

Are you ready
to be the Textile Factory of **future**?



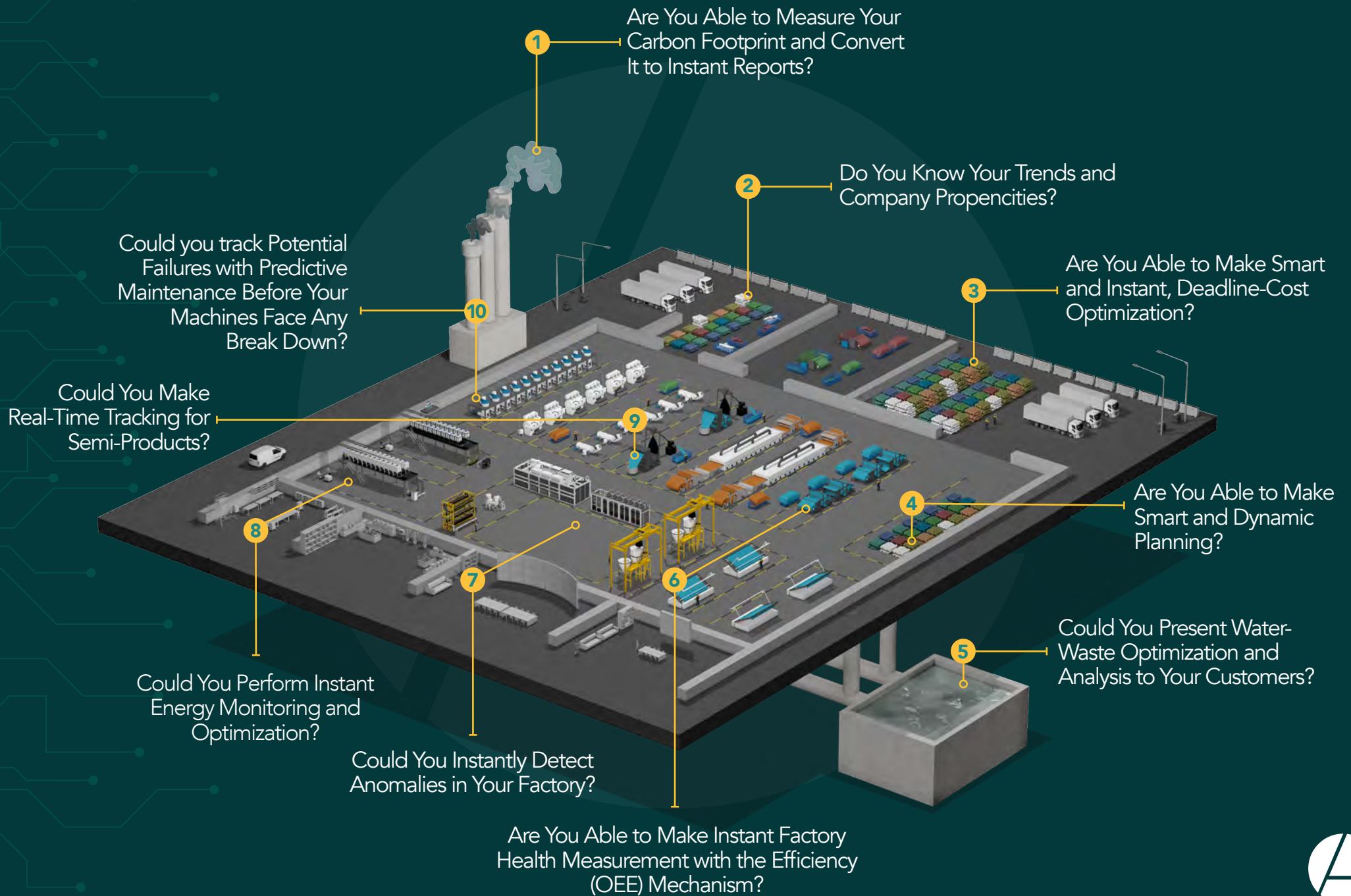
Is Your Factory Ready for 2025

The Future Is Coming Soon,
You Have Limited Time To Get Ready!

