

## MECHANIC & AUTOMATION SYSTEM DESIGN

SIBERNETIK with her experienced staff in custom machinery sector has completed many projects in cooperation with the leading companies of automotive industry.

Our dynamic staff works in a perfect harmony with our customers from the beginning of a project for the entire technological life of the product.

We intend to use the latest production and automation techniques in all the projects we carry on, in order to meet the demands of our customers.

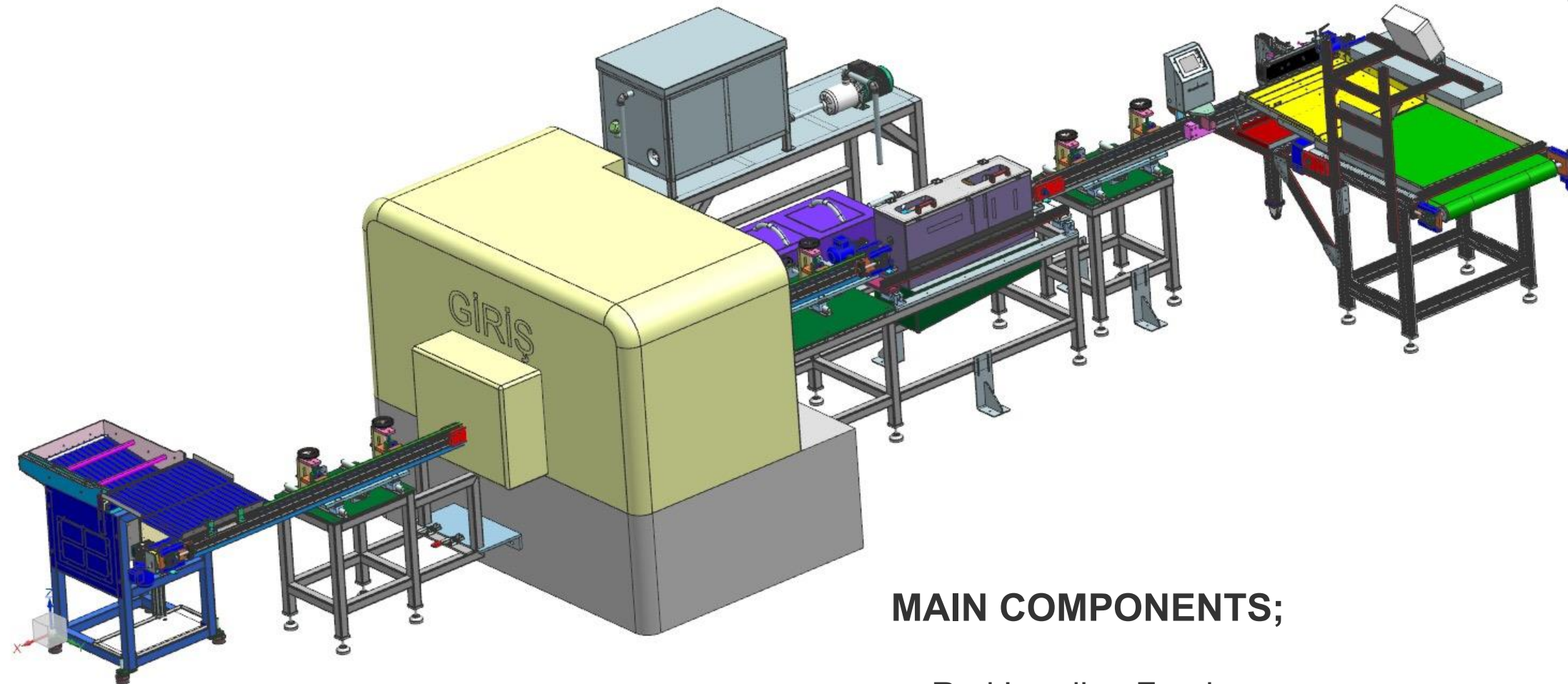
This document describes the technical characteristics of Steering Column Test Station designed and produced by SIBERNETIK



*Rod Diameter Measurement System*

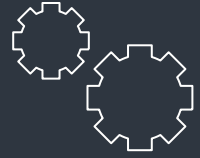
# ROD DIAMETER MEASUREMENT SYSTEM

A step feeder & diameter measurement system for automatically loading / unloading of rods through grinding machines



