



USER GUIDE

UNI-TROL GARAGE EQUIPMENT







Thanks

First of all, thank you for choosing Elegance CNC Wheel Diamond Cutting Expert.

Before starting to use the product, make sure you have received enough training and carefully read the Elegance User Manual. Follow the warnings and directions in this User Manual for both your own safety and to ensure the long-lasting use of the product.

Failure to follow the warnings and instructions can result in serious injuries and accidents.

Product damage caused by not following the instructions is not covered by the manufacturer's "Limited Warranty". The standard equipment or product description of the product may vary according to the following factors:

- Model
- Order
- Local Version
- Validity/Availability

The manufacturer reserves the right to make changes in the following areas:

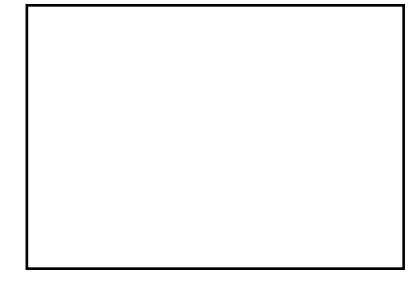
- Design
- Equipment
- Technical Specifications

For this reason, hardware and descriptions on the product may differ from those in the picture. The following documents are integral parts of the product:

- User Manual
- Warning Labels
- Technical Information Labels

Always keep the specified documents. You sell the product, absolutely give all documents to the new owner.

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The following symbols are found in this user manual.

A CAUTION:

CAUTION: This symbol is used to remind you of points that you should pay attention to. Read the areas where you see this symbol carefully. If these warnings are not followed, accidents and injuries may occur

A WARNING:

WARNING: This symbol is used to draw your attention to certain warnings. You can avoid accidents by being sensitive to these warnings.

A IMPORTANT:

IMPORTANT: This symbol is used to draw your attention and alert you to important issues.

REMINDER:

REMINDER: This symbol and box are used to make reminders that may facilitate use.

SCREEN WARNINGS:

SCREEN WARNINGS: This symbol and box are used to show the list of Pop-Up warnings that will appear while using the interface.

(i) NOTE:

NOTE: This symbol and box are used to make a model reminder.

Models			TP-01H	TP-01HV	L-01H	L-01HV	TPL-01H	TPI-01HV
Wheel Capacity	•	22" Vertical Cutting 12" Chuck /w reinforced BlackChrome Clamps 15" max. Cut height (381 mm)	√ × √ √	√ √ √ √	✓ × ✓ ✓	√ √ √ √	✓ × ✓ ✓	\frac{1}{\sqrt{1}} \frac{1}{\sqrt{1}} \frac{1}{\sqrt{1}}
Software	•	Elegance Cutting Expert Software Windows Operating System	√ √	√ √	√ √	√ √	√ √	√ √
Computer	•	Standart 17,3" IPS monitor 802.11ac Wi-Fi 1.1 kW X axis motor 1.1 kW Z axis motor /w brake 380V 5.5 kW spindle motor (1250 rpm)	√ √ √ √	\ \ \ \ \	\ \ \ \ \	✓ ✓ ✓ ✓	√ √ √ √	√ √ √ √

Dimensions

• Width 1320 mm

Length 1620 mmHeight 2245mmWeight (kg) 970

Safety Guidelines and Labels

Safety Guidelines

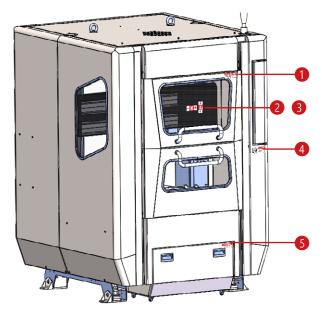
In this section, safety reminders are made in order to prevent accidents that may occur during the use of the product. Before starting to use the product, read the user manual and safety instructions carefully.

Safety.1 General Safety Reminders

- The operator of this machine must be well trained.
- The operation of the machine should not contradict the instructions in the instruction manual.
- Before using the machine, read the user manual thoroughly.
- The area where the machine will be used should be well lit.
- The area where the machine will be used must be clean and tidy.
- Items that may pose a security threat should be removed from the environment of the machine.