. Factories that do not perform Sustainable Clean Production Management, **will not be able to continue their lives!**

. Factories that do not perform Real Time Cost and Deadline **Management will fall behind the competition!**

. Factories that do not perform Predictive and Intelligent Production **Management will fall behind the competition!**



1. SUSTAINABLE CLEAN PRODUCTION

MRLSL and ZDHC Inspection, Production Optimization

Today, it is no longer enough for your factory only to be productive and profitable. The use of energy, chemicals, dyestuffs and water you need while producing both consumes limited natural resources and harms the environment by generating CO2 emissions and wastes. Digital Factory provides instant monitoring of each stage of your production in a transparent and backward traceable manner integrated with your supplier channels. It helps you keep to keep your consumptions in minimum level by optimizing your production. Helps you to check your compliance with MRLSL (Restricted Substance Production List) and ZDHC (Zero Waste in Hazardous Chemicals) instantly. It provides instant data and reports for International Audit Institutions on Cleaner Production, detects and reports anomalies. Thanks to the optimizations it provides while doing all these, it also reveals how your customers can express the benefits they provide to the consumption chain by reducing the resource consumption of the products offered to their customers, by using their resources correctly, and how they stand out from their competitors with this method they prefer. The future will be the period of time of innovative and idealistic enterprises that provide sustainable production!

2. REAL-TIME EFFICIENCY WITH COCKPIT

Instant OEE, Consumption, Cost and Production Analysis

Flying a massive AIRBUS, the captain makes many decisions by looking at a few critical key indicators generated from thousands of data on the plane. You have to look at hundreds of reports and data to make sure that the machines, human resources, energy and raw materials in your factory are used effectively. Most of the time, these reports are too late; It reaches your hand as the aircraft engine catches fire and falls towards the sea. Whereas, Digital Factory instantly shows you the most basic / critical data you need to see the big picture. OEE (Overall Equipment Effectiveness) is the most basic indicator used to measure the efficiency of all factories today. It expresses the capacity of your factory, how much you can produce using this capacity, and how much of your production is of the expected quality as a single number. Digital Factory, if your capacity decreases for some reason (inoperative machines, decreased energy capacity, raw material and human deficiencies, etc.), if you become unable to use your current capacity (downtimes, losses, wastages, waiting, breakdowns, etc.), if you experience quality errors in production (repairs, additions, re-operations etc.) shows you all these instantly and provide you with an in-depth analysis to reach the source of the problem.

3. ORDERS ARE ON TIME AND AT SCHEDULED COST

Smart, Instant Semi Product Tracking with RFID Technology & Production management

While tens of tons of semi-finished products are produced daily in your business, hundreds of tons are circulating or waiting inside. Your costs are increasing, your deadlines are not meeting. In order for your machines to be used effectively, to reduce your losses, and for your repairs and additions to approach zero, a flawless operation from the laboratory to the field must be carried out and followed instantly. In order to carry out your production orders with smart grouping, smart recipe, dynamic planning, process optimization, the Digital Factory will instantly monitor all the semi-products that will complete each order in your entire order pool with RFID technology, to complete the most suitable recipe for them with the fastest route, with optimized machine process values. makes continuous and dynamic planning / optimization.

4. DIGITAL FACTORY: NEVER SLEEPS, NEVER MISSES

Instant Trend & Anomaly Analysis from Hundreds of Thousands of Data

While thousands of transactions are carried out in your factory, hundreds of thousands of data are generated. Raw material and energy consumptions, downtimes, repairs, additions, errors, losses, wastages, malfunctions... Thousands of transactions that you cannot fully control cause increased costs, delayed products, and thus customer dissatisfaction and loss. The Digital Factory instantly monitors every single process, from the cabin temperatures of a night shift of stenter to the motor chain speed, from your tower speeds in your dyeing machine to your heat exchanger efficiencies, from the goods batched per hour in batching, from quality control to the finished product shipped. It checks the accuracy of the processes, your consumption, predicts errors and malfunctions before they occur, and informs you if there is an abnormal situation. It predicts the production orders that will exceed the planned cost or the ones that do not reach the deadline, and informs you before any burden being faced.



