

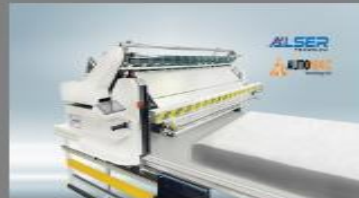
Well come To Cutting Automation



Pattern Design,
Development &
Nesting



Sample Room
Automation



ALSER Spreading
Solution



YINENG Spreading
Solution



YINENG CUTTING
SOLUTION

MANUAL SPREADING VS AUTO SPREADING

MANUAL SPREADING



AUTO SPREADING



MANUAL SPREADING

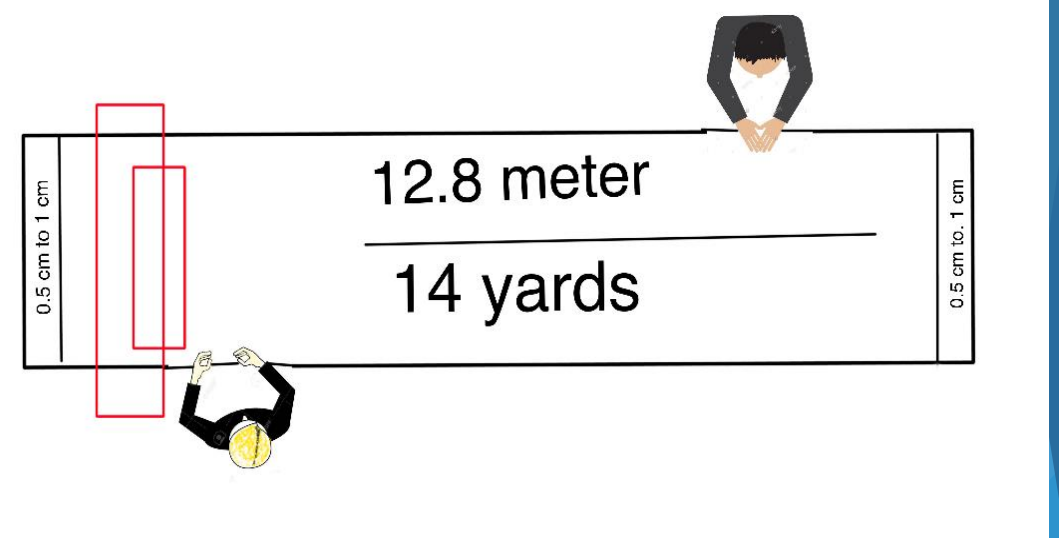


- ❖ For 7+7=14 Yards or 12.8 meters

Production per day,
8 workers in 10 hour= 8,500-9,000 T-Shirt lays



AUTOMATED SPREADING



For 7+7=14 Yards or 12.8 meters:

Production per day,
2 workers in 10 hour= 10,000-12,000 T-Shirt lays



Manual cutting Machine

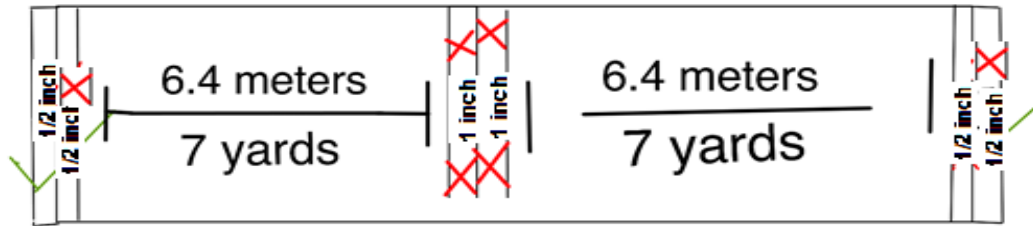


Auto cutting Machine



Manual Cutting Vs Auto Spreading & Cutting Cost saving analysis (200,000 pcs/ 30000 kg.

FROM THE PICTURE WE CAN SEE SAVES.



