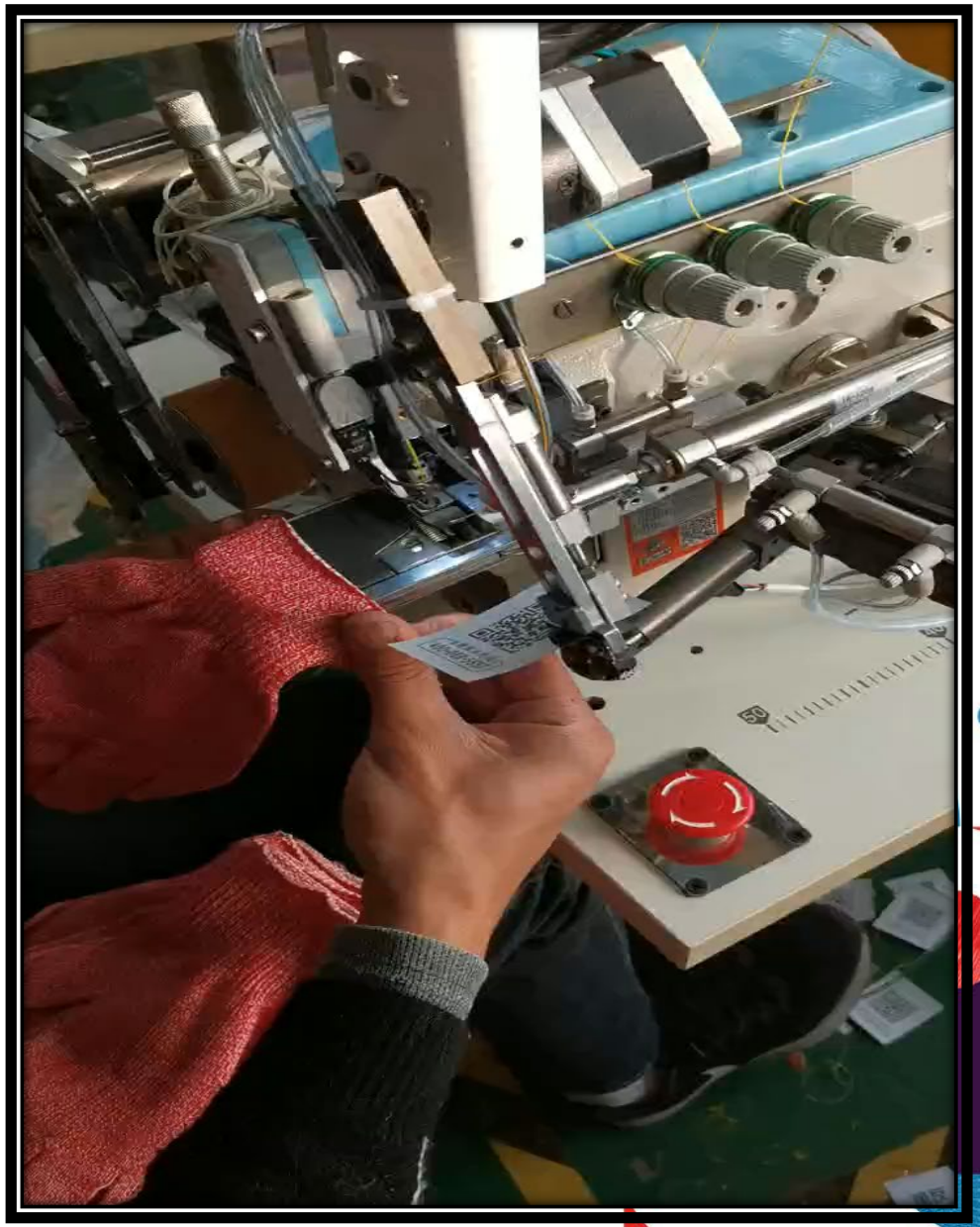


Auto Elastic Ring

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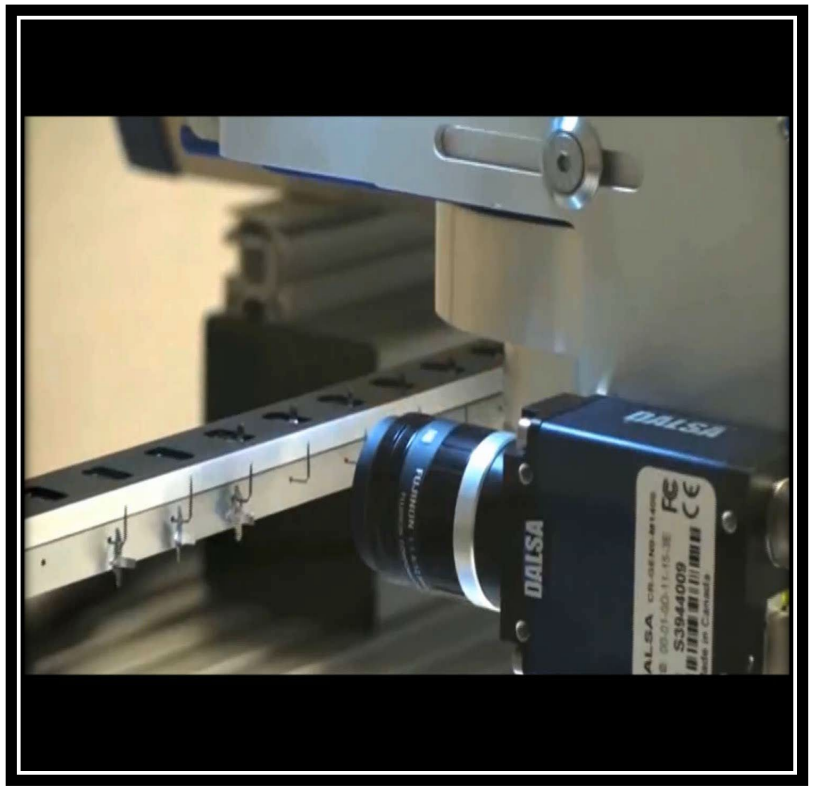
GLOVE HEM WITH LABEL INSERTION

