


 **MRARGUS VISION**

 **ARGUS (SHANGHAI) TECHNOLOGY CO., LTD.**

WWW.ARGUS-T.COM

Fei: +86-13701225444
Email: FEI@ARGUS-T.COM

ARGUS Introduction

- ARGUS is the machine vision system supplier by providing the system for detecting textile defects to support textile company realize cost saving, efficiency improvement & data management
- ARGUS partners are mainly the global first tier Equipment Maker, Manufacture and Brand in the textile industry, such as Shenzhou International, China Jushi, Taishan Fiberglass, American Performance , GITI Tire cord & Luolai Home textile, etc.
- ARGUS R&D and Project members own over 15-20 years of professional experience in textile machine vision
- Base on Artificial Intelligence, ARGUS develops the latest Generation Inspection System which makes the traditional complicated system innovated to be simple, low cost and user friendly—**Primary school graduates can operate easily**

Application in Textile Industry — Not just Apparel



Apparel
Weaving, Knitting



Carbon Fiber



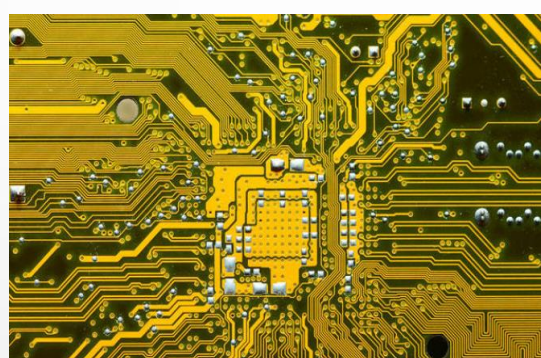
Leather base cloth
Knitted and woven



Automotive sector
Seat belt, airbag, tire cord, car interior



Household products
Curtains, sheets, carpets, wallcoverings



Circuit Board
Glass fiber insulation



Nonwovens
Facial & Mask



Wind power
Carbon/Glass fiber wet felt,
Carbon/Glass fiber pultrusion plate

MRARGUS INSPECTION SYSTEM

Global Partners

Apparel & household



申洲國際集團控股有限公司

Shenzhou International Group Holdings Limited

LUOLAI 罗莱家纺

Automotive Textile

GITI TIRE
佳通轮胎



Fiberglass & Composites



巨石集团有限公司
JUSHI GROUP CO., LTD.



泰山玻璃纤维有限公司
Taishan Fiberglass Inc.

