



# COŞKUN COMPANIES



## COSKUN COMPANY \_ Istanbul plant

Management center and main production area.



İstanbul Atatürk Havalimanı İhtisas Serbest Bölgesi,  
Yeşilköy Serbest Bölge Mah. Havalimanı Cad.

1/A Blok Sokak No: 13-15- PK: 34149 Bakırköy / İSTANBUL



## COSKUN\_Corlu plant

Production Area for backup/support production and  
piston rod production.

Cumhuriyet Mah. Ali Osman Çelebi Bulvarı  
No:147/A Çorlu/Tekirdağ



## COSKUN BVBA

Warehouse\_the stocking area in Belgium.

Industrierrein 4361 3800 Sint-Truiden Belgium





## COSKUN BVBA

Warehouse\_the stocking area in Belgium.



- Our main distribution center in Europa COSKUN BVBA is established in 2002 in Belgium/Sint-Truiden.



- Main objective of Coskun BVBA is to be close to the customers and provide logistic support.

Address : Industrierrein 4361 3800 Sint-Truiden Belgium

# COSKUN COMPANIES GROUP \_COSKUN Corlu PLANT

Company was purchased by COSKUN in 2003 from Tenneco Automotive - Monroe.

**The chromed and annealed shock absorber piston rod production.**

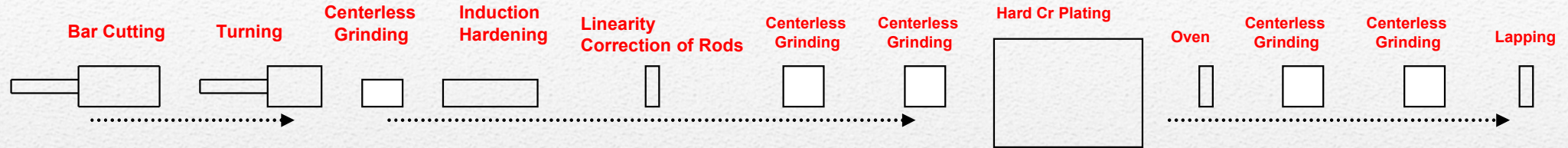


- Total area 65 acres
- Production capacity 6 million piston rod pcs / year

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# Rod Production Layout Plan in Coskun Corlu plant

In below, you can see our machine park and production line for the piston rod production where is in our Corlu plant.



**Bar Cutting :**  
1 pc. Rod Cutting

**Turning :**  
2 pcs. Gildemeister GLD 25  
2 pcs. Gildemeister GLD 20  
2 pcs. Mazak Multiplex 610  
1 pc. Mazak Multiplex 620  
1 pc. Mazak Nexsus  
2 pcs. Ramo CT2  
1 pc. Traub TNS 26  
2 pcs. Danubat 500/2TS/2CM  
2 pcs. Schütte

**Induction Hardening :**  
1 pc. FDF Induction harding  
1 pc. ELDEC Induction harding

**Straightening**  
1 pc. Straightening Machine

**Centerless Grinding :**  
9 pcs. Cincinnati 3-500 Twin Grip Centerless Grinding

**Super Finish :**  
2 pcs. Supfina lapping machine  
2 pcs Nagel superfinish+Eddy Current+Marposs

**Deep Drilling :**  
1 pc. TBT 850/4 Deep drilling machine  
1 pc. Brio bar-end machine center

**Other processes :**  
. 4 pcs. Escofier Thread Rolling  
. Hexagonal Punch Press  
. Turning the corner

**Chrome Plating :**  
4 Pcs. 4.5 Ton Cr Bath2  
Siemens Control PLC



**Coskun**

# **FREE ZONE PLANT**

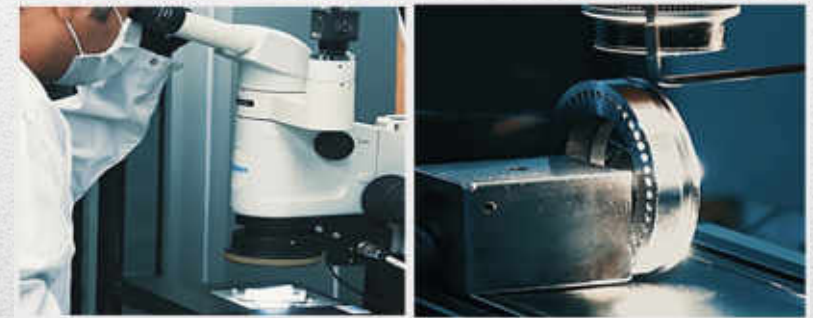


**Address : Istanbul Atatürk Havalimanı İhtisas Serbest Bölgesi, Yeşilköy Serbest Bölge Mah. Havalimanı Cad.  
1/A Blok Sokak No: 13-15- PK: 34149 Bakırköy / İSTANBUL**

# About us \_COSKUN COMPANY Istanbul Plant

- Total number of employees : 126
- White collar staff : 18
- Blue collar staff : 108
- 3.500 m2 closed area
- 62 pieces CNC machine
- 10 pieces Six-Spindle machine with NC
- 3 pcs CNC Six-Spindle machine
- IATF 16949 / AS-EN-9100 Quality Certificates

[www.coskunotomat.com.tr](http://www.coskunotomat.com.tr)



## About us

Renown for its superior and high-precision products in the metal machining industry, Coşkun Otomat was incorporated in 1976, Istanbul.