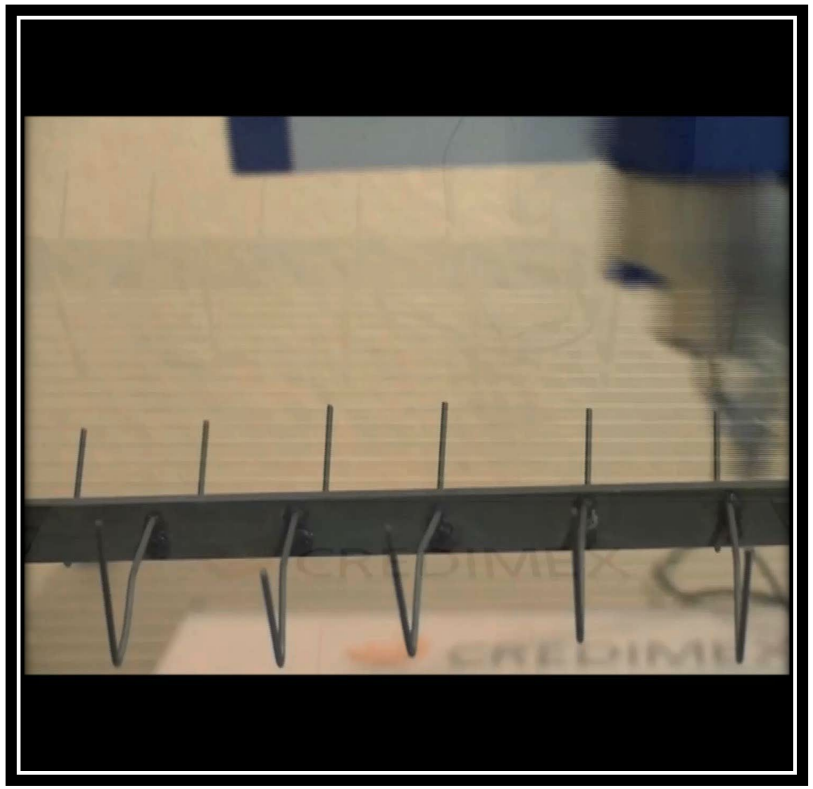




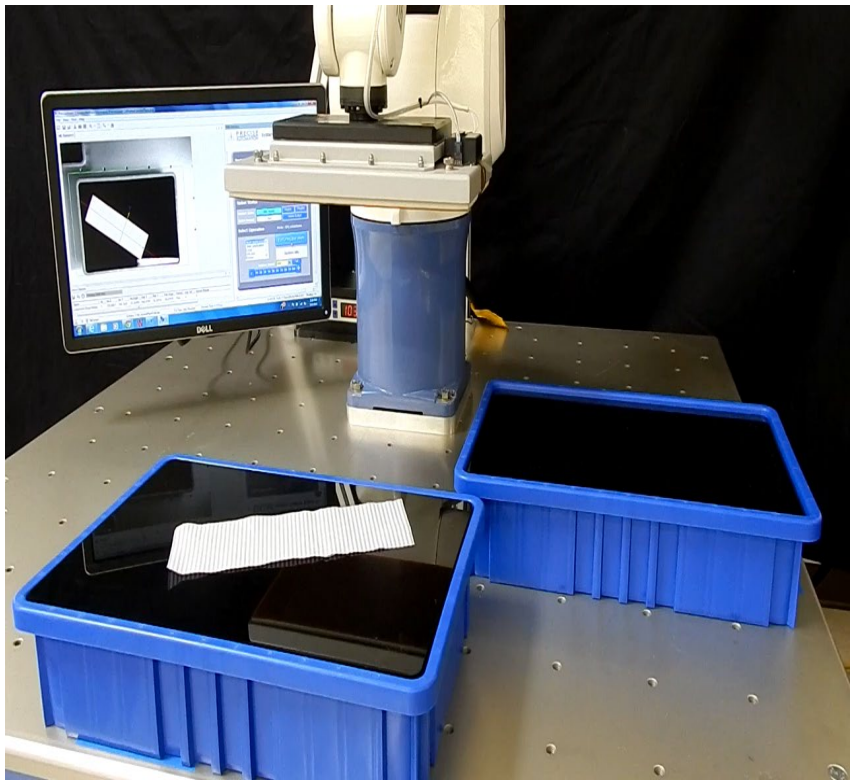
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VISION SYSTEMS VIDEO





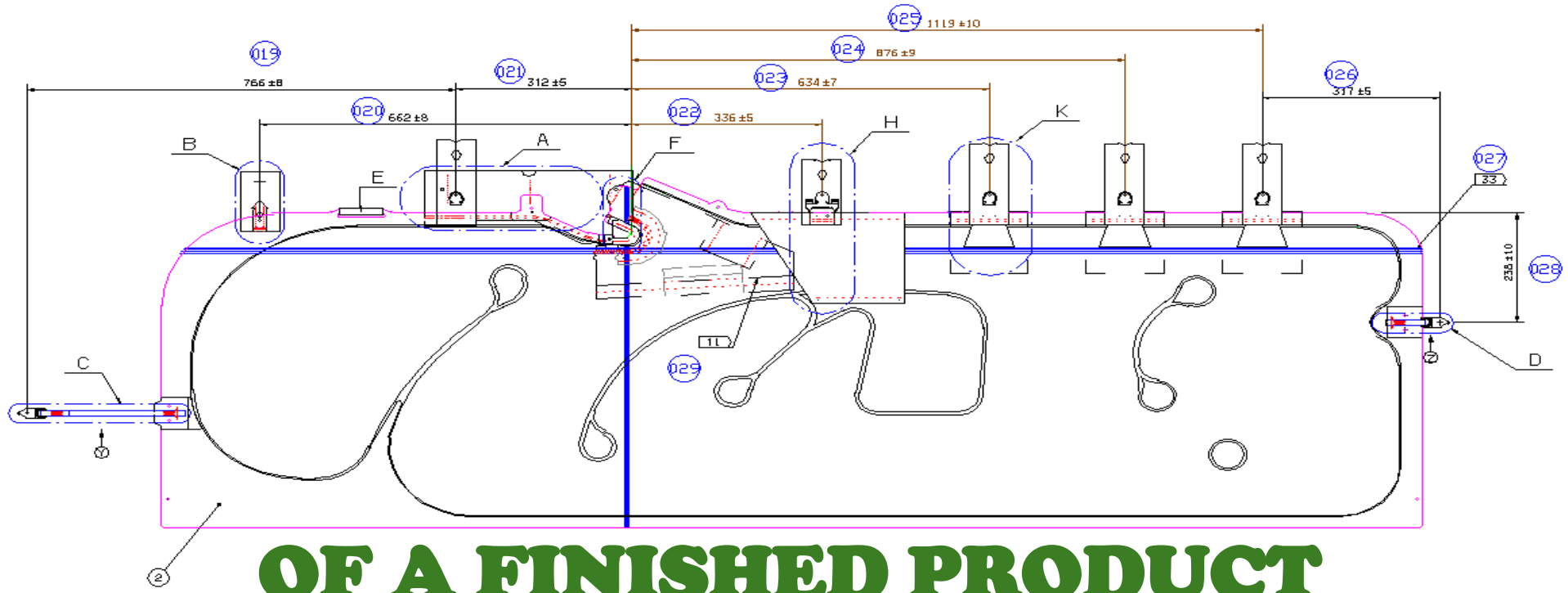
Camera takes a Picture of the Drop Location; Then of the Object; Then Drops the Object Onto the Pin



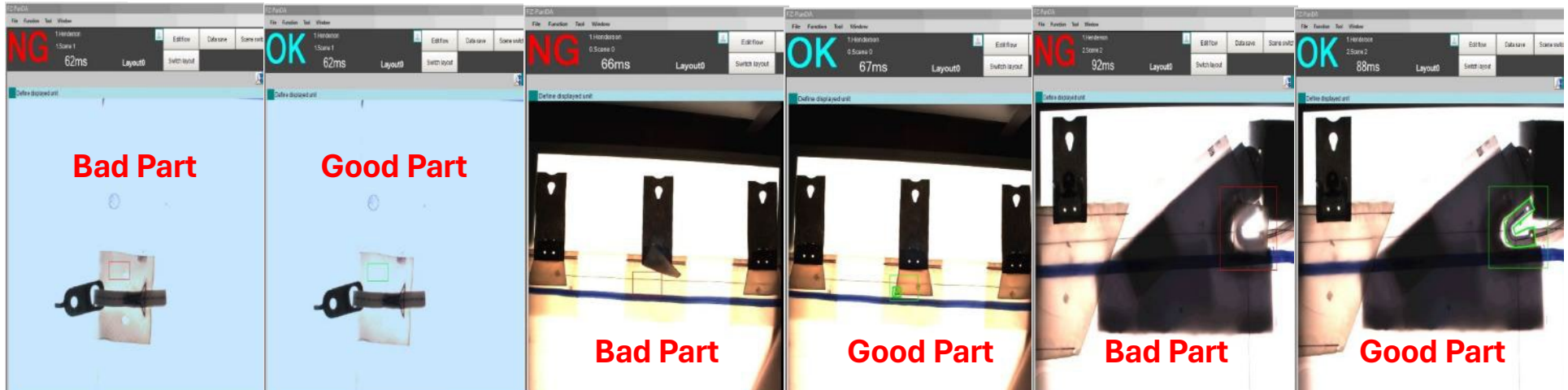
Camera Takes a Picture Places Fusible on Fabric