Summary of Savings

1. Manpower Savings:

•Daily Cutting Target: 200,000 pcs

•Manual Manpower:

- 22 tables × 16 people = 352 people
- (Lay man 8, bundle 2, cutter 2, numbering 2, writer 1, CSV 1 = 16 people per table)

•Auto Spreading Manpower:

- 18 tables × 8.5 people = 153 people
- (Lay man 2, bundle 2, auto cutter 0.5, numbering 2, writer 1, CSV 1 = 8.5 people per table)

•Total Manpower Saved:

- 352 people - 153 people = 199 people saved

•Manpower Savings Calculation:

- Average Salary per Worker: 12,000 Tk
- Monthly Savings:

•199 people × 12,000 Tk = 2,388,000 Tk
199 people × 12,000 Tk = 2,388,000 Tk

- Annual Savings:

•2,388,000 Tk/month × 12 months = 28,656,000 Tk/year
2,388,000 Tk/month × 12 months = 28,656,000 Tk/year

2. Fabric Savings:

•Total Annual Savings: 28,656,000 Tk (Approx. \$851,760 USD at 1 USD = 123 Tk)

•Manpower Savings: 28,656,000 Tk

•Fabric Savings: 104,930,880 Tk

•Total Savings:

•28,656,000 Tk (Manpower) + 104,930,880 Tk (Fabric) = 133,586,880 Tk
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Fabric Saving Calculation for Auto Spreading

Fabric Saved per Ply:

$$\frac{1}{2} + 1 + 1 + \frac{1}{2} = 3 \text{ inches saved per ply.}$$

Manual Lay Adjustment:

Additional 1 inch saved due to manual lay adjustments.

Total Fabric Saved per Lay:

$$3 \text{ inches} + 1 \text{ inch} = 4 \text{ inches saved per lay.}$$

Fabric Saved per Lay (504 inches):

$$\frac{4}{504} \times 100 = 0.8\% \text{ fabric saved per lay}$$

Additional Marker Efficiency Gain:

0.5% improvement in marker efficiency.

Total Fabric Savings:

1.3% fabric saved (0.8% from spreading + 0.5% from marker efficiency).

Fabric Savings Calculation (Updated)

Daily Fabric Cut: 35,000 kg

Fabric Saved per Day (1.3% from spreading):

$$35,000 \text{ kg} \times 1.3\% = 455 \text{ kg saved per day}$$

Average Fabric Price: \$6.00 per kg

Daily Fabric Savings in USD:

$$455 \text{ kg} \times \$6.00 = \$2,730 \text{ saved per day}$$

Monthly Fabric Savings in USD (26 days/month):

$$2,730 \$ \times 26 = 70,980 \$ \text{ per month}$$

Annual Fabric Savings in USD:

$$70,980 \$ \times 12 = 851,760 \$ \text{ per year}$$

Annual Fabric Savings in Taka (at 1 USD = 123 Tk):

$$851,760 \$ \times 123 = 104,930,880 \text{ Tk per year}$$

Summary of Fabric Savings:

Annual Savings from Fabric: 104,930,880 Tk (Approx. \$851,760 USD)



Auto Cutting Cost and Saving Analysis Report

Cost and saving analysis Report

Cutting Automation Production Target 2 shift from 6 table pcs

SL	Machine Name	Machine Quantity	Total Price USD	Total Price USD	Total Savings in USD	Remarks
1	Automatic Spreader Machine with conveyer belt	6	192000	300000		Cutting Cost and Saving Analysis Report 1. Manpower Savings (2 Shifts, 12 Tables per Shift) ✓ Manpower Saved per Table per Year: ✓ Saved per Worker per Year: Tk. 28,656,000 ✓ Total Savings (Manpower) for 2 Shifts with 12 Tables per Shift: ✓ Annual Savings in Manpower: Tk. 28,656,000. 2. Fabric Savings (1% Savings) ✓ Fabric Savings per Year (1% Fabric Saved): ✓ Annual Fabric Savings: Tk. 87,731,280 3. Grand Total Savings (Manpower + Fabric) Total Savings per Year: Manpower Savings + Fabric Savings: Tk. 28,656,000 (Manpower) + Tk. 87,731,280 (Fabric) = Tk. 116,387,280 🇸🇬 Grand Total in USD (Conversion at 1 USD = 112 Tk) ✓ Total Annual Savings in USD: ✓ Tk. 116,387,280 ÷ 112 = \$1,039,172 USD ☑ Summary of Savings: Manpower Savings per Year: Tk. 28,656,000 Fabric Savings per Year: Tk. 87,731,280 Total Annual Savings: Tk. 116,387,280 (Approx. \$1,039,172 USD)
2	Automatic cutting machine 2		184000	360000	1039172	
3	Fabric Folding Machine	2	10000			
Grand Total for Cutting Automation			386000	660000	1039172	