- The operator must wear non-slip shoes and protective shoes against any parts that may fall on their feet
- The operator should wear safety glasses to protect his eyes.
- Do not work with long hair that may cause an accident, tie your hair back or wear a hat to protect your hair.
- Do not operate with gloves.
- Do not hold or touch chips by hand.
- Do not wear loose clothing while using the machine.
- Do not wear accessories such as necklaces and bracelets while operating the machine.
- Do not operate or maintain the machine when you feel unwell or under the influence of alcohol.
- Do not climb on the machine, use a ladder.
- Do not touch the rotating parts of the machine with your hand or body.

- Do not touch the rotating parts of the machine with hand tools or other tools
- Do not open the electrical panel cover, cable terminal or other protection equipment.
- Do not use the compressed air from the air compressor to clean the electrical parts of the machine, CNC units and electrical panel.
- Do not wear/put magnetic accessories that will hinder the operation of the control unit and drivers.



∆WARNING!

When the machine is running on AUTO mode, keep the door CLOSED!

Label 1

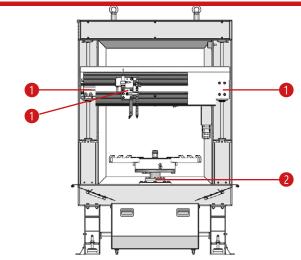


Label 2



Label 3

Periodic Lubrication Labels





Label 4



DO NOT OPERATE the machine without the chip tray.

Label 6



AWARNING!

DO NOT OPERATE WITHOUT **CLOSING DOOR!**

AWARNING!

I- THE SPINDLE SPEED RECOMMENDED IN THE TECHNICAL DATA OF CUTTING TOOLS MUST NEVER BE EXCEEDED. FAILURE TO DO THIS MAY CAUSE IN A SERIOUS ACCIDENT.

2- LUBRICATE THE SPINDLE IN THE PERIODS RECOMMENDED IN THE USER MANUAL.

SAFETY PRECAUTIONS

I- READ THE INSTRUCTION MANUAL before starting and operating the

2- STRICTLY OBSERVE all instructions written on the caution plates. This machine is designed and manufactured for well-trained operators, who have a basic knowledge of machine operation.

NEVER OPERATE the machine without the protective doors, covers,

4- NEVER OFENALE the matchine vinitions the protective access, covers, glasses and other safety parts in place, estings of CNC parameters without consulting the manufacturer of the machine.

4- The machine starts and moves automatically, DO NOT TOUCH and DO NOT STAND BY the rotating or moving parts.

7- DO NOT OFERATE the machine without making sure that the rim

clamps are tight.

8- DO NOT OPERATE the machine with the gloves on.

9- DO NOT WEAR loose clothing while operating the machine.

10- DO NOT OPERATE the machine with accessories as necklace.

11- USE safety glasses and anti-slip shoes.
12- DO NOT HOLD or TOUCH CHIPS by hand.
13- ALWAYS KEEP THE POWER SUPPLY OFF while performing

maintenance, repairs and checks of the machine.

14- NEVER REMOVE or OBSTRUCT the view of any warning plates on

FAILURE TO OBSERVE THE ABOVE INSTRUCTIONS MAY

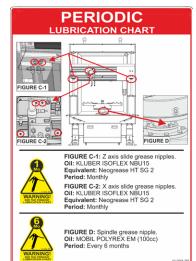
Label 7



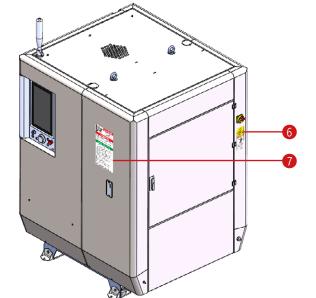
Label 1



Label 2



Label 3

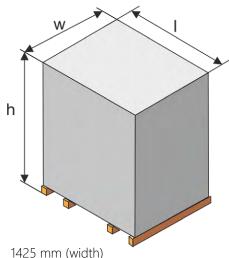






Transport and Installation

Package Sizes



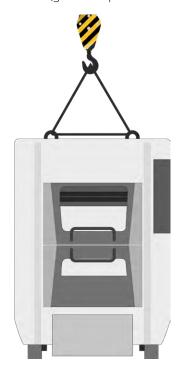
1760 mm (length) h : 2150 mm (height)