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Vision INSPECTION



OF A FINISHED PRODUCT



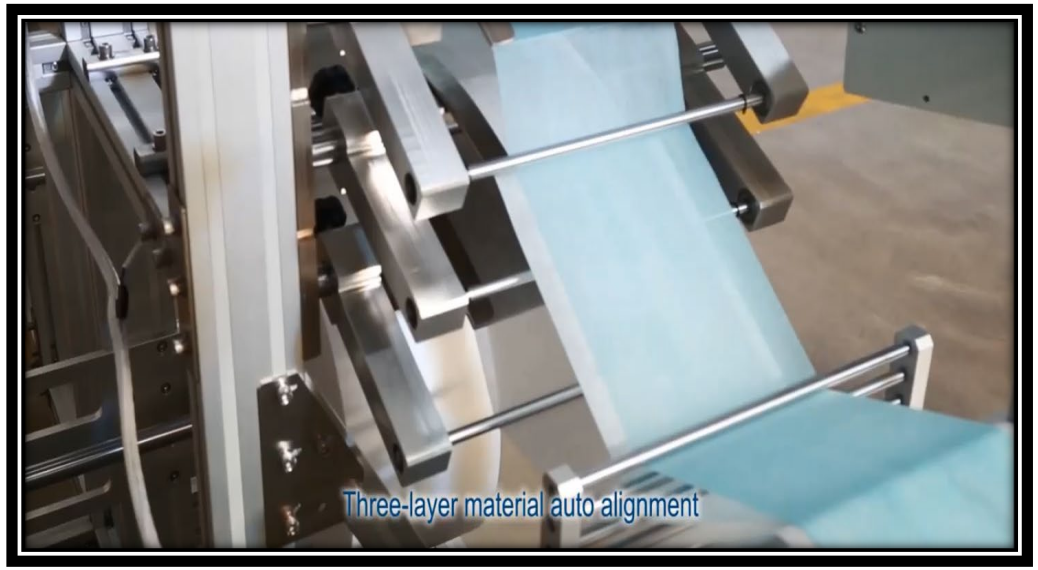
Advanced Textiles EXPO®

Vision Alignment & Inspection Of Products



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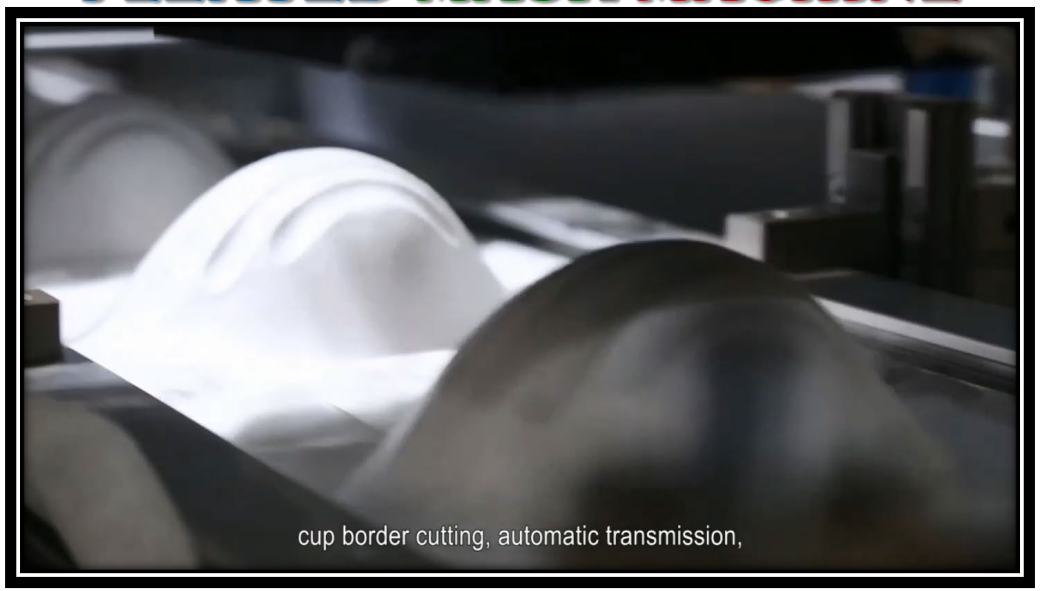
PPE ULTRASONIC AUTOMATION



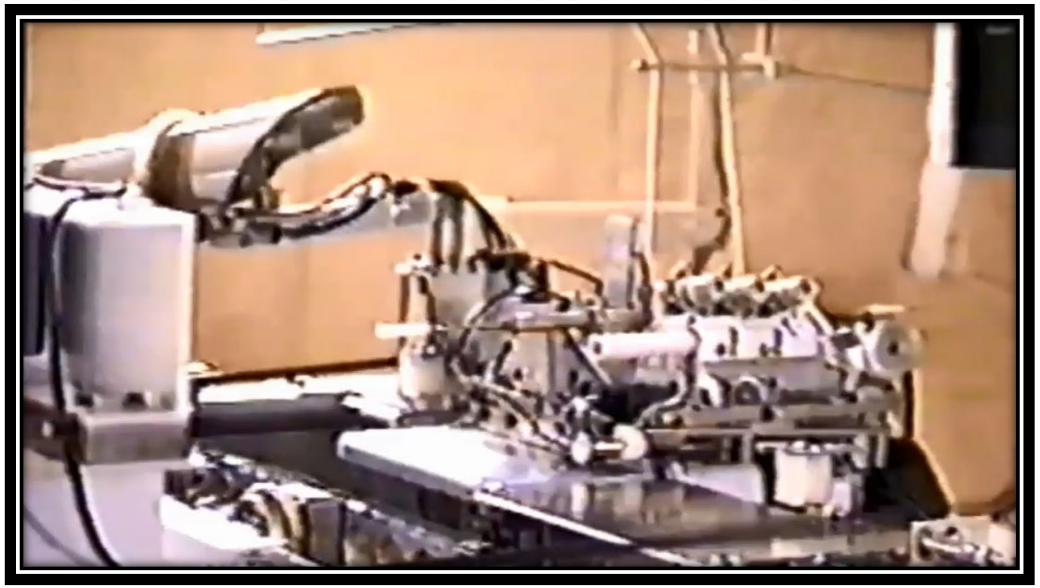
PLEATED MASK MACHINE



FOLDABLE MASK MACHINE



CUP MASK MACHINE



MEDICAL CAP MACHINE

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AUTOMATIC ULTRASONIC GOWN MFG