As an Original Equipment Manufacturer with its expert staff and latest technology usage, Coskun Otomat is at the service of the domestic (Turkey) and international automotive industry for more than 44 years. At present, the company performs its activities in its factory located in free-zone with a covered area of 3.500 sqm and the expert technical and administrative staff put their effort to provide the highest quality in customized orders, material supply, production and on-time delivery.

# About us \_COSKUN Customers



# Customers



**SACHS**

ZF Friedrichshafen AG



## PRODUCTS AND PRODUCTION TECHNOLOGY

Coskun manufactures high-precision, high-complexity and mission-critical components for its global and market-leading customers.

In strict conformance to customer demands and by employing high-precision machining methods, the company manufacture components from carbon alloy and stainless steel bars and cast inputs through CNC machines, single-shaft & multi-shaft lathing stations, grinding, honing, ultrasonic washing stations and dimensional control devices.

With its extensive portfolio of equipment capable of batch-manufacturing bars in a diameter range of 3 to 250 mm at a precision as high as 1 micron, the company manufactures high-precision machining products.

# Raw Material Warehouse



For each incoming raw material is given a batch number to implement a traceability system. All parts produced are followed up with batch number from input till to output. All feedbacks regarding parts coming from customer are followed up with batch number. All parts during the production are moved together this batch number.



## STAINLESS STEELS AUSTENITIC

Corrosion-resistant, non-magnetic steels

X8CrNiS18-9 - Nr.1.4305 - AISI 303

X6CrNiMoTi17-12-2 - Nr.1.4571 - AISI 316Ti

X5CrNiMo17-12-2 - Nr.1.4401 - AISI 316

X5CrNi18-10 - Nr.1.4301 - AISI 304

X2CrNiMo17-12-2 - Nr.1.4404 - AISI 316L

## Corrosion-resistant, temperable steels

X20Cr13 - Nr.1.4021 - AISI 420A

X14CrMoS17 - Nr.1.4104 - AISI 430F

X46Cr13 - Nr.1.4034 - AISI 420C1

## Aluminium series ;

EN AW 2014-T3 or T4 / 7075-T6 / 6082-T6

## Specail Steels ;

11SMnPb30 - Nr. 1.0718 / ETG 100 / 11SMn30

44SMn28 / HSXZ12 /

SCHMOLZ  
BICKENBACH



 **Rodacciai.**

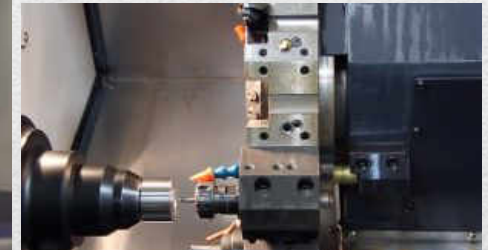
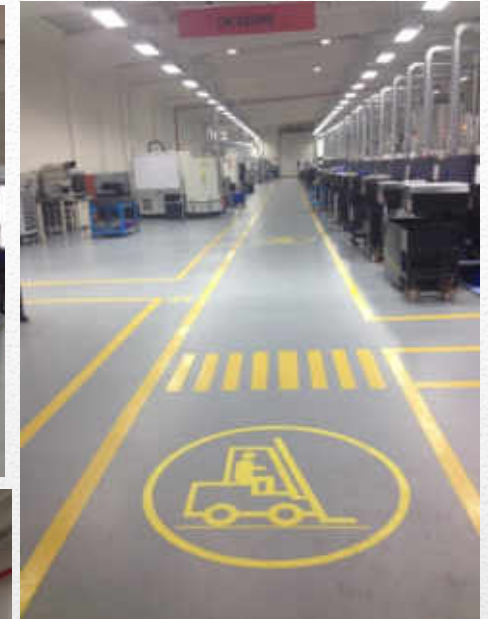
**SCHWERT**  
TOOL STEELS



Ugitech



# Production Area - Machining



**Coskun company is able to machine the parts with complex geometry in high precision and quality with it's skilled staff in their field and deliver them to its customers in the targeted time. Our company does all machining manufacturing parts within the standards of customer technical drawings.**