MRARGUS INSPECTION SYSTEM

Installation Example

On Loom Inspection

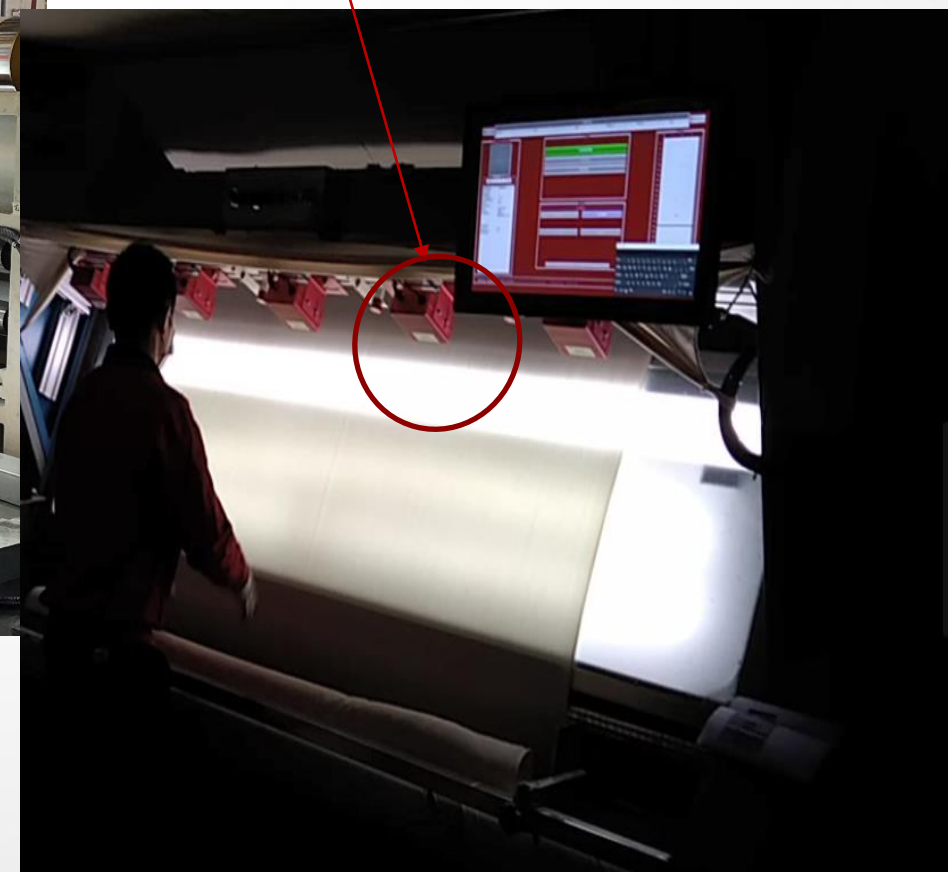
Smart Camera

Smart Camera

Inspection Table

Smart Camera

Producing Online Inspection



Main Parts of the System

Smart Camera

- ◆ Independent R&D
- ◆ Edge Computing Capability

Industrial illumination

- ◆ Reliable
- ◆ Custom made design

Artificial Intelligence Software

- ◆ Simple & Easy to Learn and Use
- ◆ Cover various products such as Apparel, Automotive Textile, Composites, nonwoven& films, etc.
- ◆ ARGUS system can be adopted into different production processes for online or offline detection










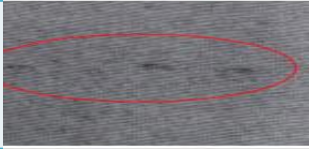




System Function

- ◆ 24-hour, real-time and full width detection
- ◆ Defects information such as defect's picture, longitude and latitude are recorded on time
- ◆ According to the production need, Argus inspection system can "Record Defects information", "Alarm" or "Stop the machine" when Argus detect the defects
- ◆ Production information of textile such as production date, textile type, length, defects information, and operator name etc. can be recorded, used and tracked
- ◆ All the above production information data can be connected to any management system like ERP or MES system, etc.

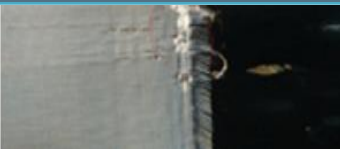
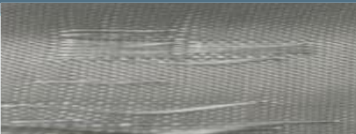
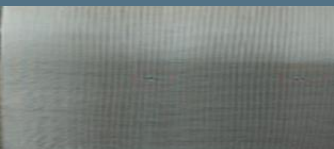



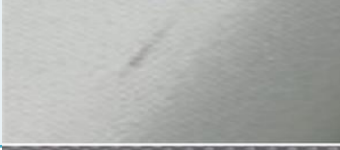








System Function

- ◆ ARGUS system own the central control system
- ◆ ARGUS system can assign the different data management authority according to the customer organization management needs
- ◆ ARGUS system detect various kinds of defects such as broken ends, broken picks, knot, hole, dirt, broken filament and weft shrink, etc.
- ◆ ARGUS system provide defects map include each defect's "X, Y position" which data can support for textile optimized cutting

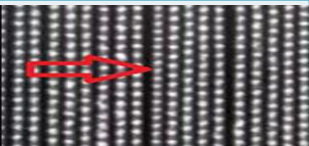
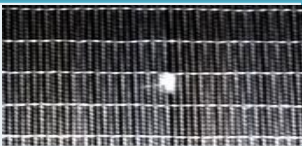


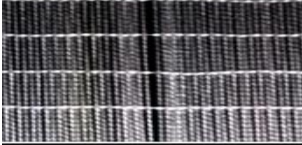
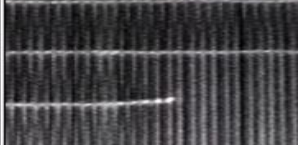
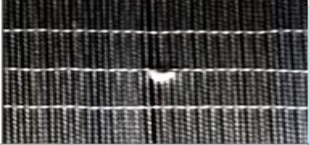
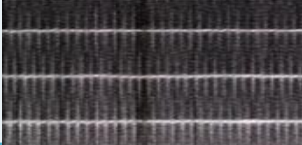