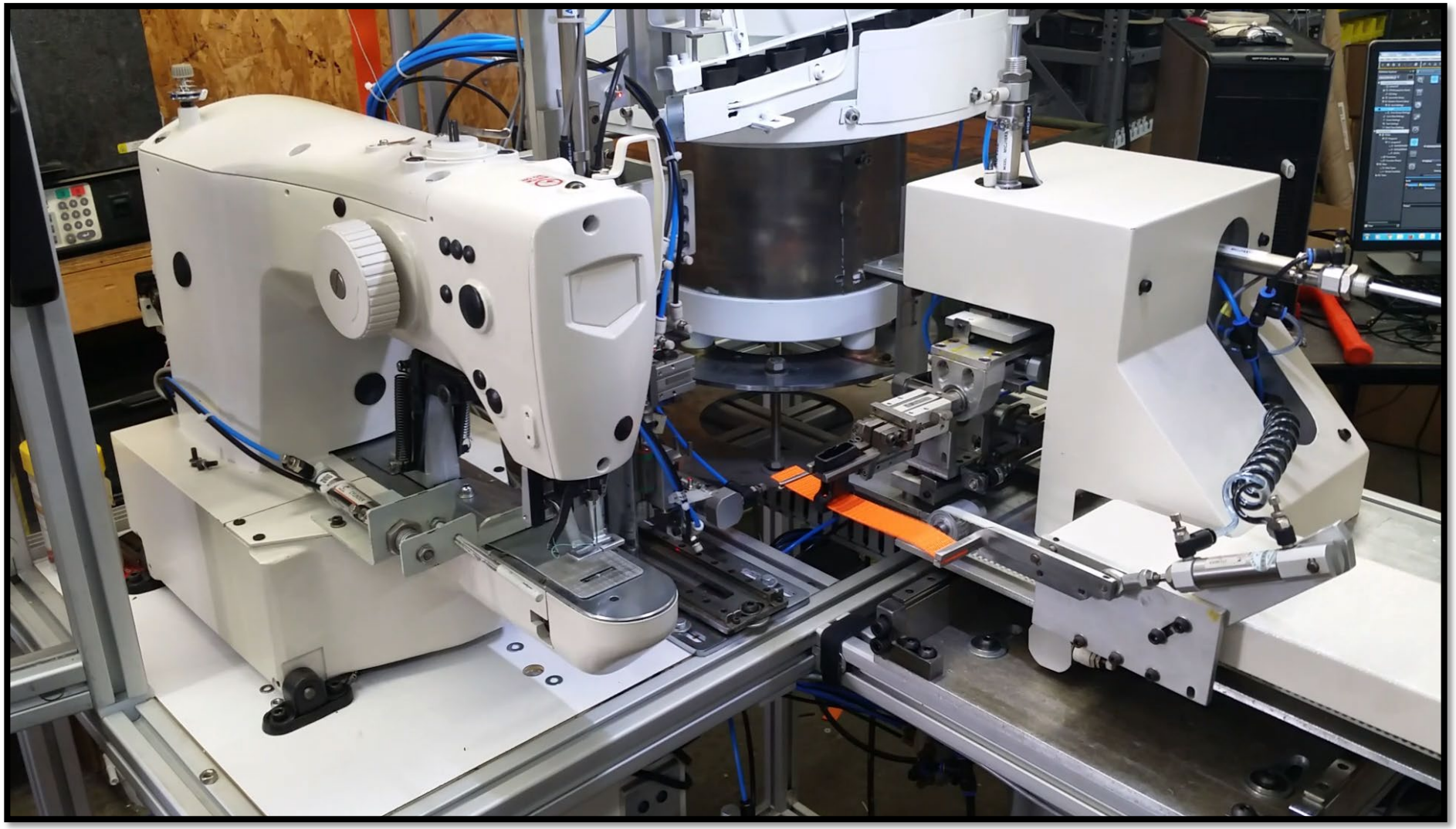
Medical Gown (Body Part) Making Machine



Proactive Adaptation of Automation



WEB END TURN & TACK



Load Buckle, Insert Webbing, Sew

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Robots and Automated Machines



Autonomous Strap System



X Y Theta Turning Head



Auto Collar & Cuff Sewing Unit



DAB Air Bag Robot

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SEAT BELT PIN INSERTION



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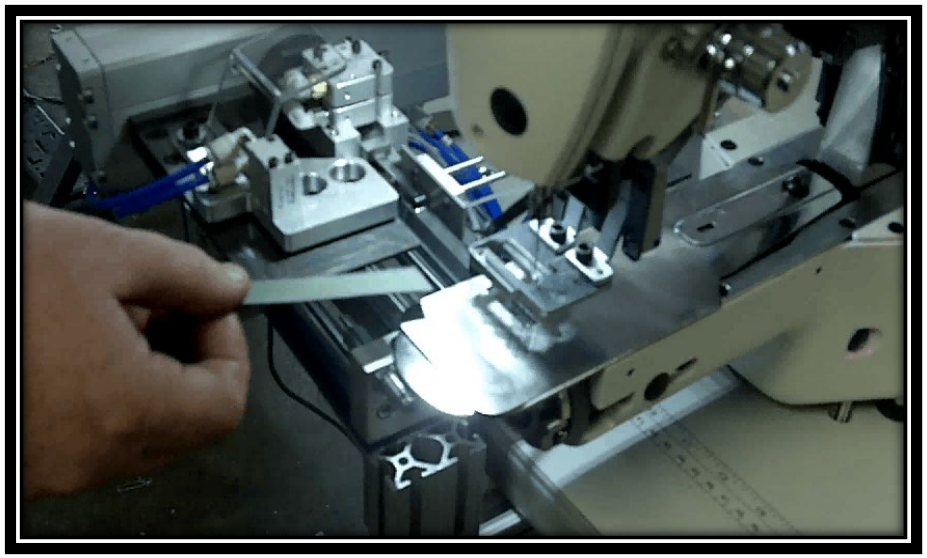
Work Cell Automation