# Production Area - Machining

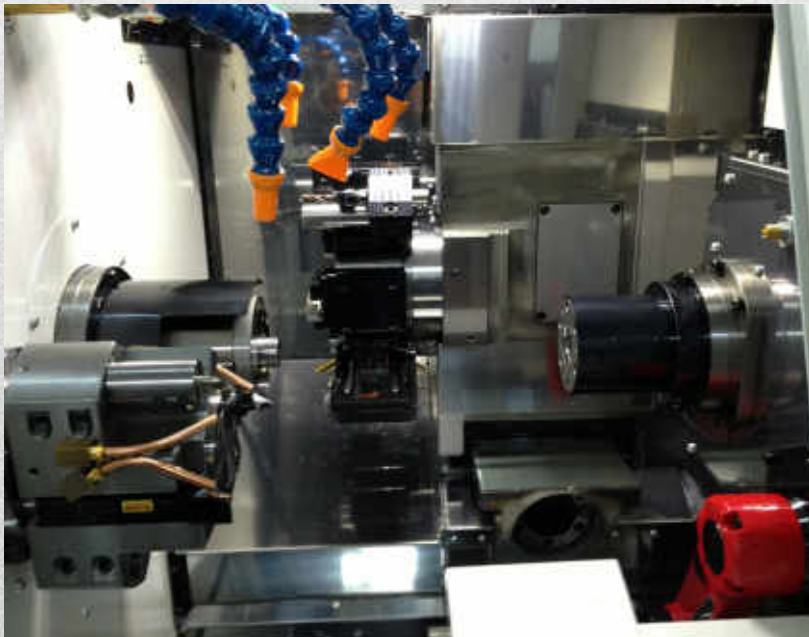


Coskun has capability of machining different kinds of materials like aluminum, titanium, stainless steel, various grades of steel, precise casting, all engineering plastics, etc. in accordance with related standards and customer requirements utilizing mostly 4 and 8 axis CNC machines and high technology turning and milling machines.

# Production Area - Machining



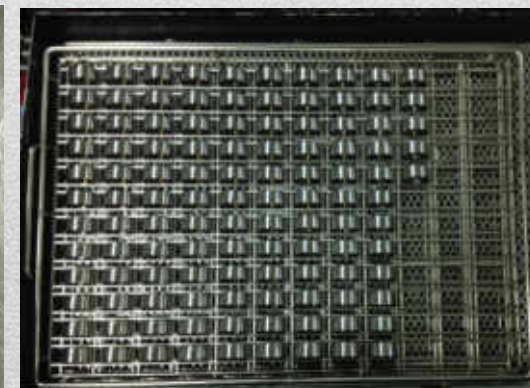
In process design, the finished part production with a single machining operation are targeted.



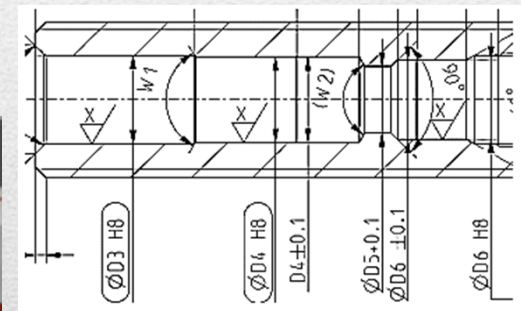
# Production Area - Machining



The produced parts in one set-up are placed within the special trays.



# CNC production – sensitive technology CNC machines



## Citizen LFV Cutting Technology – (Low Frequency Vibration Cutting)

*The servo axes are vibrated in the axial direction and cutting is performed while synchronizing this vibration with the rotation of the spindle.*

- Chips are broken up and chip nesting and entangling with the material or tool are eliminated.
- Cutting resistance is lowered.
- Effectiveness with less operator intervention is increased.

# CNC production – LFV Technology

Conventional cutting



LFV



Material : SUS304  
Weight : 14.3g



LFV technology stands for low frequency vibration cutting.



# CNC production – Some CNC machine types used in production



Citizen Cincom L20 VIII / LFV technology



Citizen Cincom L32 VIII / LFV technology



MAZAK VARIAXIS I-600 / MACHINING CENTRE



CNC Turning and Milling Machine  
MORI SEIKI ZT 1500 YB



Miyano BNE-51SY6 /



Miyano 42 DHY

# CNC production – INDEX MS22-6 / CNC Multi-Spindle Automatic Lathe



# CNC production – KNOLL Filtration System



## FILTERING / CLEANING SYSTEM TO AVOID SURFACE DAMAGES

- Cleaning of coolant lubricants, emulsions and cutting oils without filter residues.
- A vacuum pump which has been directly connected with the internal chamber of a filter drum sucks the medium into the interior of the drum.
- In doing so, the dirt particles on the surface of the filter drum are kept back by means of a superfine filter mesh.
- Due to the resistance of the accumulating filter cake, the vacuum rises.
- When an adjustable vacuum is reached, the drum rinsing occurs automatically.
- An installed scraper chain discharges the sludge.