## MAIN COMPONENTS;

- Rod Loading Feeder
- Inlet Conveyor
- Outlet Conveyor
- Washing & Drying System
- OK / NOK Rods Separator



### CUSTOMARY SOLUTIONS

Customary solutions are developed that will meet your demands according to your fabrication standards



### 3D CAD DESIGN

Systems are designed, using registered 3D CAD softwares on professional workstations



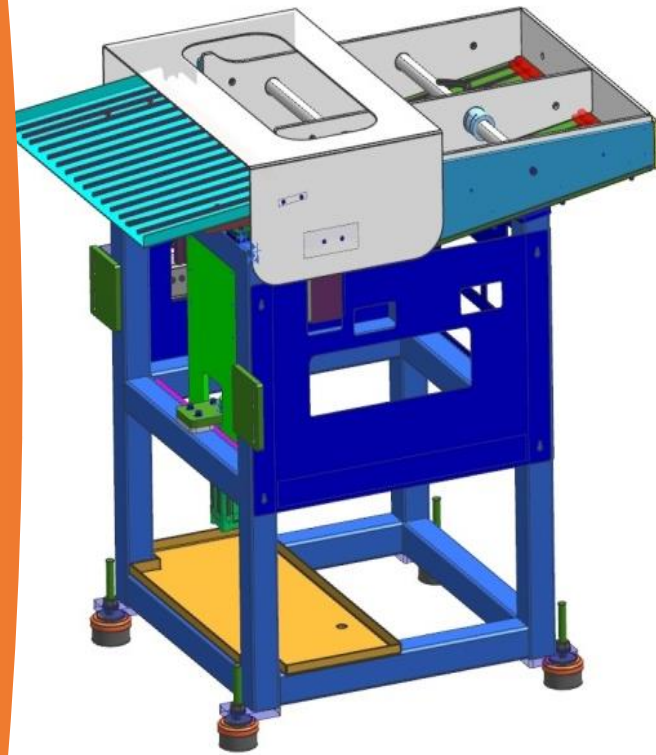
### INNOVATIVE SOLUTIONS

One of the best solutions is applied after all alternatives are offered and discussed in cooperation