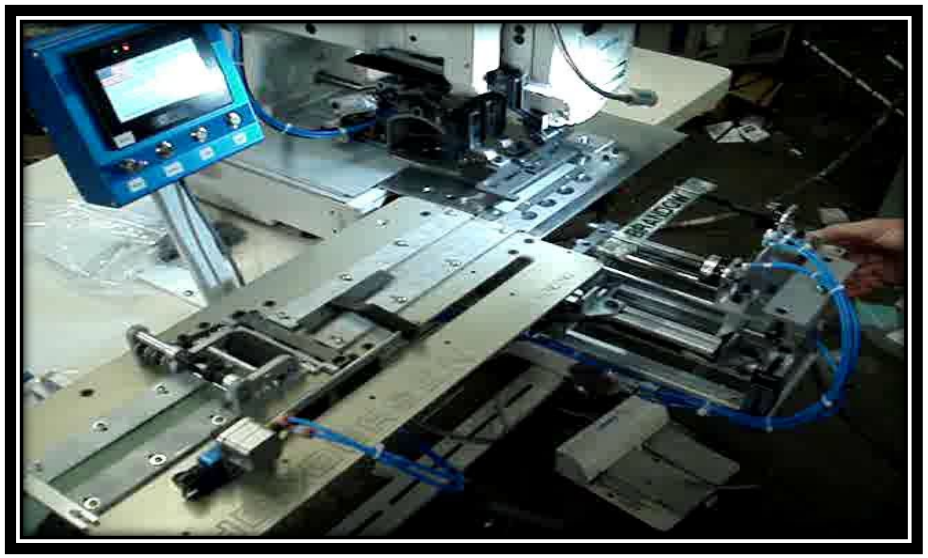
Parachute Line Cord Automation



Twin Head, Auto Velcro Loading, Medical Unit



Webbing End, Turn and Tack



Bottom Velcro Load with Name Tape on Top

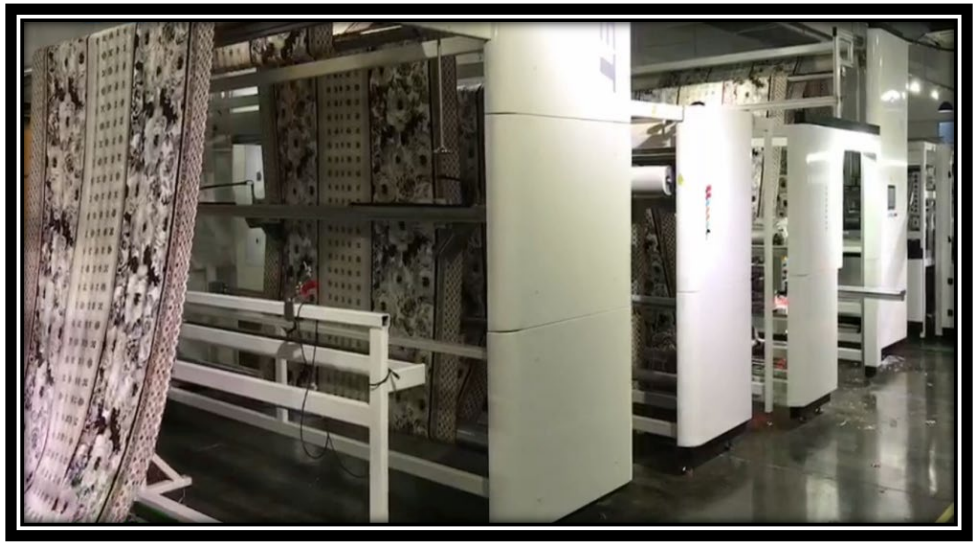
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FOUR SIDE SEWING

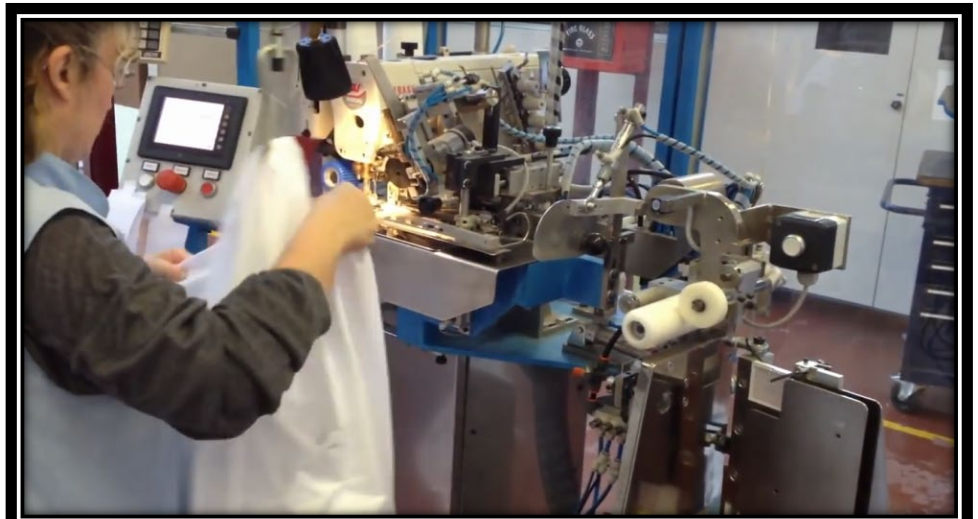
Bed Sheet



Blanket



Fitted Sheet



Pillow Cover



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AFFORDABLE Robots



Universal Dual Arm Robot



OMRON COBOT



FESTO BIONIC COBOT

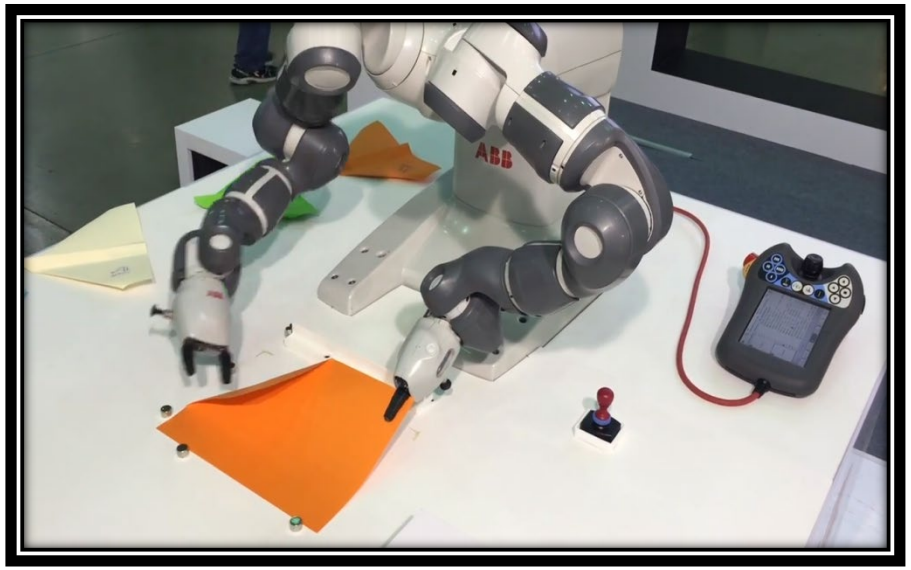
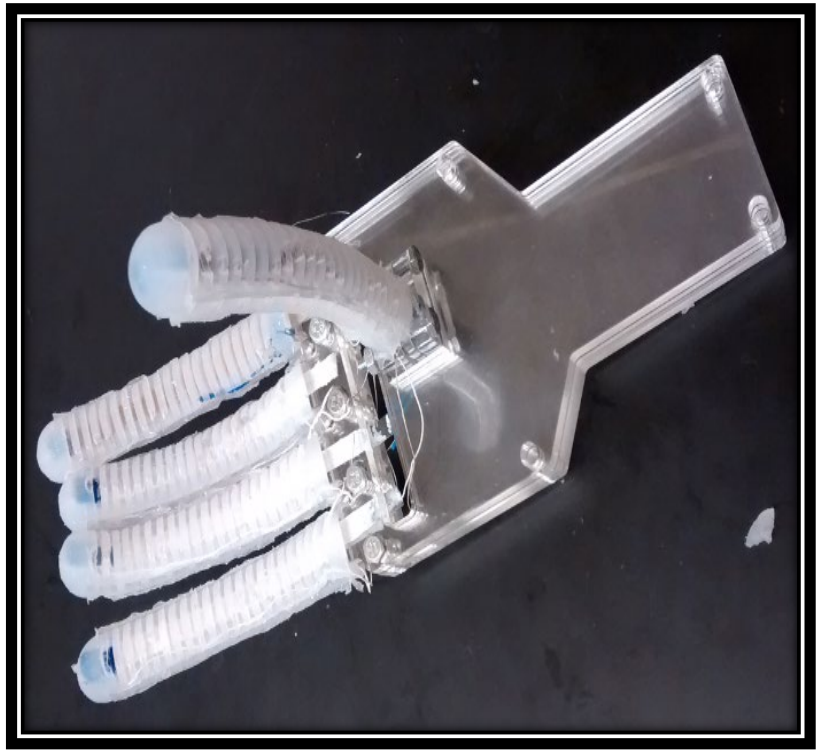
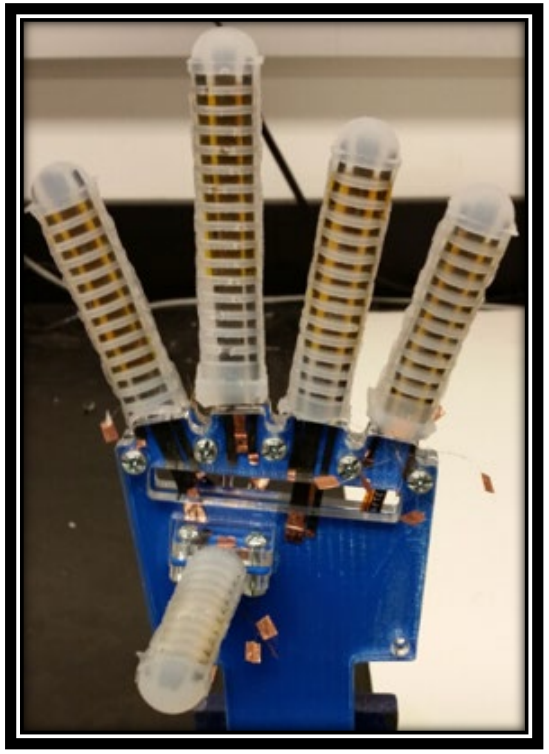