Thank You

Industry 4.0



Well come To Sewing Automation





Overclock Un-Curling Device



Brand Name: Hikari

Per hour capacity:

Approximate price: only device 100 USD (with over lock mc 850 USD)

✓ Overclock Un-Curling Device - Technical

Clarification & Benefit

By using the Overclock Un-Curling Device, we can:
Prevent excessive cutting at the side seam, reducing fabric wastage
Eliminate the need for additional patterns and fabric allowances
Save 1% of fabric consumption

💰 Fabric Saving Calculation:

If Daily Fabric Cut (Average): 12 tons

Fabric Saved per Day (1%): $12 \text{ tons} \times 1\% = 120 \text{ kg}$

Fabric Saved per Month: $120 \text{ kg} \times 25 \text{ days} = 3,000 \text{ kg}$

Cost per kg of Fabric: \$6

Total Monthly Savings: $3,000 \text{ kg} \times \$6 = \$18,000$

Conversion to Taka: $\$18,000 \times 123 \text{ Tk} = \text{Tk. } 2,214,000$
per month

☑ Additional Benefits:

Reduction in fabric wastage (1% savings)

Significant cost savings on fabric

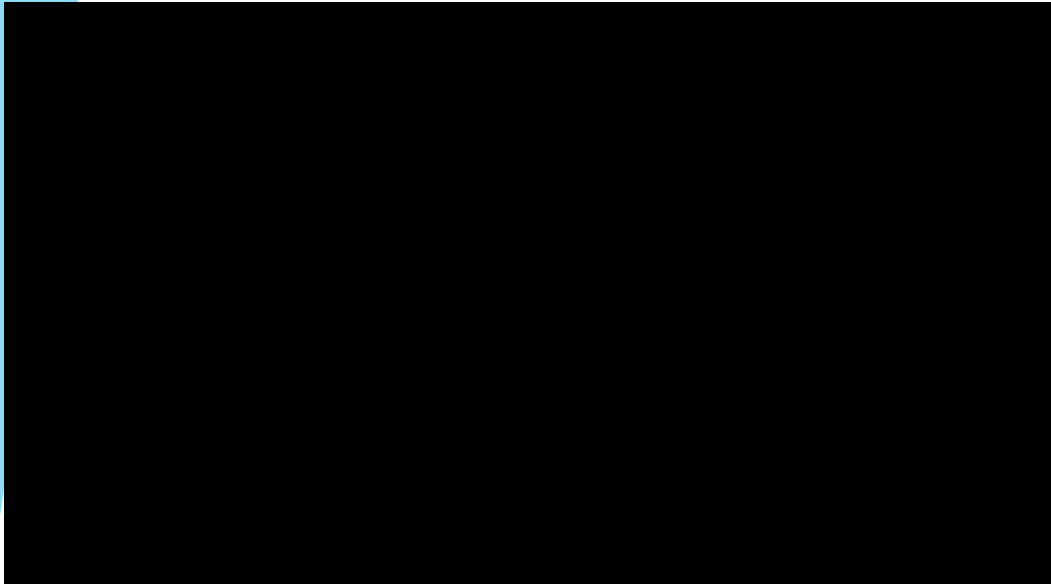
Improved cutting accuracy and production efficiency

No need for additional patterns or fabric allowances, further reducing costs



✓ Hanger Loop Joining Machine

Auto loop attaching mc



Manual loop attaching mc



**Brand Name: Empenzo/Suprime/Euromac
(Auto)**

**Per hour capacity: 400 pc
c: 15000 USD**

✓ Hanger Loop Joining Machine - Technical Clarification & Benefit

By using the Auto Hanger Loop Joining Machine, we can:
Save 3 machines and 3 operators

💰 Cost Saving:

Manpower Saved: 3 operators

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: $3 \times 20,000 = \text{Tk. } 60,000$