# ROD LOADING FEEDER

Step feeder that is used to load the rods one by one to the conveyor

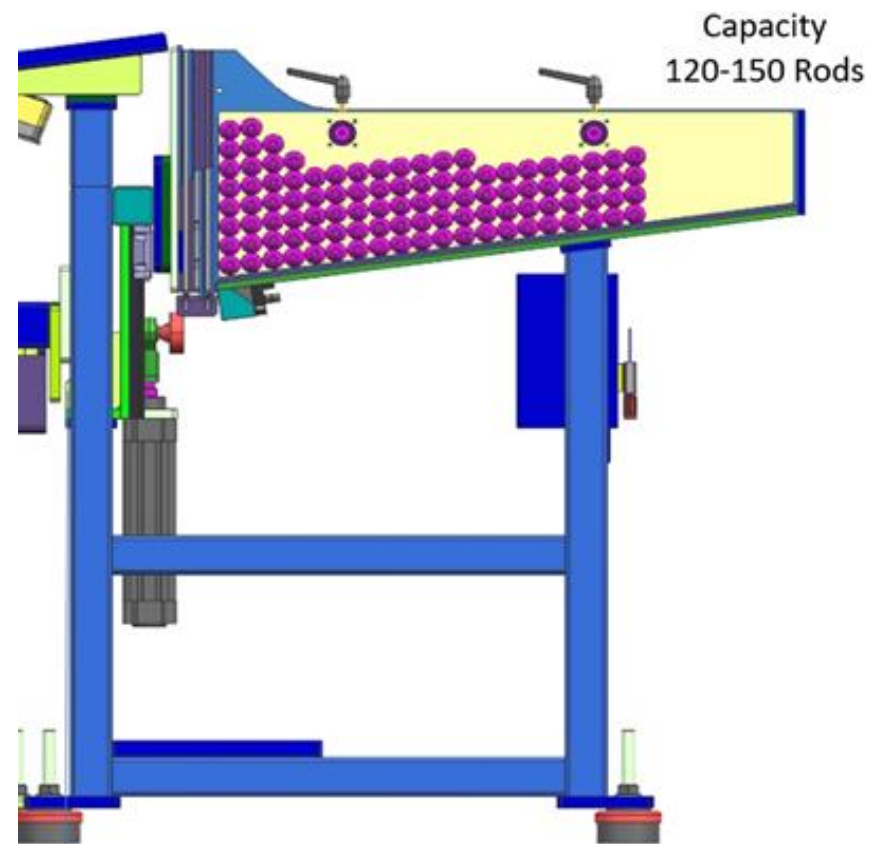


- ✓ Pneumatically Actuated,
- ✓ Manual Adjustment according to rod length,
- ✓ Suitable for loading rods in different diameters without any adjustment,
- ✓ Up to 150 rods capacity,
- ✓ Rod Presence & Fullness sensors,
- ✓ Can be integrated to automation system easily with Digital I/O,

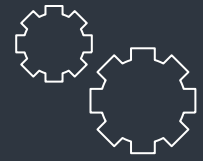


## Safety Precautions

- ✓ Moving areas are covered by safety covers with magnetic switches,
- ✓ All surfaces that will be in contact with rods are coated with plastic material,



- Fabrication Conditions,
- Lay-Out
- Mechanic System
- Pneumatic System
- Ergonomics
- Safety



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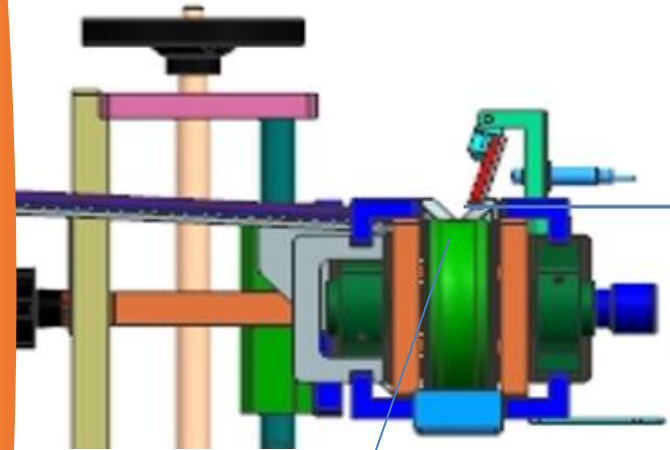


## INNOVATIVE SOLUTIONS

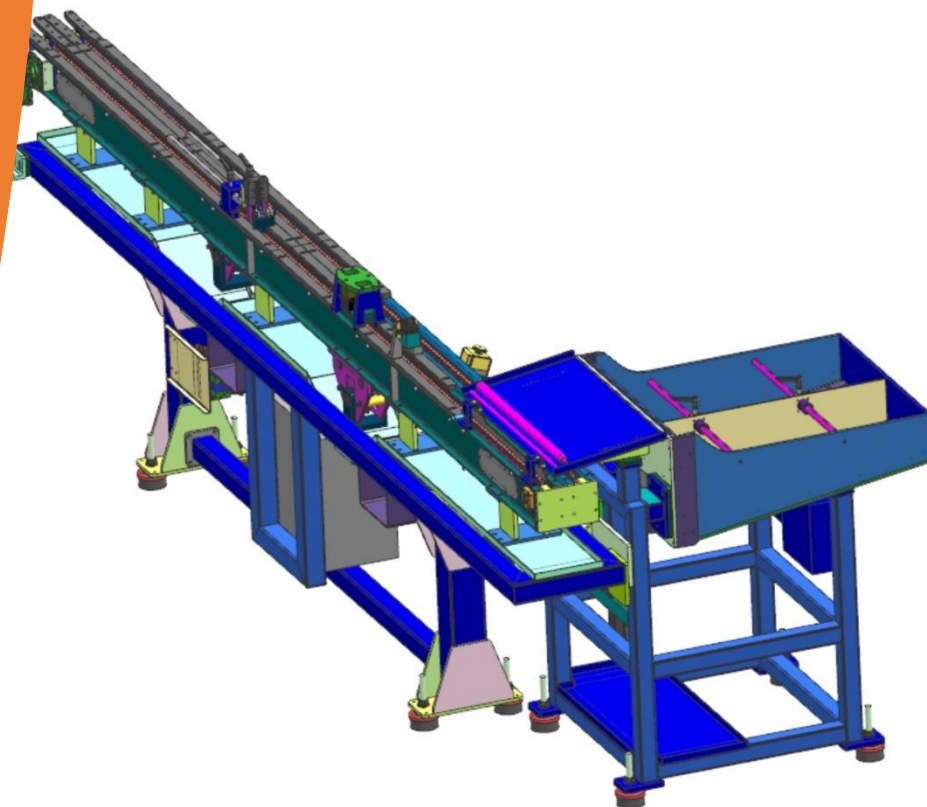
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# CONVEYOR