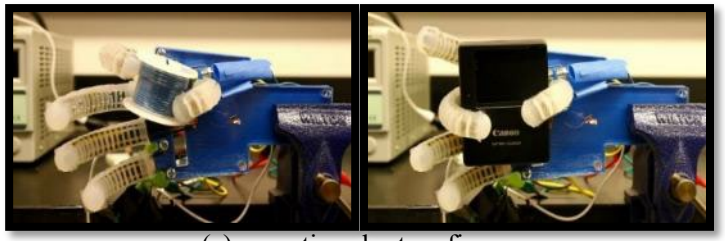
ABB YUMI ROBOT

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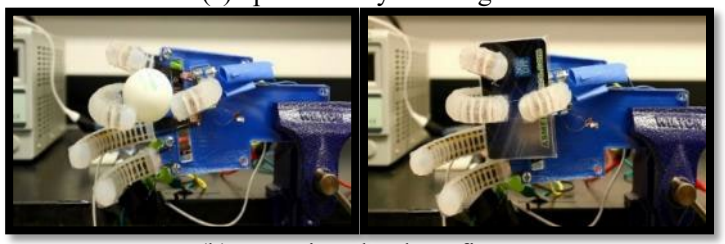
Haptic Technology



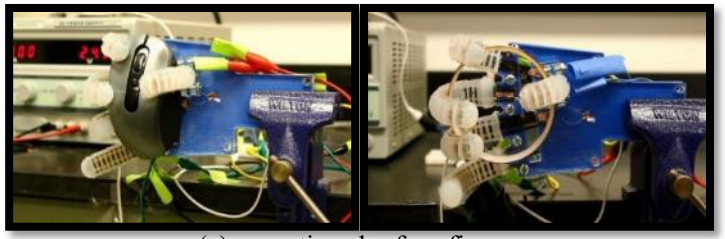




(a) operations by two fingers



(b) operations by three fingers



(c) operations by four fingers



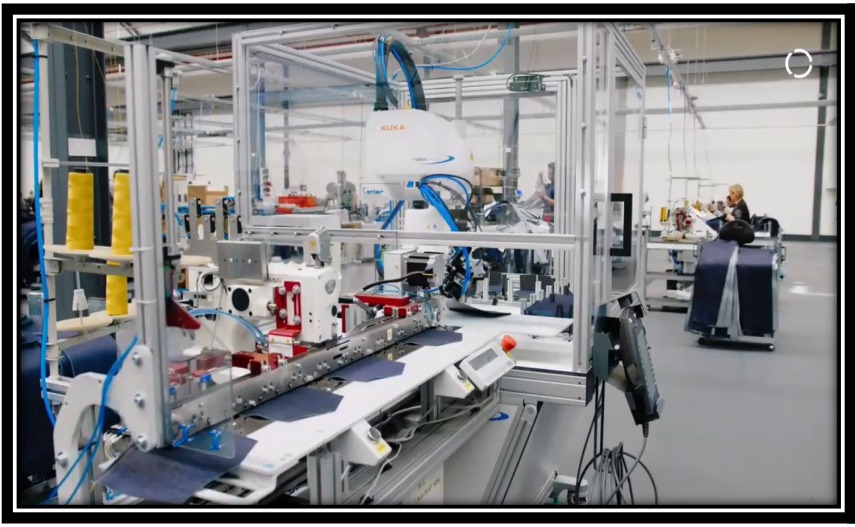
(d) operations by five fingers

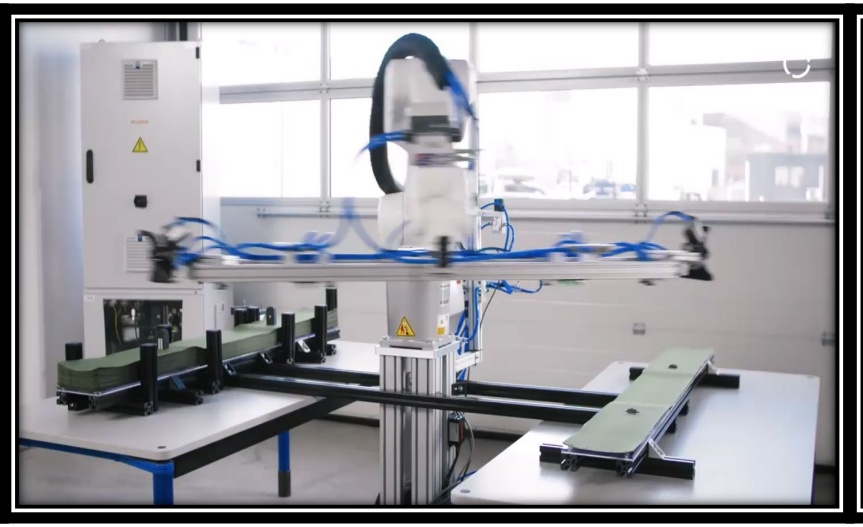
Flexible, Dexterous, Mechanical Hand Form