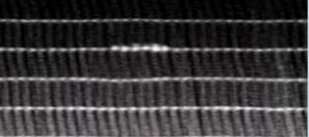
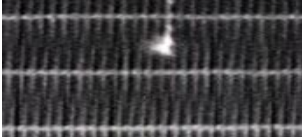

Typical Defect Types of Apparel

Defect	Image	Defect	Image	Defect	Image
Broken yarn		Broken yarn		Missing yarn	
Missing yarn		Spot		Colored yarn	
Dirt		Broken yarn		Broken yarn	
Hole		Knot		Joint	

Typical Defect Types of Fiberglass

Defect	Image	Defect	Image	Defect	Image
Bound damage		Floating		Double knitting	
Dirt & Oil stain		Hole		Cotton yarn	
Weft spot		Broken ends		Double pick	
Honeydew dust		Broken picks		Loose/Tight end	
Back stitch		Broken thread		Missing pick	

Typical Defect Types of Tire Cord

Defect	Image	Defect	Image	Defect	Image
Strong twist yarn		broken filament		out of selvage	
Weak twist yarn		gap		broken weft	
ball		oil yarn		abnormal yarn	
weft ball		knots		loose& tighten	

MRARGUS INSPECTION SYSTEM

Operation interface—Primary School Graduated can operate easily

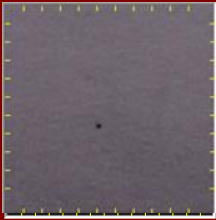
Alarm

STOPPED

MRARGUS

Inspection Table	Roll ID	Fabrics	Width[mm]	Operator	Comment
JY#1	JY#1-2023/03/16-21	600PIFE	50	108	

Defect and Roll Info



Image# 3 [1-4]

First

◀

▶

Last

Title	Value
IMAGE INFO	
Defect #	3
Camera Number	1
Y position [M]	25.17
X position [mm]	43
Classification	Horizontal
SYSTEM INFO	
Status	SYSTEM STOP !!!
Reason	Strong Defect
Info	Operator : #8
	Threshold : 3.9320
ROLL INFO	
Length [M]	28.16
Speed [M/min]	0.00
Total Defect #	4
Warnings	
Width Now/Avg/Max	