Annual Saving: Tk. 7,20,000

✓ Additional Benefits:

Increased production efficiency

Higher consistency and accuracy in loop joining

Reduced space and maintenance costs

Improved quality in finished products



✓ Label Assembling Machine (6 Head)



Brand Name: Empenzo/ IFA Tech
Per hour capacity: 900 pc
Approximate price: 50000 USD

✓ Label Assembling Machine (6 Head) -
Technical Clarification & Benefit
By using the Label Assembling Machine (6 Head),
we can:

Increase productivity by 5 times
Save 5 machines and 5 operators

💰 Cost Saving:

Manpower Saved: 5 operators

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: $5 \times 20,000 = \text{Tk. } 1,00,000$

Annual Saving: Tk. 12,00,000

☑ Additional Benefits:

Significant productivity boost (5 times more
efficient)

Reduced space and machine maintenance costs
Higher accuracy and consistency in label
assembly

Improved overall production efficiency



✓ Overlock Side Seam Machine for Auto Vertical Tuck - (Back leaching mc)



Brand Name: Hikari

Per hour capacity: 90 pcs 5% decrease as usual mc.

Approximate price: 5200 Usd

✓ Overlock Side Seam Machine for Auto Vertical Tuck - Technical Clarification & Benefit

By using the Overlock Side Seam Machine for the Auto Vertical Tuck, we can:

Replace 1 Vertical Tuck Machine

Save 1 machine and 1 operator

Per Hour Capacity: 90 pcs

💰 Cost Saving:

Manpower Saved: 1

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: Tk. 20,000

✓ Additional Benefits:

Increased production speed (90 pcs per hour)

Improved efficiency by consolidating machines

Reduced space and maintenance costs

Consistent quality with fewer errors



Auto hemming machine

Auto hemming machine body hem



Brand Name: yamato/Euromac

Per hour capacity:

Approximate price: 20000 USD Sleeve hemming

Brand Name: Hikary

Per hour capacity:

Approximate price: 20000 USD (body hemming)

Auto hemming machine sleeve hem



☒ Auto Hemming Machine - Technical Clarification & Benefit

For trial implementation, we can buy 4 machines. If successful, we can implement 100% automation.

1 machine and 1 operator saved per 2 machines

1 operator will manage 2 machines

☒ Cost Saving (Trial Basis):

Manpower Saved: 1 operator per 2 machines

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving for 4 Machines: $20,000 \times 4 = \text{Tk. } 80,000$

☒ Additional Benefits:

Increased efficiency with fewer operators

Higher consistency in hemming quality

Reduced floor space required

Supports scaling production if trial is successful

✓ Auto Elastic Belt Making Machine



Brand Name: Suprime/Euromac
Per hour capacity: 600 pcs
Approximate price: USD-15000

✓ Auto Elastic Belt Making Machine - Technical Clarification & Benefit

By using the **Auto Elastic Belt Making Machine**, we can:
Eliminate **2 machines** (Elastic Rib Joining + Vertical Tuck Machine)
Save **6 manpower** per shift, i.e., **12 manpower** in **2 shifts**

💰 Cost Saving:

Manpower Saved: 12

Average Salary per Person: Tk. 20,000

Total Monthly Saving: $12 \times 20,000 = \text{Tk. } 2,40,000$

Annual Saving: Tk. 28,80,000

☑ Additional Benefits:

Faster and smoother belt making process

Improved accuracy and finishing

Reduces space and machine maintenance

Supports higher output with fewer resources

Vitoni: Video Link, <https://youtu.be/Hn7tCTo7zkI?si=sUXSQm3tK7eK9TGp>

Suprime: Video link, <https://www.youtube.com/watch?v=vNmV8YFq4qE>



✓ Overlock Machine with Auto Sharing Device



Product Overview: Hikari Auto Sharing Device

Brand Name: Hikari

Product: Auto Sharing Device

Per Hour Capacity: As usual (specific capacity details may vary depending on the application, but it maintains the typical output standard)

Approximate Price: 260 USD

✓ **Overlock Machine with Auto Sharing Device - Technical Clarification & Benefit**
By using the Overlock Machine with Auto Sharing Device, we can:

Eliminate 1 manual machine

Save 1 operator (per shift)