Camera & Sensor Technology

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Robotic End Effectors

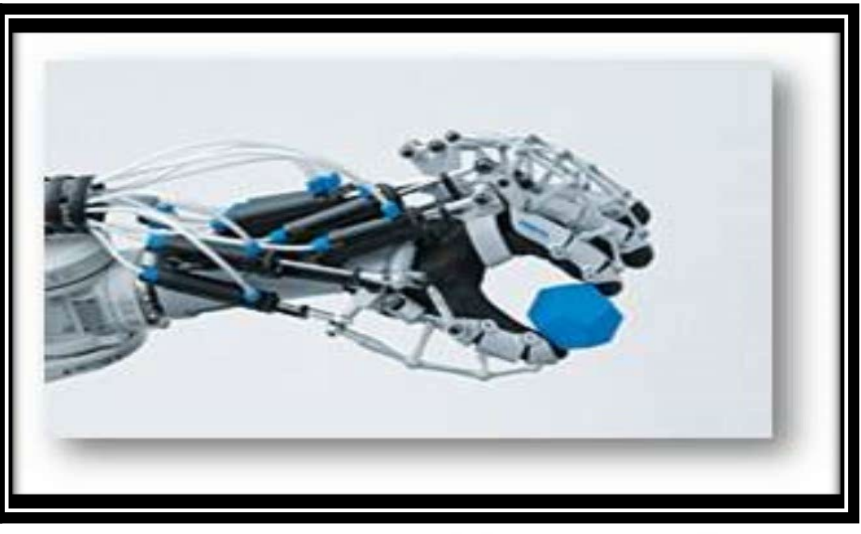






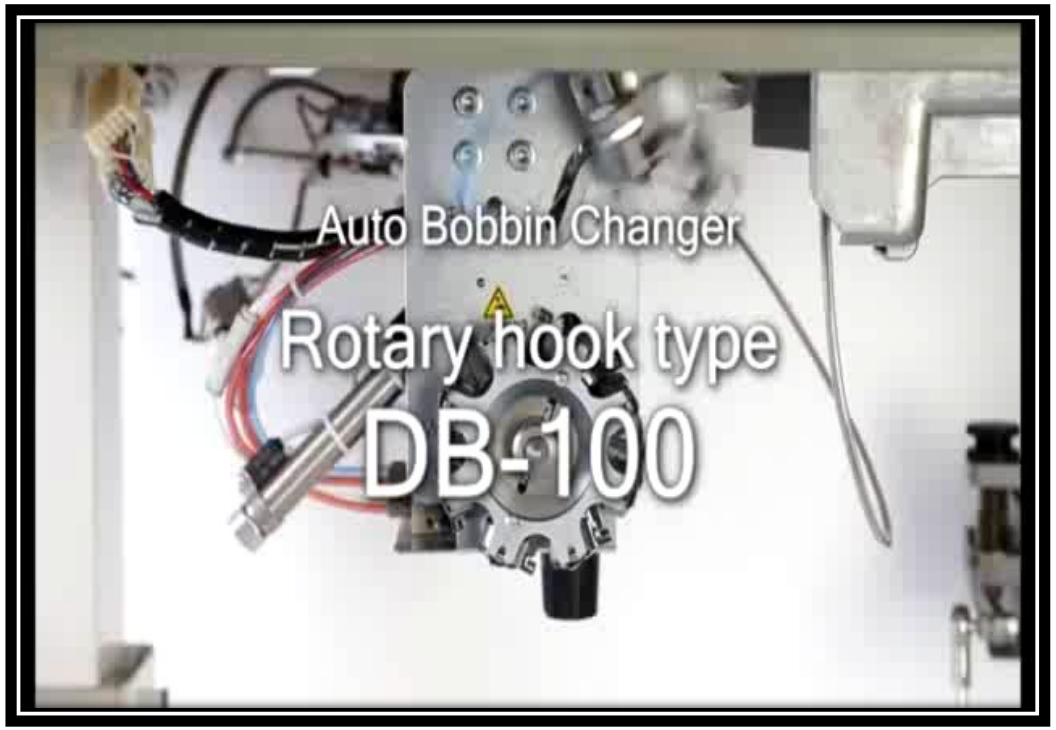






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Automated Devices





Auto Bobbin Checker



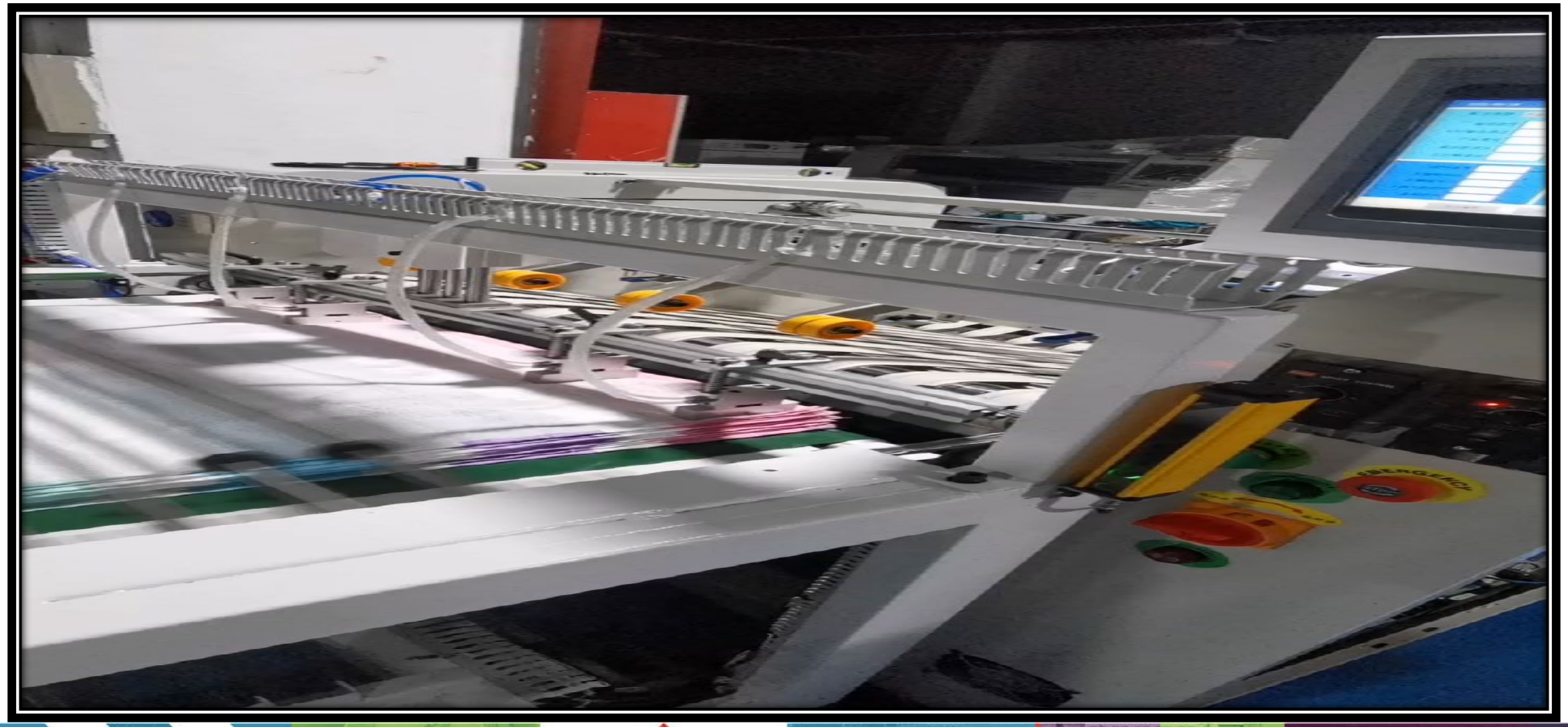
Auto Skip Catcher



Auto Bobbin Changer

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Automatic Folding Machine



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THE FUTURE

Automated Assembly Line

Procedure.1
Set Front + Back Panels

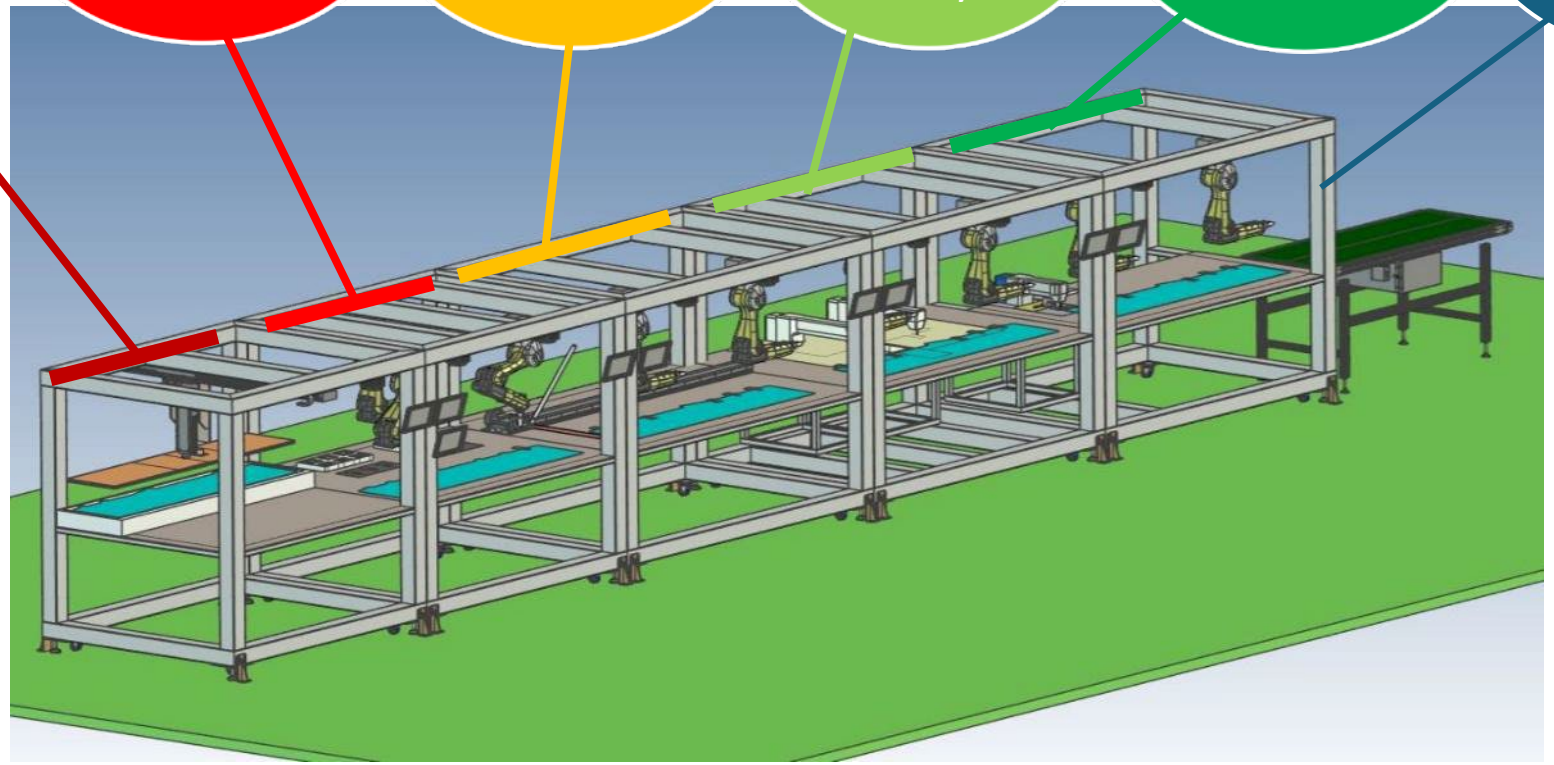
Procedure.2
Close 1st & 2nd Shoulders

Procedure.3
Hem 2-Sleeves

Procedure.4
Set 2-Sleeves to Body

Procedure.5