- ✓ Chain or Belt Conveyor applications are possible,
- ✓ Rod Presence & Fullness Sensors
- ✓ Rod Stopper Systems on different positions,
- ✓ Speed Adjustment Possibility,
- ✓ Multi Channel Conveyor Applications,
- ✓ Height Adjustment & Back – Forth Adjustment Possibility to absorb the changes rise from grinder renewal,

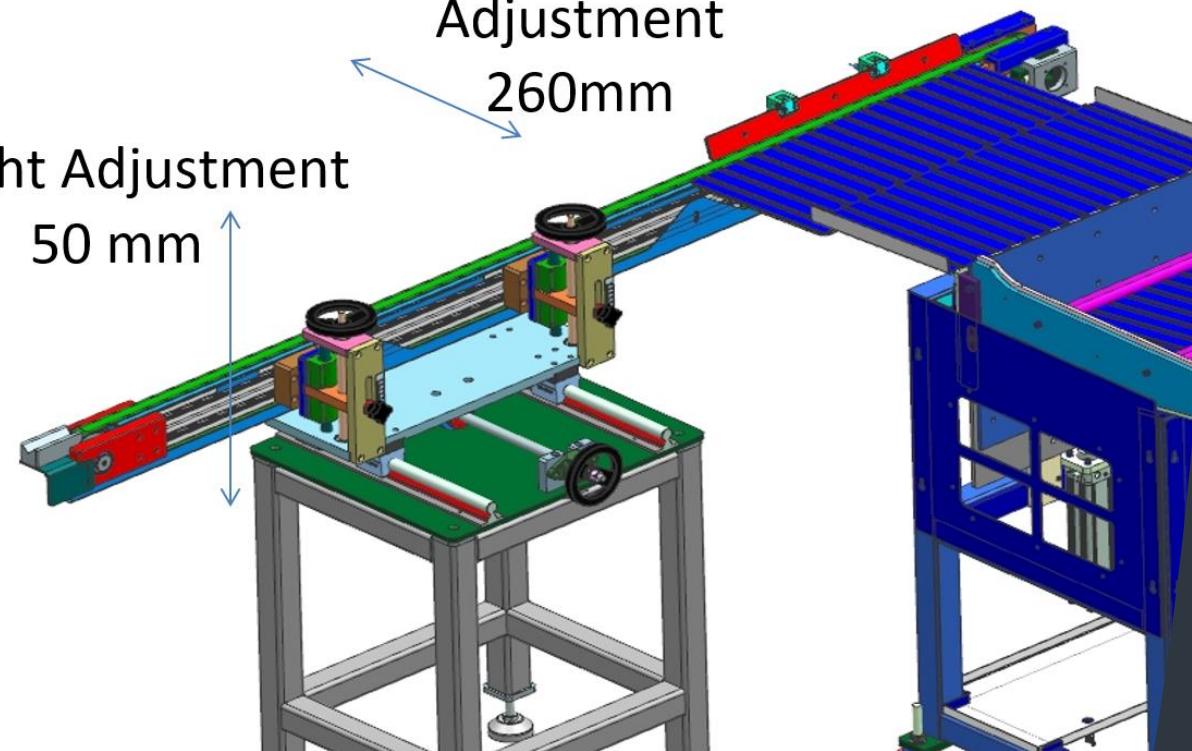


Special Machined Belt Form



Back - Forth  
Adjustment  
260mm

Height Adjustment  
50 mm



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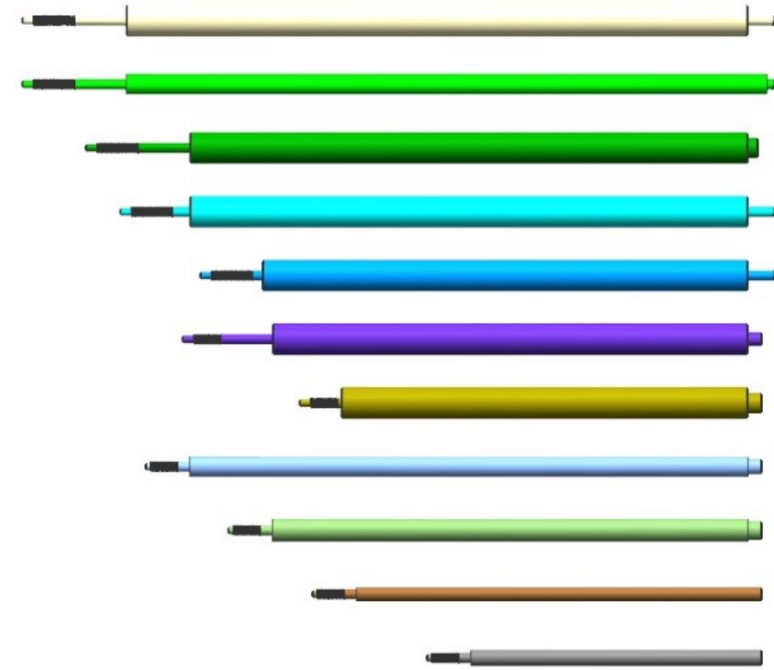