💰 **Cost Saving (One Shift):**

Operator Saved: 1

Monthly Salary: Tk. 20,000

Working Days: 20

Annual Saving: Tk. 2,40,000

☑ **Additional Benefits:**

Reduced machine maintenance cost

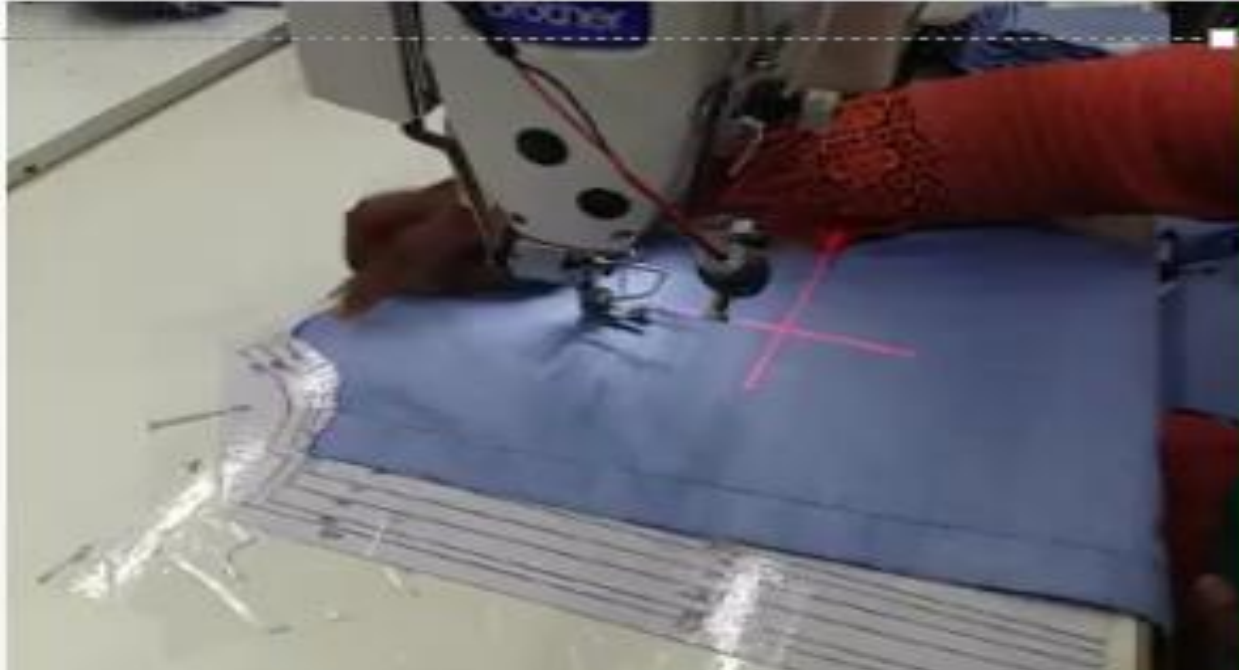
Higher production speed

Consistent stitching quality

Saves floor space and electricity



✓ Auto Laser Marking Device -



Technical Clarification & Benefit (One Shift)

By using the Auto Laser Marking Device, we can eliminate the need for:

Manual marking tools like **magic pen, powder, chalk**
1 operator per shift for marking work,

💰 Cost Saving (One Shift):

Operator Saved: 1

Monthly Salary: Tk. 20,000

Working Days: 20

Total Monthly Saving: Tk. 2,40,000

☑ Other Benefits:

No need for consumables (pen, powder, chalk) - additional material savings

High precision marking - improves garment quality

Faster marking process - boosts production efficiency

Clean and eco-friendly - no dust or residue

Brand Name:
Per hour capacity:
Approximate price:



✓ Automatic Chap Pocket, Moon Join Machine



Brand Name: Euromac
Per hour capacity: 240 pcs
Approximate price: 19000 USD

✓ **Automatic Chap Pocket, Moon Join Machine – One Shift Benefit**
Using this machine will replace **7 manpower** and **1 manual machine** per shift.