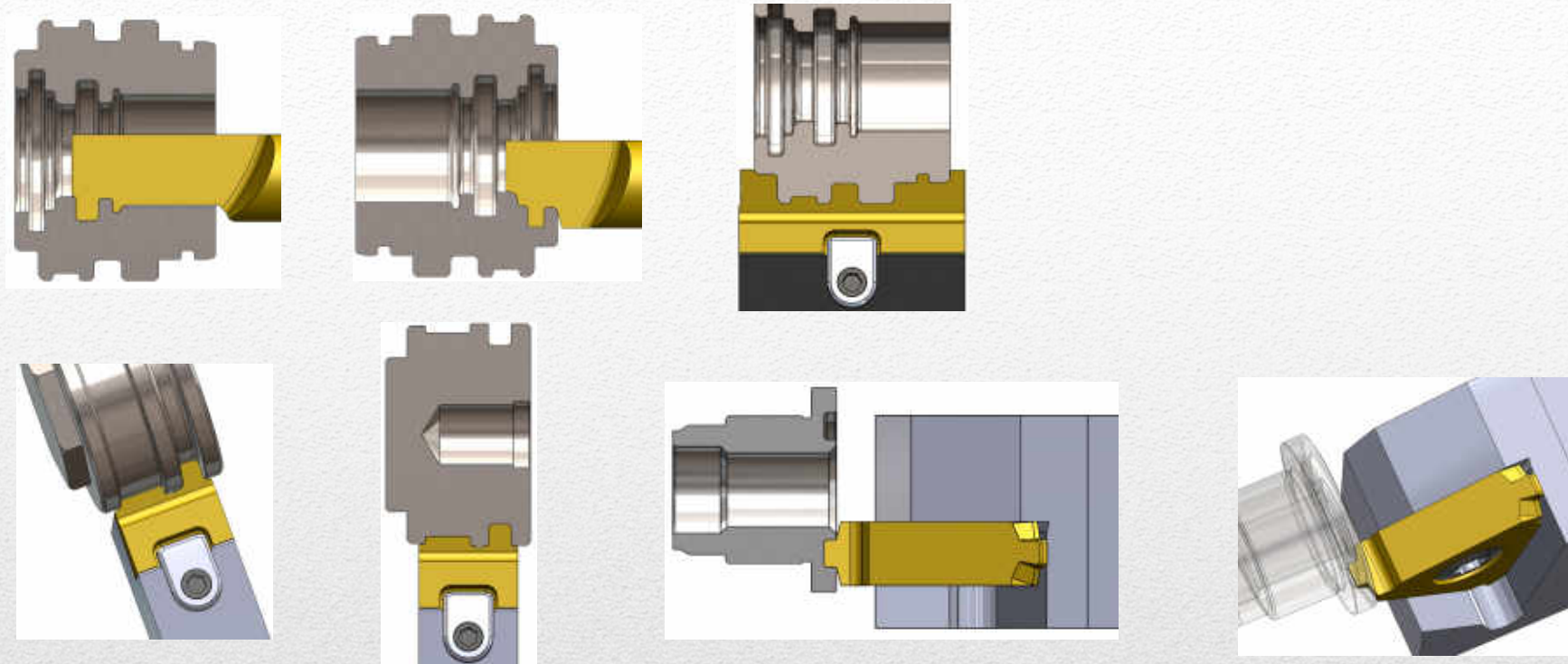
**KNOLL**



# CNC production – MAZAK VARIAXIS I-600 CNC MACHINING CENTER

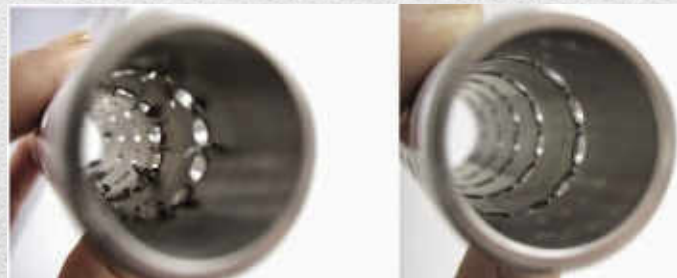


## CNC production – special toolings



Use of special profile tools for the inner and outer surfaces to generate and correctly in one time all dimensions.