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# ROD DIAMETER MEASUREMENT SYSTEM

- ✓ Measuring of the rods moving on belt conveyor,
- ✓ KEYENCE diameter measuring sensor,
- ✓ Monitoring of the real rod diameter values,
- ✓ Can be used for rods with different diameter with manual adjustment,
- ✓ Can be used for rods with different length without adjustment,
- ✓ Washing & Drying the rods with pressurized water and air before measuring,



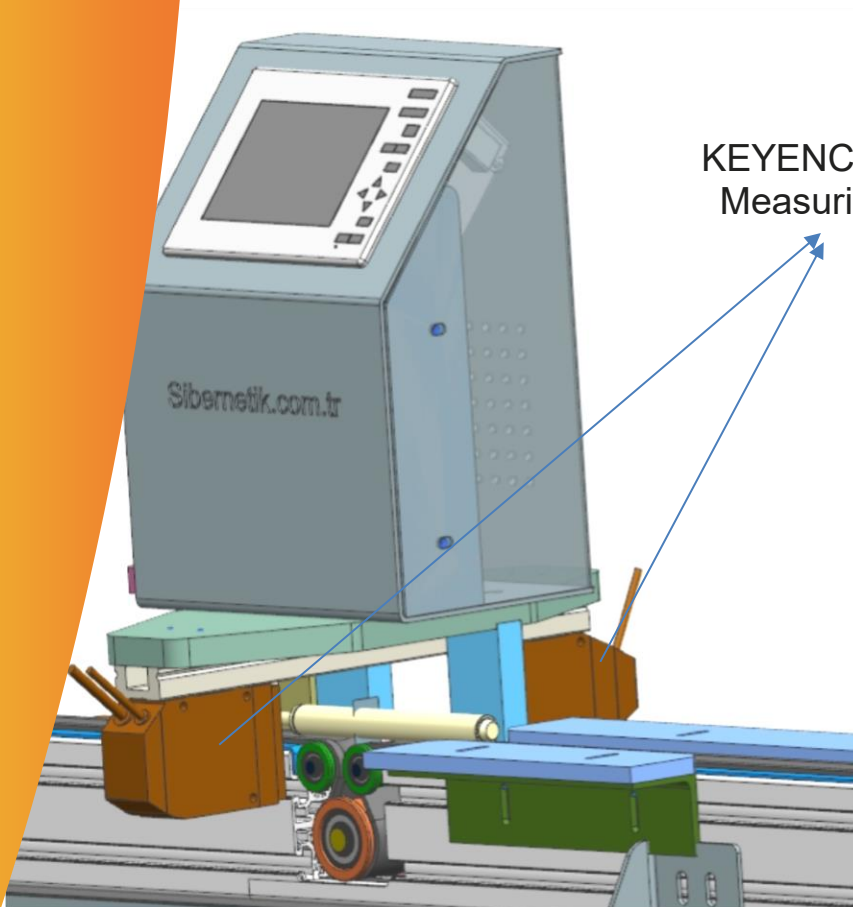
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KEYENCE Diameter Measuring Sensor