💰 **Cost Saving (One Shift):**

- **Manpower Saved: 7**
- **Average Monthly Salary: Tk. 20,000**
- **Total Monthly Saving: $7 \times 20,000 = \text{Tk. 1,40,000}$**
- **Annual Saving: Tk. 16,80,000**

✓ **Additional Benefits:**

- **Faster production**
- **Consistent product quality**
- **Less human error**
- **Saves space and improves workflow**

Vitoni: video link https://youtu.be/ft7lCE_YE1w?si=xNJZIYo6FSTsshNB

Suprime: Video Link <https://www.youtube.com/watch?v=w5FVhBA3fuw>



✓ Auto Pocket and Moon Setter machine (APW)



✓ Auto Pocket and Moon Setter machine (APW) - Technical Clarification & Benefit

By using the **Auto Pocket Join Machine (APW)**, we can:

Save 4 machines used for pocket joining

Save 4 operators (1 per machine)

💰 Cost Saving:

Manpower Saved: 4 operators

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: $4 \times 20,000 = \text{Tk. } 80,000$

Annual Saving: Tk. 9,60,000

✓ Additional Benefits:

Increased speed and precision in pocket joining

Reduced space requirements by consolidating machines

Improved consistency and quality in production

Lower maintenance costs for fewer machines

Vitoni: Video link https://youtu.be/ft7lCE_YE1w?si=xNJZIYo6FSTsshNB

Suprime: Video link <https://www.youtube.com/watch?v=w5FVhBA3fuw>

✓ Auto Pocket Bone/Zipper Setter

Vitoni: Video link

https://youtu.be/e1_De7dXtNE?si=YafNRswBMB6zOBKC

✓ Auto Pocket Bone/Zipper Setter - Technical Clarification & Benefit

By using the Auto Pocket Bone/Zipper Setter, we can:

- Increase productivity by 8 times
- Save 8 machines and 8 operators

💰 Cost Saving:

Manpower Saved: 8 operators

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: $8 \times 20,000 = \text{Tk. } 1,60,000$

Annual Saving: Tk. 19,20,000

✓ Additional Benefits:

Significant boost in productivity (8 times more efficient)

Reduced space and machine maintenance costs

Higher consistency in pocket bone and zipper setting

Improved overall production efficiency

Automatic button feeder Device



✓ Automatic Button Feeder Device - Technical Clarification & Benefit

By using the Automatic Button Feeder Device, we can:

Save 2 machines used for button feeding

Save 2 operators (1 per machine)

💰 Cost Saving:

Manpower Saved: 2 operators

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: $2 \times 20,000 = \text{Tk. } 40,000$

Annual Saving: Tk. 4,80,000

✓ Additional Benefits:

Faster and more accurate button feeding

Reduced floor space requirements

Improved production efficiency

Lower machine maintenance costs for fewer machines

Vitoni: Video link

<https://youtu.be/euMpDQvPWvg?si=fxi4CCGaGqi6R8lp>

Suprime: Video Link

<https://www.youtube.com/watch?v=PEMLIYl15Rc>

✓ Metering Device



✓ Metering Device - Technical Clarification & Benefit

By using the **Metering Device**, we can:

- **Double productivity** (2 times more efficient)
- **Save 2 machines and 2 operators**

💰 Cost Saving:

Manpower Saved: 2 operators

Monthly Salary per Operator: Tk. 20,000

Total Monthly Saving: $2 \times 20,000 = \text{Tk. } 40,000$

Annual Saving: Tk. 4,80,000

☑ Additional Benefits:

Increased productivity (2 times more output)

Reduced space and machine maintenance costs

Improved consistency and accuracy in production

Higher overall efficiency in the manufacturing process

Redsun/Xiong chen: Video likn

https://youtu.be/OFK2Cok8Nvk?si=FTDZ9F48rg_7lvIs

Suprime: Video likn

<https://www.youtube.com/watch?v=hPctgSQJkBk>

✓ Old Overlock Machine (Auto Device)



✓ Old Overlock Machine (Auto Device) - Technical Clarification & Benefit

By upgrading the Old Overlock Machine with the Auto Device, we can achieve:

- 15% increase in production
- Full automation for enhanced efficiency

💰 Benefits:

Increased Production: 15% more output with the same resources

Reduced operator dependency

Higher consistency and quality in stitching

Lower labor costs due to automation

Improved efficiency and faster turnaround time