# high –precision machining methods

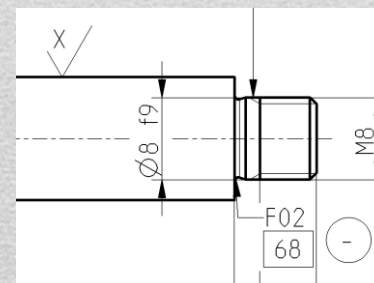


Honning method



Air gauge

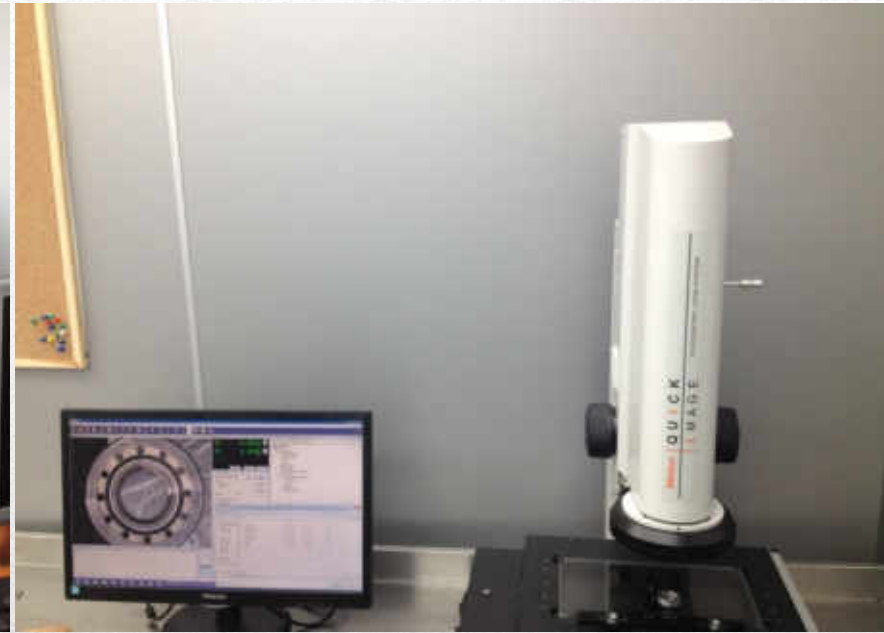
$$\sqrt{x} = \sqrt{\frac{\text{glattgewalzt/burnished}}{R_{\max} 2.5}}$$



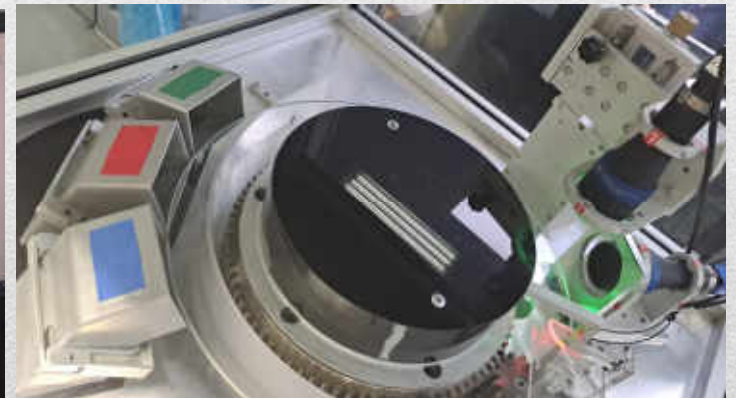
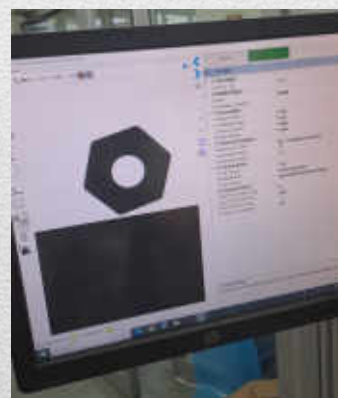
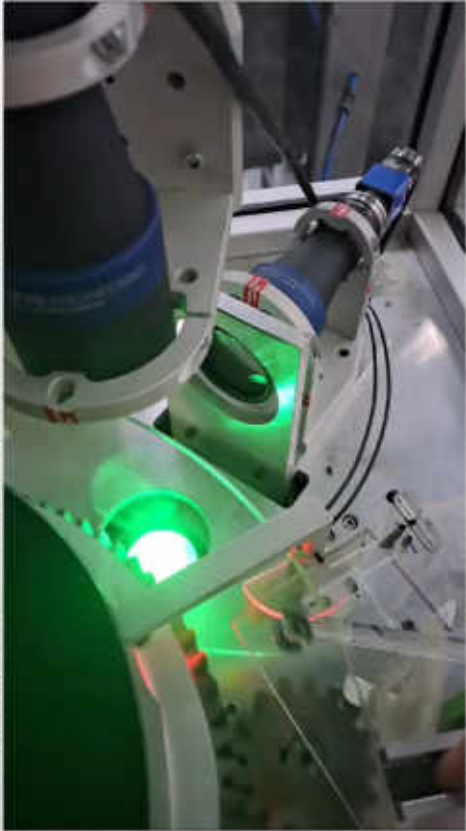
# Quality Laboratory and engineering office