How?
With Creating Digital Twin
of **Your Factories!**

Factories

CORLU DYEHOUSE

DENIZLI GARMENT
LAUNDRY

BURSA DYEHOUSE



Departments

Dyehouse

Delivery Dept.

Marketing

Raw Fab. Dept.

Workshop

Laundry



Machine and Equipment



600 kg Dyeing Machine



Eliar ICT200 Sensor



A = %97
P = %97
Q = %97



CONSUMPTION

600kW

5TON

6TON



65 kg/L

Water Consumption is
In Sustainable Production Range!

Factory Health %90



ELIAR SLD Transfer Pump
84 Hours Left for Maintenance!
A notification for maintenance had been sent to Mr. Resat Durmaz...

ELIAR ADW Silo 2
EL-BLUE Dyestuff Quantity %20
Fill the Silo!

Order No: 1984 |
Raw Fabric
Had Received in
Warehouse.



Order 1422 |
Rescheduled for the
Deadline. There will
be no delay!



Raw Fabric Opener 1 |
Machine is Ready
Load the Batch in the Que!

Order No: 2324 Had Been
Set Off. A Notification Had
Been Sent to Customer...

752-12 Anomaly Detection|
Electricity Consumption
Above from Normal!

Check the Stenter Machine!

● Your Enterprise Resource Software is
Integrated with ERP.

● Received Data from **Your Sensors**
and Energy Meters.

● Needed **Sensors and Energy**
Meters Installed.

● * To Do List - Steps



10 TONS OF FABRIC IN THE QUE
PERCENTAGE OF WORK COMPLETED %60



5 TONS OF FABRIC IN THE QUE
PERCENTAGE OF WORK COMPLETED %90



Order #432-621 Stop the Process! THERE IS AN ERROR!
Order Steps



Yeşim AKKAN



SP-1984 Order Confirmed.



We Track Your Semi-Finished Products
In an Operator Independent Way
and Untouched by Any Human,
With **Our RFID Technology!**



A = %97
P = %97
Q = %97



CONSUMPTION

600kW 5TON 6TON

Eliar RFID
Processing Station



+2 Hours
WON!

1984-8652 Ord. Batch 2 - Had Been
Routed from Fabric Opener No:3 to
No:4!

Instant Monitoring Module

- >1983-8612 Ord. Batch1- Drying Process Completed.
- >1983-8612 Ord. Batch3- In Fabric Opening Process.
- >1983-8612 Ord. Batch2- In Brush Sueding Process.
- >1983-8612 Ord. Batch4- Fixage Process Completed.
- >1983-8612 Ord. Batch5- Dyeing Process Finished.

1984-8652 Ord. Batch 3 - Now
under Singeing Process.

1984-8652 Ord. Batch 1 - Straming
Finished! Being Transferred to
Continuous Washing.

1983-8612 Order
Drying Completed.

"1984-8652 Order
Stenter 4 Motor Failure!"

Instant
Consumption
200kW 2TON 1TON

Route 1 | Created for Order No: 1984-8652.
Kg Cost 80 TL Time 22 Hours..

Apply Route 1

Route 2 | Created for Order No: 1984-8652.
Kg Cost 60 TL Time 36 Hours.

Apply Route 2

Customer Information

ER-AD1984 Textile Enterprises A.S.
Turkey See Existing Projects

Order Information

Order No # 1984-8652
30 / 1 Cotton Jersey P84F214
Color EL-1984 Blue 1.200 kg
Delivery Time! 20 December 2023

Plan Smart Route for Order

Route 1
Route 2

Eliar RFID Receiver

Eliar Silicone Coated
RFID Tags

Fabric Opening

Heat Setting

Singeing

Continuous Desizing

Dyeing

Wet Opening

Drying

Brush Sueding

Printing

Steaming

Continuous Washing

Finishing

Raising

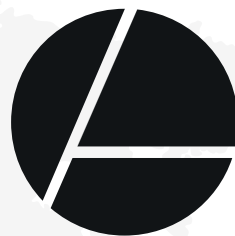
Shearing

Drying

Finishing

Sanforizing

Quality Control
- Packaging



You are ready for the future with **ELIAR!**

Production in the new world order is both difficult and dependent on many parameters. The standards that customers expect from production are now even more restrictive. It is essential to make sustainable production and to use our resources correctly. Being ready for all these instantly and adapting your enterprise to this process is now a necessity. Lower your costs and command your factory!