Transport and Shipping

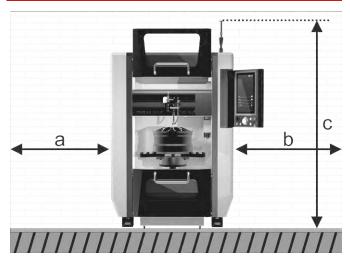


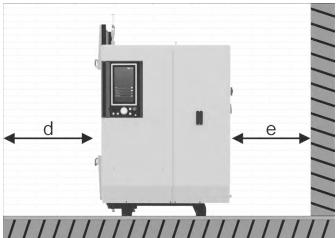
Gross weight: 1100 kg. Net weight: 970 kg.

- During shipping and transportation, product should be kept in its original box to avoid damage to the product's parts. Follow the transport and shipping warnings on the box
- Keep the product in vertical position during transportation.
- Do not drop the machine during transportation and protect it against impacts.
- Malfunctions and damages that occur during transportation after the product is delivered to the customer/ shipping company are not covered by the warranty.
- During transport, keep your device in an upright position and do not put any load on it.
- If your device has its original box, put it in its box, if there is no original box, carry it using a crane with the eyebolts on it. Take precautions against impacts to external surfaces (glass and painted surfaces).



Working Area

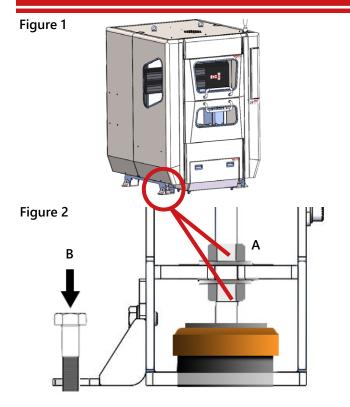




Recommended minimum working area dimensions;

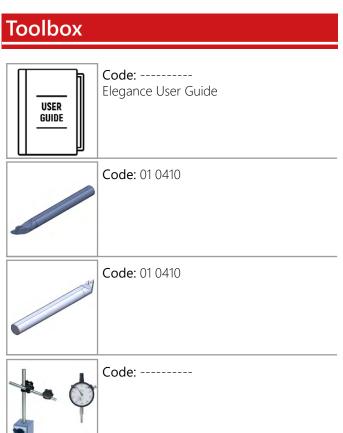
- a: 100 cm
- b: 100 cm
- c: 220 cm
- d: 150 cm
- e: 150 cm

Installation



The installation of the product should be done after the product is leveled. Adjust the balance precisely with the nuts shown (see Figure 2A). Repeat this process for all feet and rubber wedges. Do the balance check again and make sure that the product is in balance. Make sure that the rubber wedges are on the ground and all the weight is on the rubber wedges. The sheet metal cage around the wedge should not touch the ground

After adjusting the balance and making sure that the rubber wedges are seated on the floor, fix the product to the floor at the place shown (see Figure 2B). Repeat this process for the all four mounts.



Code: -----



Front View

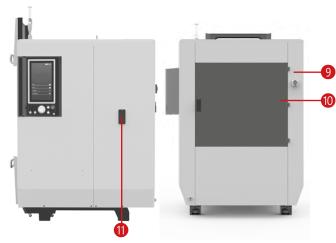


- Tower light: Green (operation in progress), Yellow (ready / standby), Red (alarm)
- 2 Sliding door: Combined door system.
- ğ Control panel: (see Control Panel)
- Vertical guideway group: The slide group that enables the axes to move in Z + (up) and Z- (down) directions.
- Horizontal guideway group: The slide group that enables the axes to move in X + (right) and X- (left) directions.
- 6 Spindle and Chuck Group: Group consisting of 12" chuck and 3 chrome plated rim fastening arms. Thanks to the chrome clamp, it tightly grips the rim and provides its rotation.
- 7 Chip tray: A wheeled tray where the chip pieces

from the cut product are collected and disposed of.