## 3D- Mitutoyo Crysta Apex CMM & Quick Scope & Quick Image & Contracer & Roughness Testers & Laser Microscope

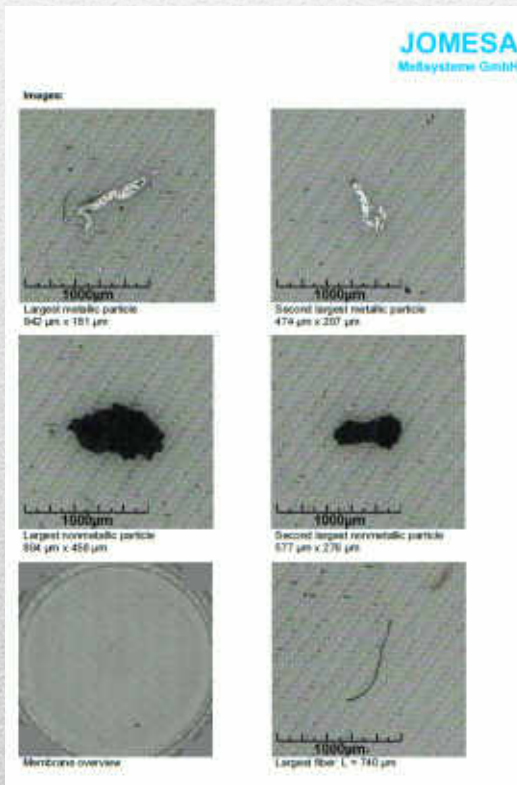
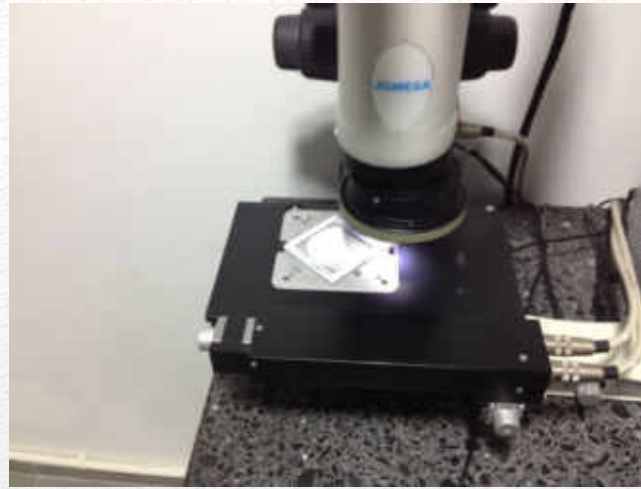
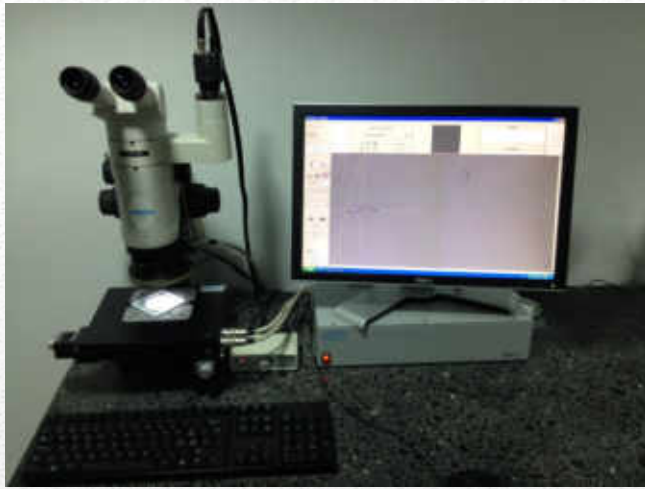


# Quality - 100% camera measurement





# Jomesa Contamination measurement analysis



## Contamination Evaluation; Cleanliness Reports

Contamination Test on Jomesa test device;

Microscopic analysis starts with the filter membrane, which has to be placed onto the analyzing system.

After placing the filter membrane onto the analyzing system, the measurement method has to be selected

Then the filter identification data is entered into a database sheet. Then the the automatic processing is started.

Reports are freely configurable and can be adapted to customer requirements.