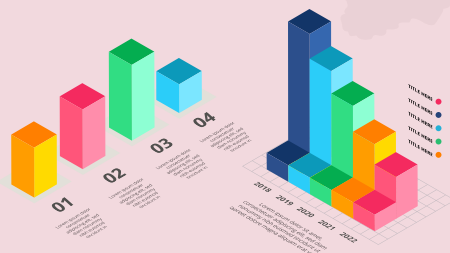
01



Sustainable Production

Ensure that all data of your factory can be monitored and managed in a secure, transparent environment based on user roles appropriate to business needs, on a centralized management basis. Automate MRLSL (Restricted Substance Production List) compliance checks. Perform MRLSL control instantly in your raw material tracking. By providing live integration with your supplier's updated list, you can receive restricted substance use detection and warnings live and get the ZDHC report on a work order basis. Get the ZDHC report at any time on any client.

02



We Analyze Your Tendencies, We Provide Information

What's going on in your factory? Just like on our smartphones, it instantly lets you know what's going on. Night shift performance is 20% less than other shifts. Things move 20% slower on stenter machines. The most dyed colors in dyehouses are dark colors; navy blue is the trend of the last 3 months with 62%. Today, 50 tons of fabric were produced and 30 tons of dark colors were in the first place, 12 tons of medium and 8 tons of light colors were produced. Additional work order costs constituted 5% of the total cost. Repaired work order costs accounted for 3% of the total cost.

03



Intelligent and Instant Order & Production Management

Thanks to the Smart Production Management starting from the order, you are an administrative assistant who realizes the desired cost and quality target for you. It follows all processes in line with your goals, makes sense of all data and optimizes it for you. From laboratory to factory level; It carries out a controlled production process with an auditor approach, without compromising the trio of quality, deadline and cost.

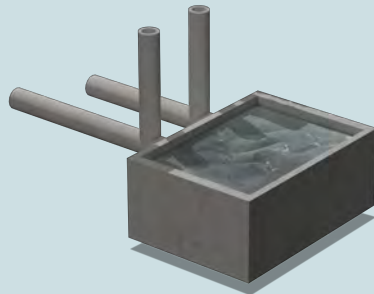
04



Smart Route App

According to your deadline and cost criteria, so many processes are required to optimize every second in the factory that correspondence between departments, meetings, analyzes... Which product should work in which route designs the decision according to the track. Calculates how many alternatives can be produced at a more affordable cost. It analyzes the course change while driving on the road. If there is a deviation in the targets, it presents how to compensate through alternatives.

05



Water - Waste Optimization and Analysis

It provides the opportunity to analyze in all criteria such as Factory-Department-Machine-Process-Operator-Time... with the automatic categorization of the water and waste water ratios of the processes. It offers savings that balances water use and optimizations to meet your customers' desired liquor ratios.

06



Productivity and Reporting Modules

Freedom of access to OEE (Overall Equipment Efficiency), TEEP (Total Effective Equipment Performance) in all desired criteria such as Factory-Department-Machine-Process-Personnel-Time... and based upon your needs. With your Digital Factory, you can monitor the live status of the factory in the virtual environment as if you are navigating the factory, while providing you with the freedom to obtain dynamic reports with a navigation capability and to follow all your needs such as live, history and trend with your templates that you have saved on a user basis, with special indicators for you. With your digital factory, inspections are no longer a nightmare!