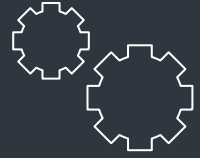
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# WASHING & DRYING SYSTEM

- ✓ Washing with pressurized water,
- ✓ Custom design spraying nozzles,
- ✓ Closed loop water plumbing system,
- ✓ Filtration and heating of the water,
- ✓ Standard air spraying elements,
- ✓ Washing & Drying the rods with pressurized water and air before measuring,

Pressurized Water  
Nozzles for Washing

Pressurized Air  
Nozzles for Drying



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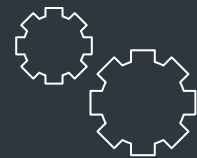
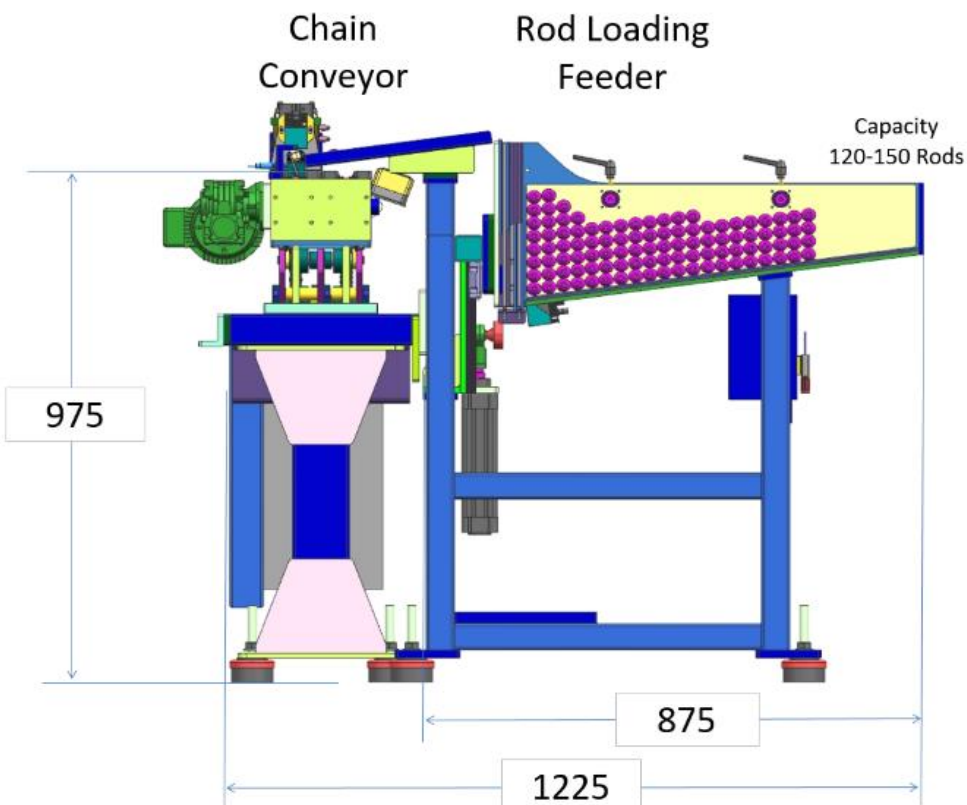
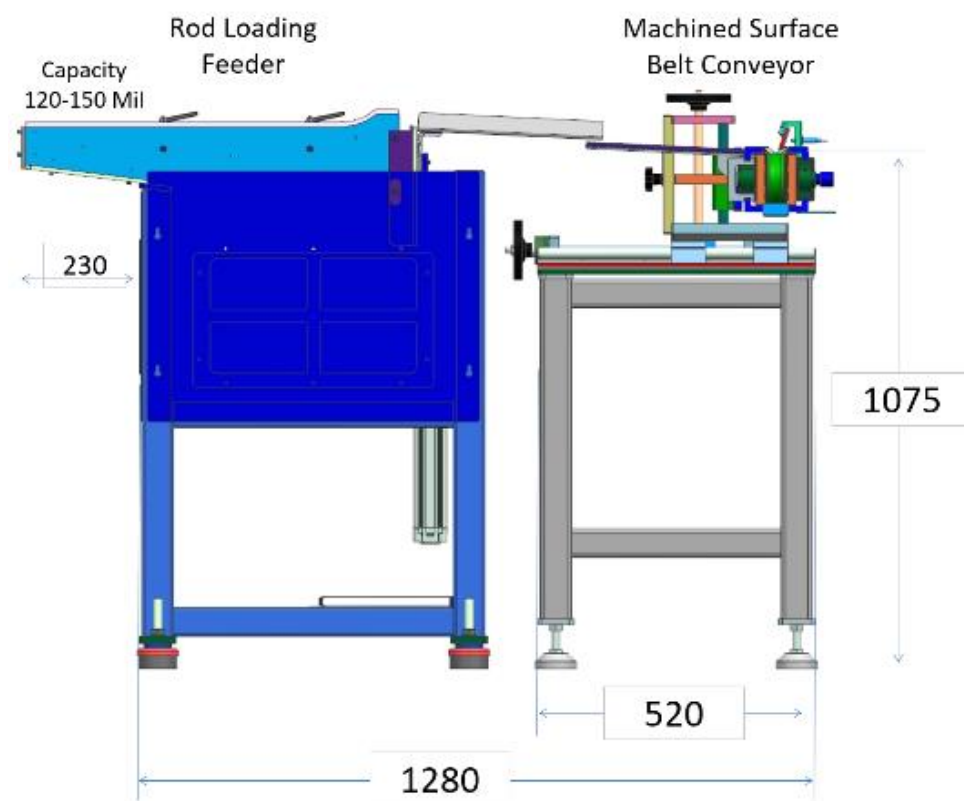
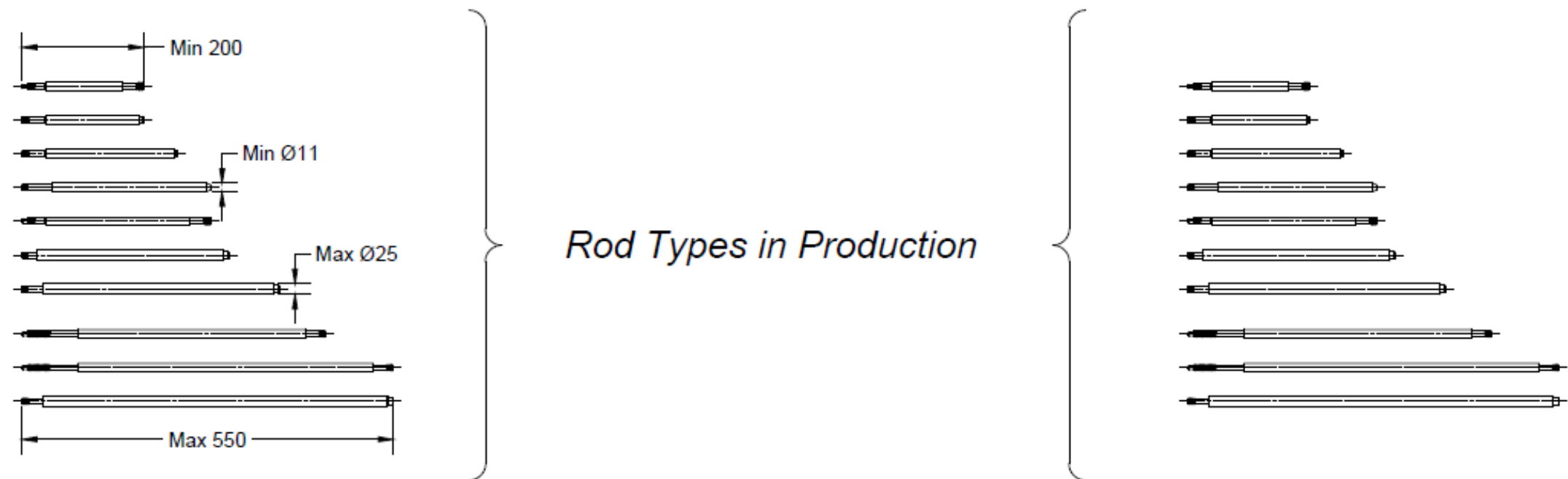


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# DIMENSIONS



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