# SPC Control - in real time

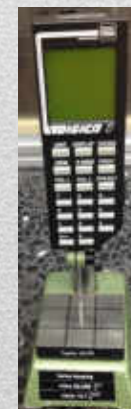


SPC software has the ability to connect and acquire data from many measuring device.

New control system provide us that we produced the parts within control limits instead of the technical drawing limits.

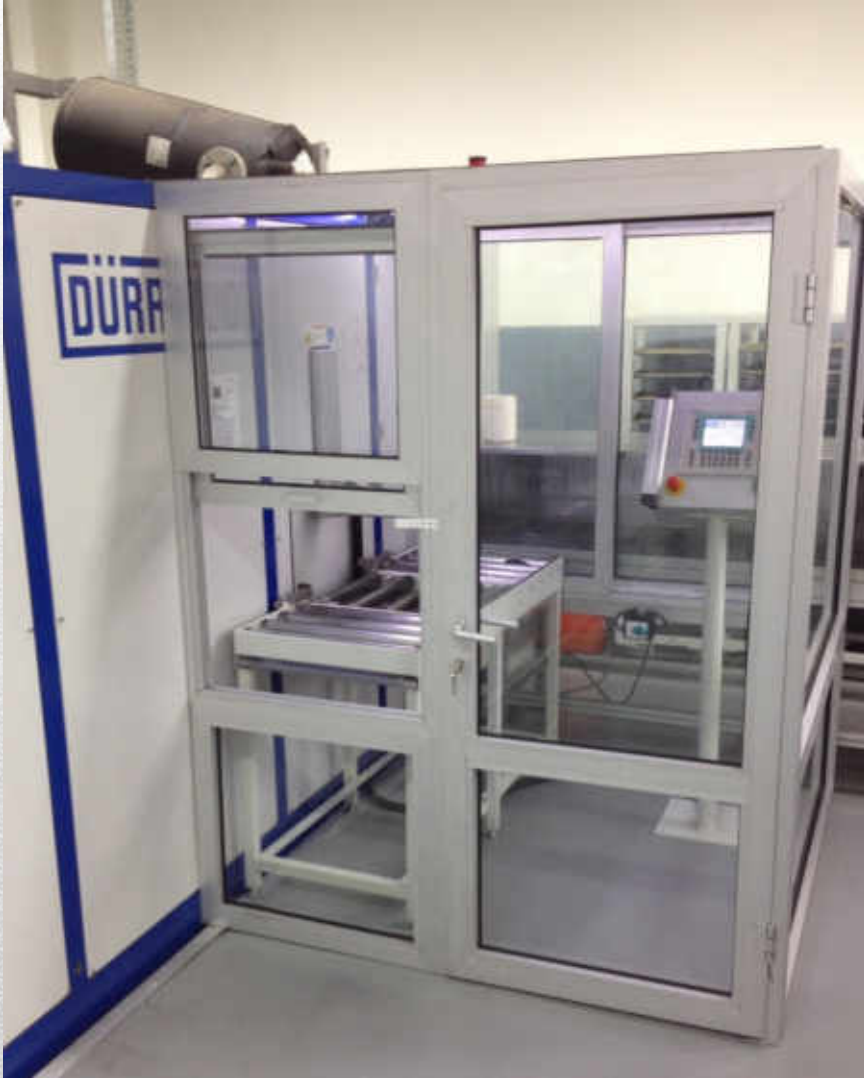


we use a special spc software system developed by mitutoyo in our production process control.