Body legs: The group that is positioned under the main body and allows the product to sit on the floor. There are two balance wedges and fixing flanges on each leg (see Installation)

Side and Rear View



Main switch Electric panel Battery box

Control Panel



- Touch screen USB port
- **200406789** On Off
- Handwheel
- Door Release
- Interior light
- **Emergency Stop**
- Handle

About

This product is produced for the purpose of turning and cleaning the top of rims between 12 "-28" and the side surfaces of rims between 12 "-22" (There may be model differences). The manufacturer is not responsible for any damages arising from the use of the machine other than its intended purpose. For this reason, do not use the machine out of purpose. If you do not have sufficient training about the product, contact an authorized dealer or the manufacturer immediately.

Fixing the Wheel

WARNING: Before fixing the rim, make sure that there are no burrs / chips and similar foreign matter on the rim holding clamps and that the clamps are clean.

Adjust the clamps according to the size of the wheel to be fastened, and place the wheel between the clamps on the chuck. After placing the wheel in the appropriate level from the 3-stage clamps, start to fix it from the chuck opening / closing slot shown with the help of the ratchet arm and its extension (See Figure 2)

NOTE: While fixing the wheel, help center the wheel during tightening by moving the wheel back and forth while tightening the chuck. After the wheel cannot move, fix it from the other two open/close slots on the chuck and make sure that the wheel is securely fixed.

After making sure that the rim is securely fixed, start by following the New Mode / Open Mode / Free Mode or Pro Mode steps. For detailed information about these steps, read the rest of the user manual carefully.

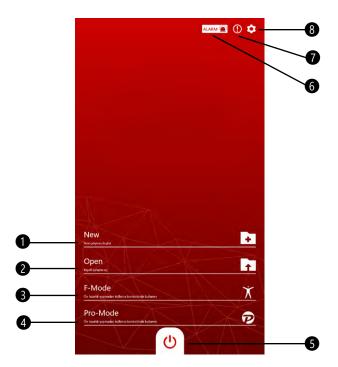


Interface

The program consists of 8 steps in total: 6 steps control, dimensioning and cutting, 1 step recording and 1 step finishing. You can also cut from the Pro-Mode screen where you can see all the steps on a single page.

Main Menu

On the main menu screen, you can choose which operation you want to start. From this screen, you can access four different modes, settings and user manual.



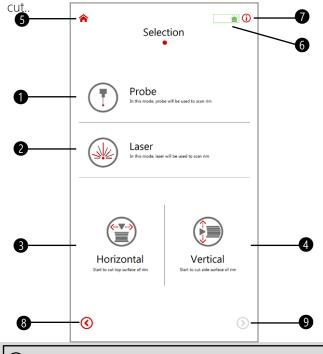
New Rim Cutting Mode Saved Project Opening Mode Free Mode

4 Pro Mode for Experienced Operator Ŏ Computer shutdown 6 Alarm Warning / Stop Alarm User manual Settinas

New Mode +

Selection Screen

When you choose from New and Pro-Mode, this screen will appear. On this screen, you can choose which measurement model / tool you will measure with and which type to



(i) NOTE: This screen may differ by models or some models may not have this screen.

Measurement with probe Laser measurement

3 4 5 Horizontal (upper surface) cutting Vertical (side surface) cutting

Return to Main Menu

Alarm Warning / Stop Alarm

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Next Page

"O" buttons become active after measuring and cutting selection.

1. RunOut Control

On the Runout Control page, which is the first of the rim turning steps, you can take a photo of the rim that you will cut, to be used in reporting.

In the procedure on this page, after tightly connecting the rim to the chuck, pressing the ">" button allows the rim to turn.

In the meantime, it is checked whether the rim rotates with runout. If the rim rotates without runout, can be passed to next step.

REMINDER: Photographing should be done before rotating for runout control. After the runout check is done, access to the camera screen is closed.

A CAUTION: Do not rotate the rim before making sure that the rim is securely fixed.

Single Button Warning Pop-Up

Attention!

Please make sure that the rim is securely fixed, before starting the run out controlling process

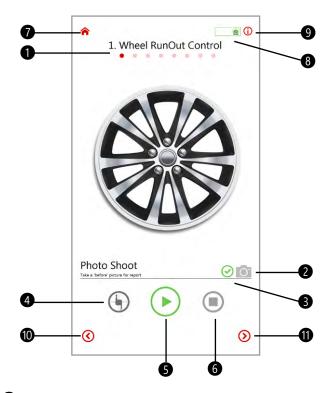


A one-button pop-up is a warning balloon that you can only approve and this pop-up has a confirm button below it, indicated by a green tick. When this warning pop-up appears on the screen, means that an action has been completed or a reminder is given.