07

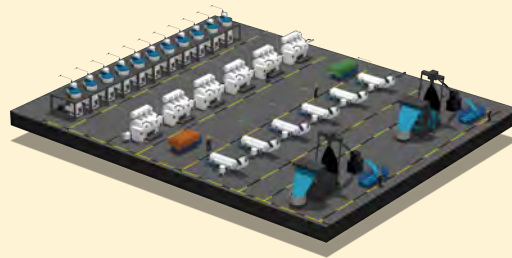


Instant Interventions with Anomaly Tests

It monitors your process health instantly and provides live check-up service. It detects the problems that will occur in advance and notifies you of the necessary intervention without the need for work order repair.

Anomaly! "30/1 Cotton, 1984 Blue... According to the average of successful work orders, it should proceed in the Stenter process at 18 m/min. Currently, 15 m/min has been detected." Anomaly! "The Stenter 3 machine is used in printed fabrics, an entry was detected in the Stenter 2 machine. No off-route work, no cleaning!!"

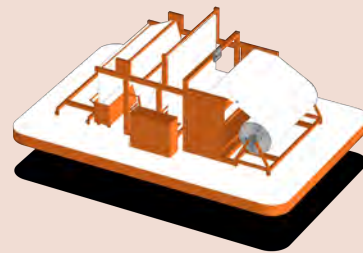
08



Instant Energy Monitoring and Optimization

Energy consumption analysis and optimization in all desired criteria such as Factory-Department-Machine-Process-Personnel-Time... "The steam consumption values in the 1200-1 machine started to rise above the normal level. In the 1200-1 machine, the temperature value is set to 90c. Although the Eliar control panel has closed the heating valve, there is a rise in temperature. There may be valve leakage, an automatic Eliar warning was entered via the predictive maintenance application and a notification was sent to the relevant parties."

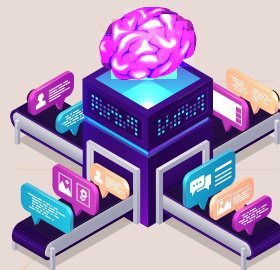
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Real Time Semi-Product Tracking