Operations

New Roll Start

Re-Start Inspection

END ROLL

Other

Roll's Report

Pictures

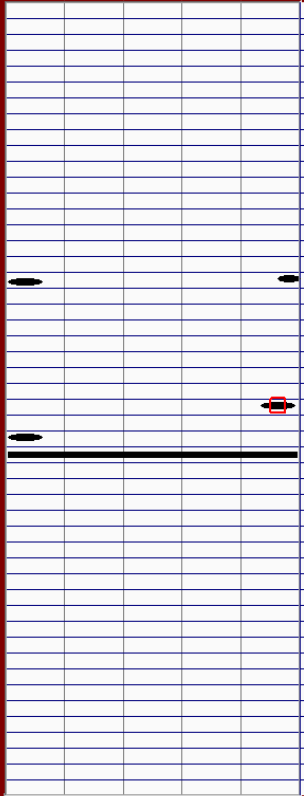
Roll's Archive

NEXT ROLL ID

Re-LEARN

Setting

Map



100 m

10 m

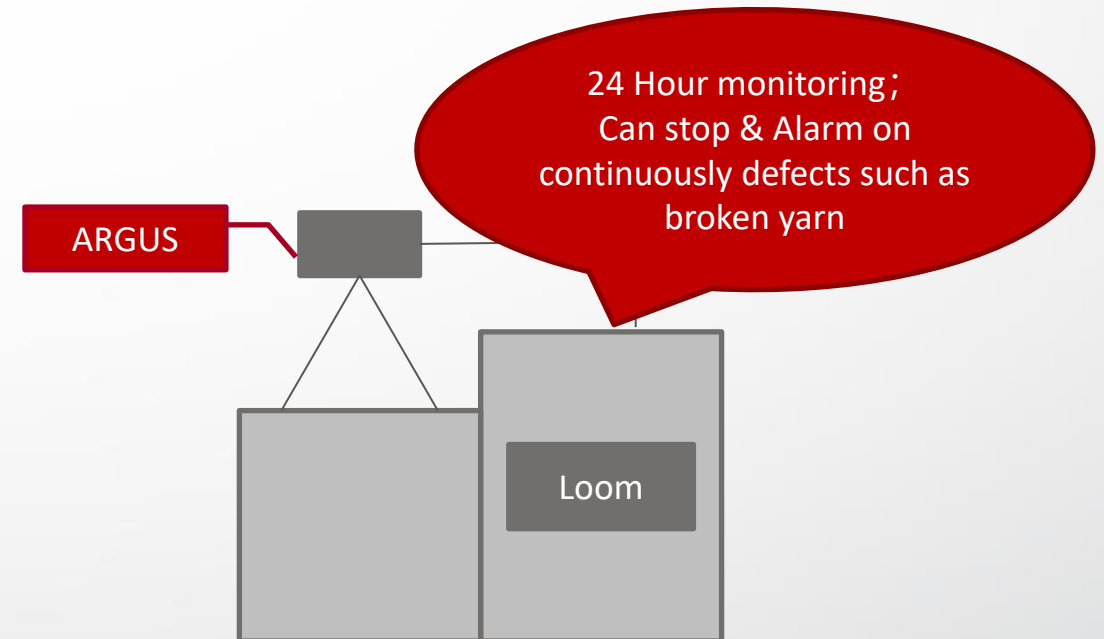
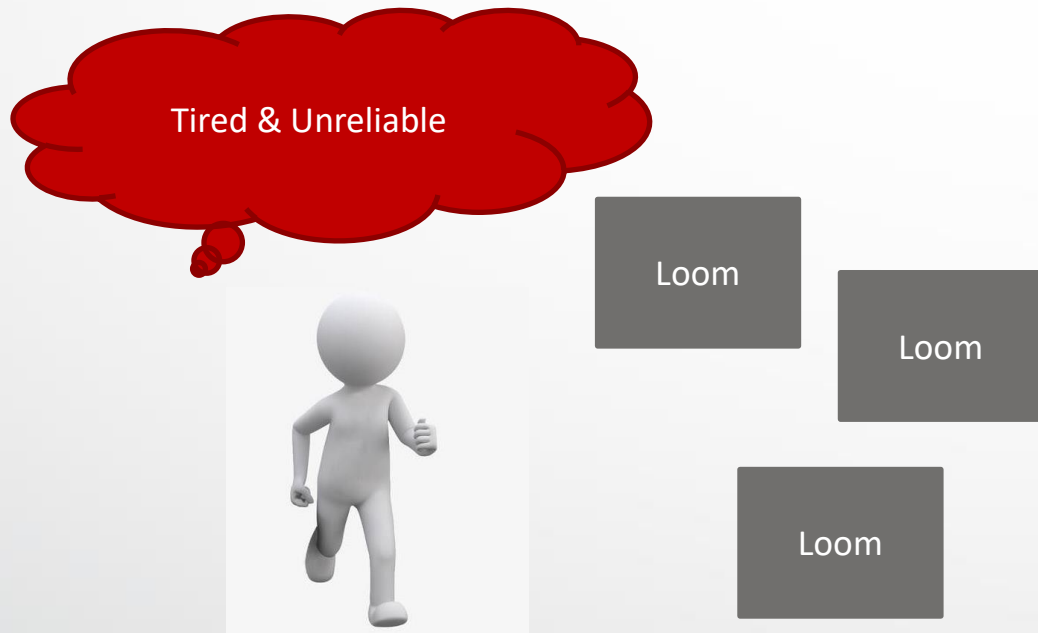
1 m