Double Button Warning Pop-Up

Attention! The tool holder will move to changing/rotating position. Do you confirm?

A double button warning bubble (pop-up) appears on the screen in cases where you need to confirm or not. You can confirm or reject the transaction with the X and green tick buttons in these warning balloons.



Step Information

Camera Button

Photo has been saved

Tool holder positioning

Rim Spinning

Stop

Return to Main Menu

Alarm

3456789 Page manual

Previous page

Next Page

SCREEN WARNINGS:

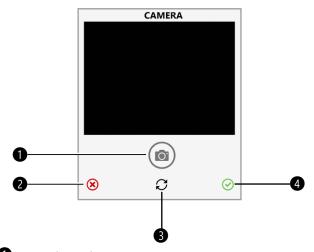
- a. Please make sure that the rim is securely fixed, before starting the run out controlling process.
- b. RunOut Controlling process will start. Do you confirm?

c. The tool holder will move to changing/rotating position. Do you confirm?

Tool Holder Positioning (): This button puts the tool holder in an optimum position so that you can change the cutter and measuring tool or switch between rotating according to the relevant screen. You can change or rotate in this position.

1.A Camera

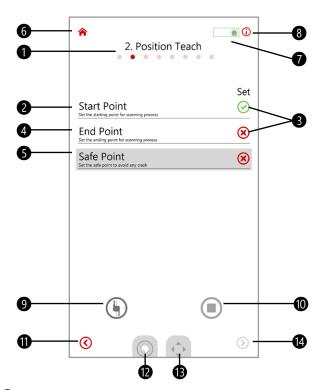
On the camera screen that you will use for reporting and archiving, you can photograph the rim before starting the cutting process or the state after cutting, save the photo you took, shoot again or exit without recording. The photos taken on this screen are added to the relevant section at the bottom of the report.



123 Take a photo Cancel / Exit Take Again Save

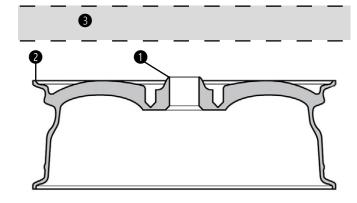
2. Position Teach

In the second step, Position Teach, you can determine and save the starting and ending points of the rim by the probe stylus or the beam indicator produced by the laser.



- Step Informationi
 - Start Point
 - Saved/Not Saved Indicator
- 108456789 **End Point** Safe Point
- Return to Main Menu
- Alarm List
 - Page manual
 - Tool Holder Positioning

Stop Previous page Handwheel Jog Pad Next Page



Start Point **End Point** Safe Point

A WARNING: The machine takes measurement from the center to the left.

Select one of the areas reserved for the point you will save and make sure that it is selected as the target with dark gray

Set the starting point so that it is to the left of the center of the wheel (at the X- position). Bring the measuring probe to the starting point, touch the tip of the probe to the starting point and stop when the red light on the probe turns

Save the point with the **②** on HandWheel or JogPad section.

A WARNING: Do not switch to other points before making sure that the gray tick section under the set part turns green.

Specify the end point so that it is to the left of the starting point (at the X- position). Bring the measuring probe to the end point, touch the tip of the probe to the end point and stop when the red light on the probe turns on. Save the point with the **②** on HandWheel or JogPad section on HandWheel or JogPad section

For determination of the safe point, locate the probe above the highest point of the rim and make sure that the red light on the probe does not light on and save with 29 button on HandWheel or JogPad section.

A CAUTION: Locate the safe point at least 2 cm / 0.79 inch above the highest point of the rim.

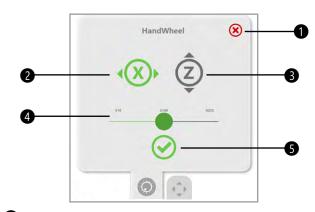
When all fields are \odot the \odot button becomes active and you can go to the next step.

SCREEN WARNINGS:

- a. Please make sure that the probe is turned to measuring position and securely fixed.
- b. The tool holder will move to changing/rotating position. Do you confirm?