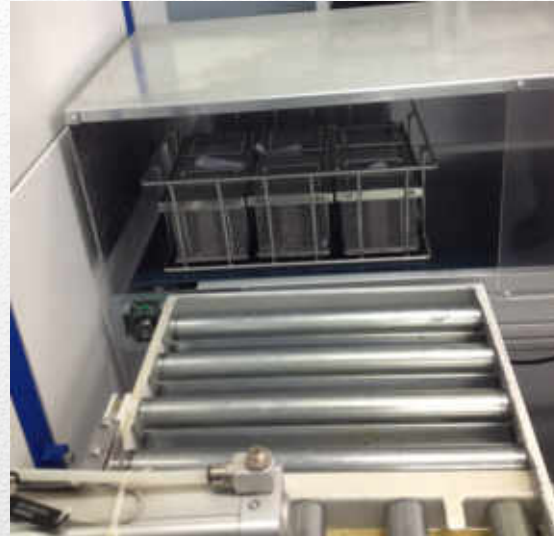
# Cleaning Operation

The protection area after cleaning operation at the exit of DÜRR machine



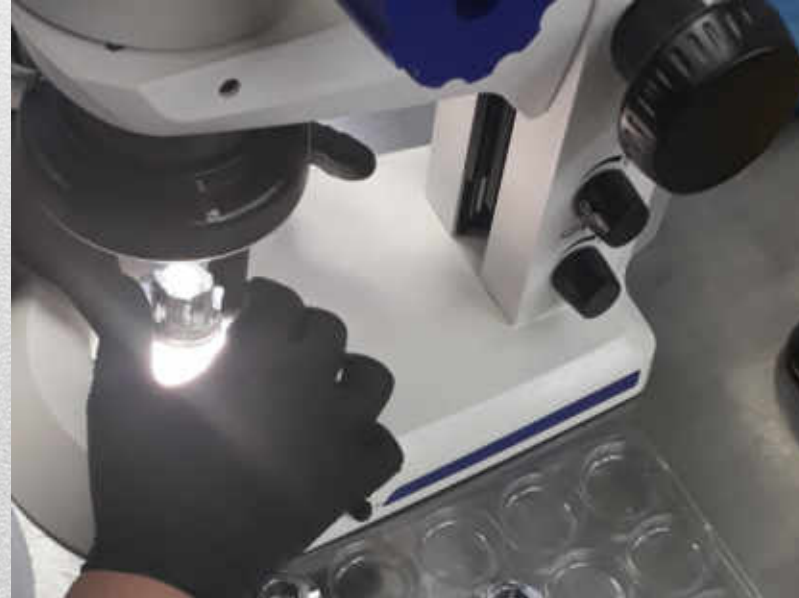
# Cleaning Operation

The washed parts are controlled 100% in the clean room



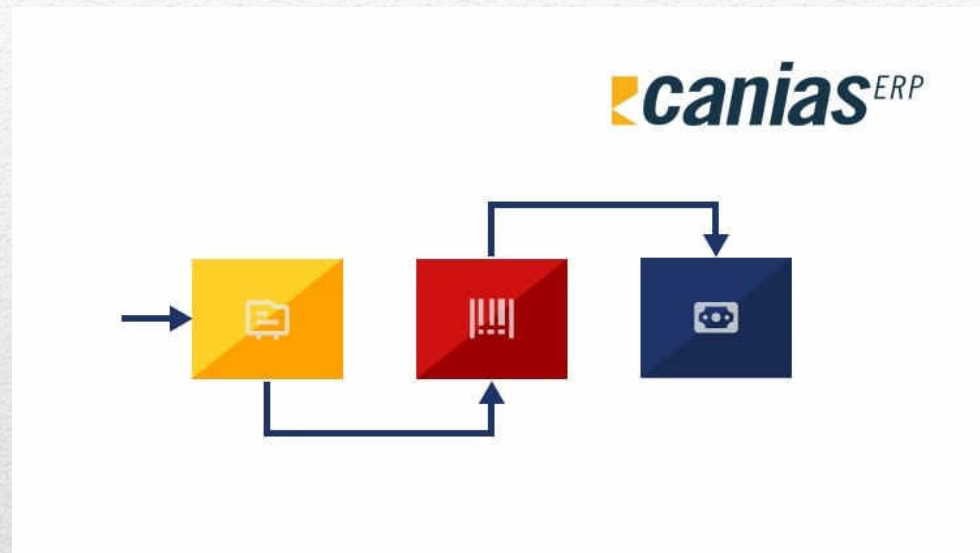
# Cleaning Operation

The washed parts are controlled 100% before packaging.



# ERP production program

All production system from input to output is managed via Canias ERP system.



# Packaging Operation

Packaging operations are executed according to customer requirements. Special separators which indicates machine code number are applied with special packaging methods.



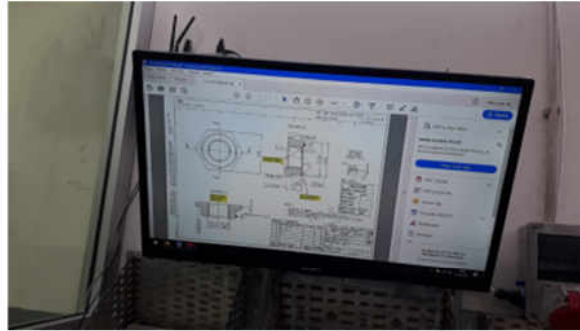
## Packaging Area



Only 1 type of product is accepted from the window into the packing room.



Only 1 type of product is accepted from the window into the packing room.



Packaging information is shown on the screen after barcode reading of incoming product



Barcode re-reading for packaging label after packing operation. Product label is created automatically after barcode reading



The packaged products go out from other window of the packing room.



Packing room



# Packaging Operation

Our general packaging method for the contaminated parts → The used materials in packaging operation : VCI plastic bag + VCI tablet (rust inhibitor) + Plastic separator + Carton box



# Labeling Operation

In the labeling process is used barcoding system. Also on each product box is marked an operator code who performs the checking operation.



**Thank you for your attention**