16/03/23 15:19:02

ShutDown

The Value of ARGUS System: On Loom

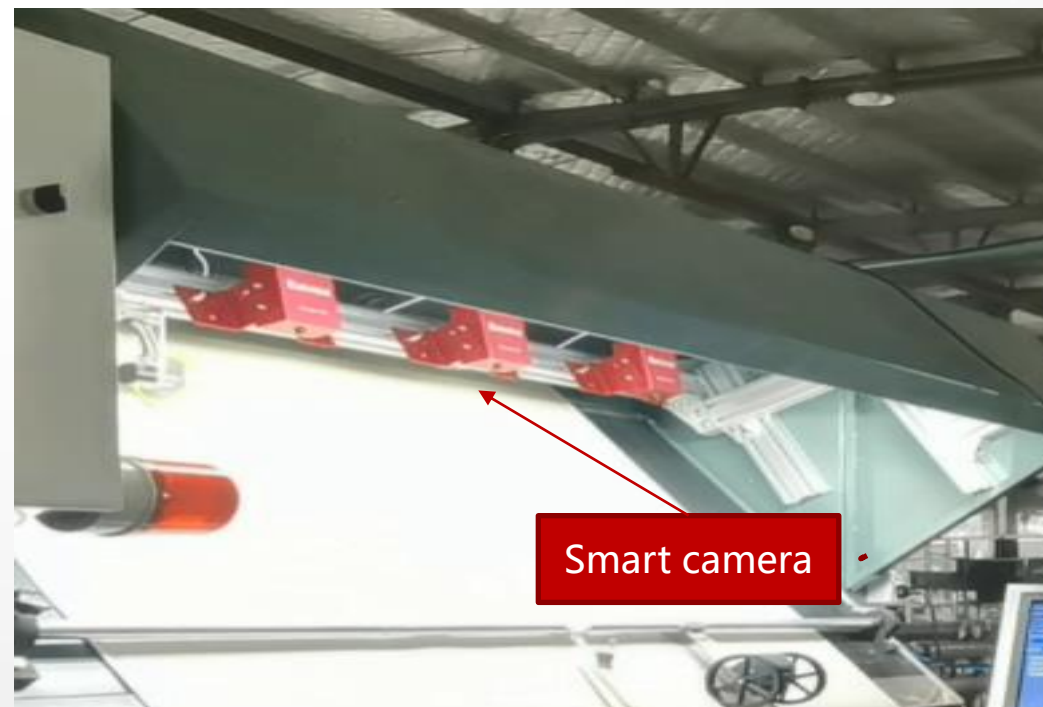
Operator-Human Being	ARGUS Value	ARGUS Function
8 to 12 hours of patrol inspection-Tired, sleepy	save 10%-80% labor cost	Tireless--24 hours inspection
Unstable inspection	Accurate	24-hour Reliable & Accurate detection
Losses caused by continuous defects	save 5-15% loss	Stop & Alarm the machine, control loss on time



MRARGUS INSPECTION SYSTEM

The Value of ARGUS System: Inspection Table

Operator-Human Being	ARGUS Value	ARGUS Function
Inspection Speed 15-25M/Min.	60%-110% inspection efficiency increase	Inspection Speed 30-60M/Min.
1-2 Person/Inspection table	save 50%-75% labor cost	1 Person/2-3 inspection table
new operator one year training	save 95% time	new operator one week training



MRARGUS INSPECTION SYSTEM

The Value of ARGUS System: Data Management

Operator-Human Being	ARGUS Value	ARGUS Function
Manual data input	50%-90% inspection efficiency increase	Inspection data-->ERP/MES
Error Record	Accurate	Stable & Reliable
Data Confusion	Data Analysis guide production	Analyze data and prevent loss

Thousands of data,
we are wholly
confused!



ARGUS Data Analysis Guide
Production



The Value of ARGUS System: Optimized Dyeing, Cutting

Operator-Human Being	ARGUS Value	ARGUS Function
Cutting and dyeing depend on experience and mood	save 1-10% loss	Dyeing or cutting by defect data
Hundreds of workers inspect the cloth pieces after cutting	save 30-85% labor cost	Quickly discover defect locations through defect maps

Loss in the process of
dyeing, cutting



Optimized dyeing and
cutting
to save loss



MRARGUS INSPECTION SYSTEM

The Value of ARGUS System: Supplier and Buyer

Operator-Human Being	ARGUS Value	ARGUS Function
Repeated inspection work-supplier check+buyer check	Efficiency improve 10-30%	Buyer use supplier inspection data
Product quality disputes	No travel for Dispute No Time Waste for Dispute No Cargo return for Dispute	Defects & Production data Trace and Track

Supplier: your problem!

Buyer: It's your problem!



Based upon data!!!

Agree!

Agree!



We are Destinated to Support ESG Development

 ARGUS (SHANGHAI) TECHNOLOGY CO., LTD.

WWW.ARGUS-T.COM

Fei +86 13701225444
FEI@ARGUS-T.COM