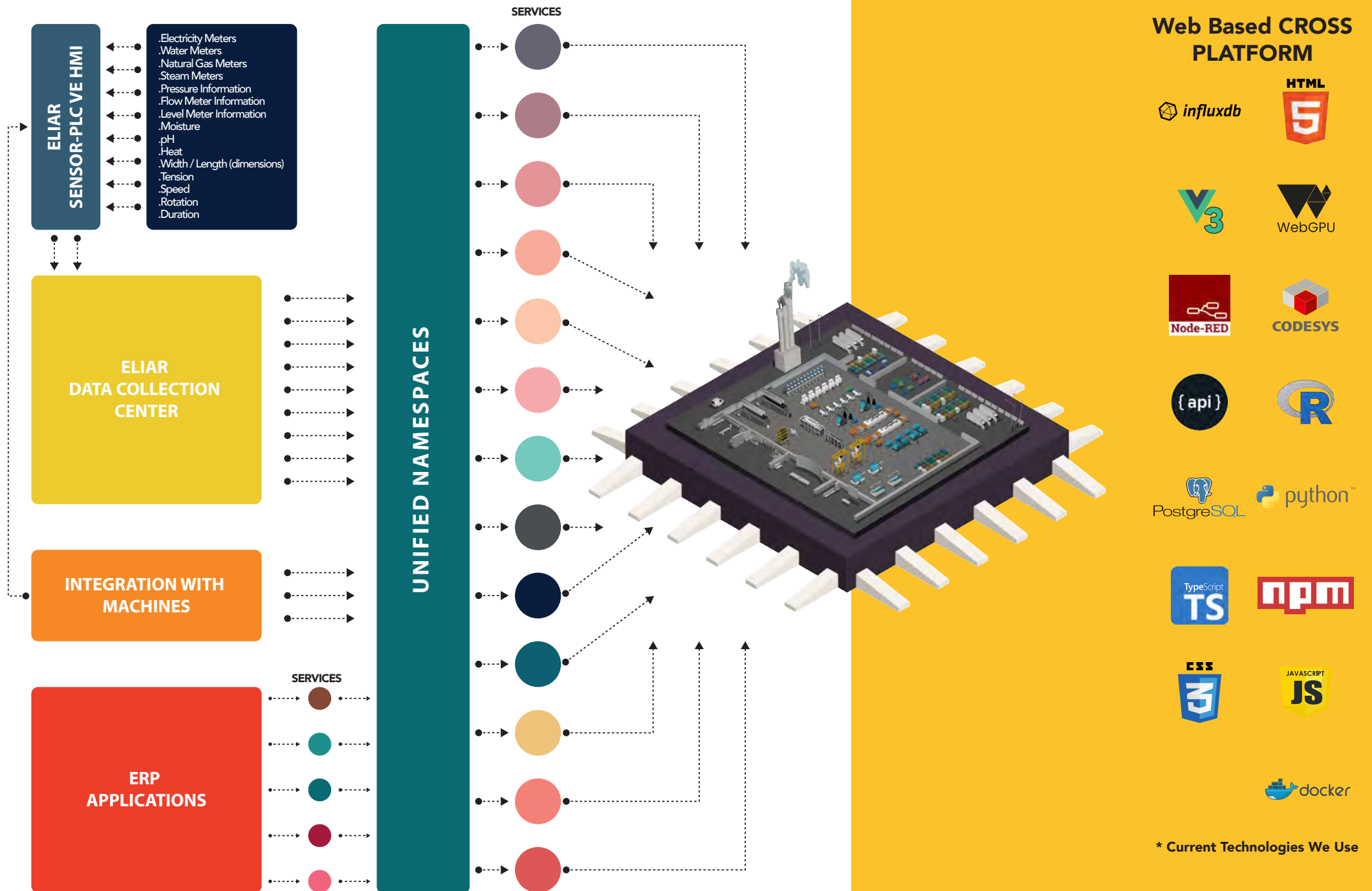
With the transfer of the factory to the digital world, the digitalization of semi-finished products also became inevitable. With the RFID technology it developed, Eliar offered the opportunity of operator-independent work order analysis without the need for barcode scanning. By going deeper into the calculation method, which can be obtained from the total production at the end of the month, or in cases where it can not be obtained by the experienced factory officials; It provides live semi-product tracking and bottleneck analysis by providing deadline cost analysis in desired criteria such as Customer-Order-Lot-Work Order-Quality-Color-Color Shade.

10



Predictive Maintenance

The EPM (Eliar Predictive Maintenance) module, which offers the ability to take precautions before a problem occurs by performing in-depth analyzes beyond standard control maintenance, prevents problems from occurring when there is a work order running on the machines, and provides the opportunity to take precautions and perform maintenance. "The Eliar RD96 requires an impeller change. The appropriate date for the exchange is automatically scheduled. Notification has been sent to the Maintenance-Repair department."



* Current Technologies We Use

ELIAR Products and Technologies



ELIAR **RD96**

You can watch our **RD96** promotional video by scanning the QR code on your mobile device.



ELIAR **PATERNOSTER**

You can watch our **PATERNOSTER** promotional video by scanning the QR code on your mobile device.



ELIAR **SLD GARMENT**

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ELIAR **RDD**

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ELIAR **RPD**

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ELIAR
SAT210



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ICT200



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ELIAR
THT125



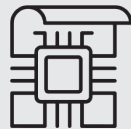
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ELIAR
7701ex



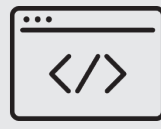
You can watch our **7701ex** promotional video by scanning the QR code on your mobile device.



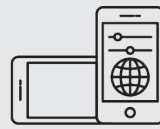
Embedded
Software



Hardware



PC
Software



Mobile
Application



Mechatronics



Robotics



Sensor



Control
Devices

Eliar Elektronik San. A.S.

Esentepe Mahallesi Saglam Fikir Sokak No:1

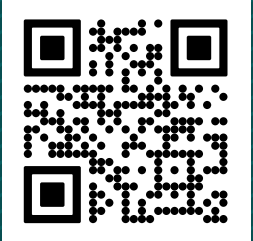
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