Close 2-Sleeves & Body

Procedure.6
Invert + Hem Bottom



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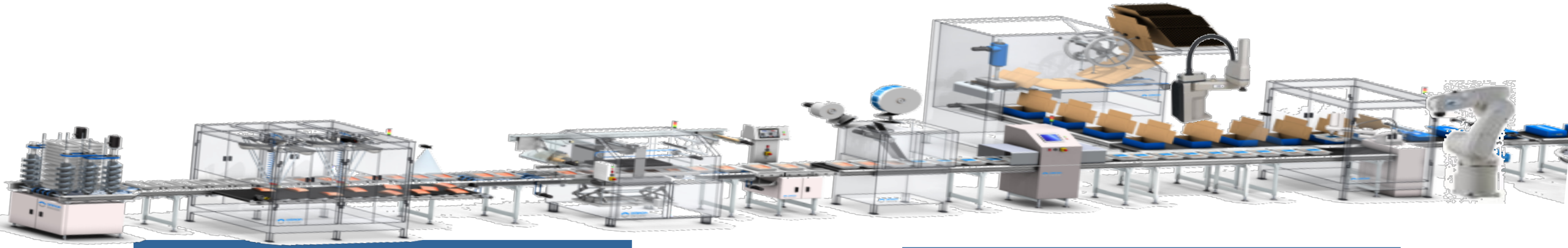
Humanoid Robots Working at BMW Plant in Spartanburg, SC



Parts Sorting

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WE Can Automate America TODAY





ROBOTIC CREEL LOADING



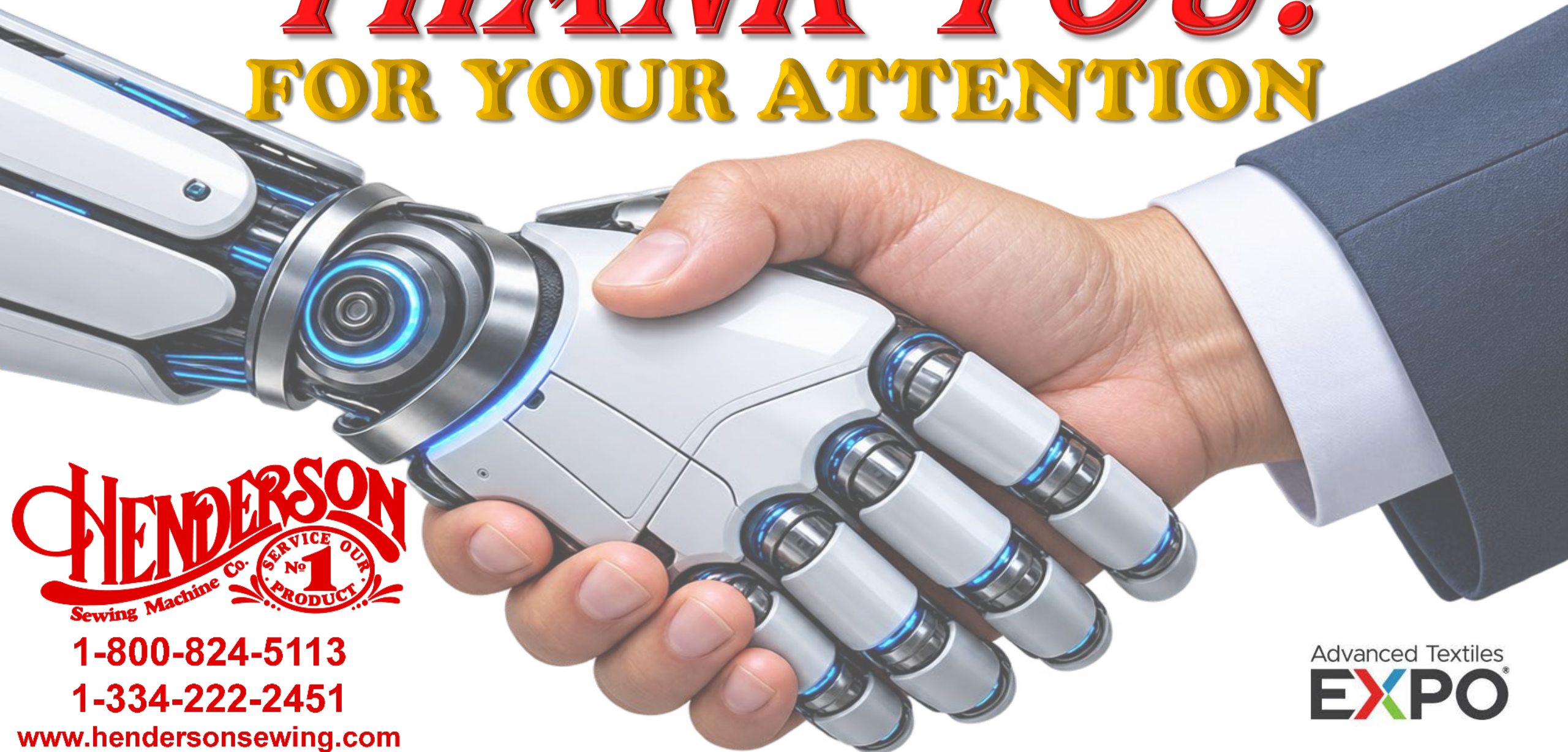


ROBOTIC CREEL LOADING

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THANK YOU!

FOR YOUR ATTENTION



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1-334-222-2451
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QUESTIONS ?



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Oct. 26–28,
2027

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