2.A HandWheel

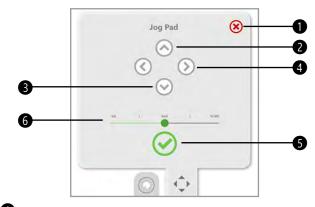
The handwheel page allows you to move the axes using the handwheel located on the control panel and located below the touch screen. On this screen, you can choose in which direction to move the axis by choosing between the X and Z axes. You can adjust the speed by sliding the circular cursor in the middle to the right and left to slow down and accelerate the axis movement speeds. X10 moves the axes in the selected direction by 10 microns per movement, X100 100 microns per movement, and X250 by 250 microns per movement.



- Screen off
- **234** X axisi Z axisi
- Speed adjustment
- Save button

2.B Jog Pad

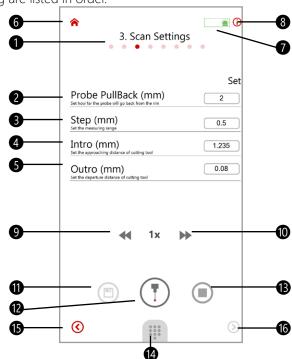
With the Jog Pad page, you can move the axes by pressing a single button. When this page is open, you do not need to use handwheel. You can move the axis by pressing or holding the button of the direction you want to move the axis. You can adjust the speed by sliding the circular cursor in the middle to the right and left to slow down and accelerate the axis movement speeds. Speed setting can be changed between 0-100%.



- Screen off
 - Z + movement
 - Z movement
 - X + movement
 - X- movement
 - Speed adjustment (0-100)
 - Save Button

3. Scan Settings

On this screen, the settings you need to make before scanning are listed in order.



- Step information
- Prope pullback (mm)
- Step (mm)
- Intro (mm)
- Outro (mm)
- Return to main menu
- Alarm list
- Page manual
- Step Slower (1x, 2x, 4x)
- 2045678999 Step Accelerator (1x, 2x, 4x)
- Save entered valuest
- Start scanning with entered values

Stop

Numpad (see: Numpad Page Number)

Previous page Next page

Probe Pullback (mm): It is the area where you determine the distance the measuring probe will move away from the rim to go to the next point, after it touches the rim. The value entered in this field must be in millimeters (mm). Recommended value is minimum 1 (one) millimeter. It is recommended to enter values of 5 (five) millimeters and above for rim types where the arms and rim walls are high and close to vertical (90 degrees).

REMINDER: The value entered in the Probe Pullback section directly affects the measurement rates

Step (mm): It is the input box where you will determine how many millimeters intervals will be measured on the rim. With the value you enter here, the measurement probe takes a measurement at each entered value. It is recommended to enter a value in the range of 1 (one) -2 (two) millimeters for flat profile rims and less than 1 (one) millimeter (eg 0.5-0.4 mm) in rim types where the spokes, rim walls are high and close to vertical (90 degrees).

MARNING: The value entered in the step field directly affects the measurement quality. As the entered value gets closer to 0 (zero), the measurement and cutting quality increases.

Intro (mm): It is the area where you determine how many millimeters away from the rim center the cutting process starts.

Outro (mm): When the cutting process is completed, it is the area where you determine how many mm away from the rim end point the cutting process will be finished.

A WARNING: In cases where the wheel is cut with the tire, the value entered in the Outro tab being 0 (zero) mm prevents the tire from damages by cutter.

Accelerating/Decelerating measurement

The program records points with the distance as much as the value entered in the Step tab. The measurement should be done slowly on wheels with high inclinations. With the ◀ and ▶ symbols, you can speed up or slow down the value you enter in Step section by 2x or 4x.

For example; When a 1 mm value is entered in the step tab, if 2x slowing is applied, the measurement is made with 0.5 mm intervals, when 4x slowing is applied, 0.25 mm intervals. The same is true for acceleration. When a 1 mm value is entered in the step tab and 2x acceleration is applied, the measurement is made at 2 mm intervals, when 4x acceleration is applied, 4 mm intervals.

▲ WARNING: Apply maximum 2x acceleration when 1 mm value is entered in the Step tab. It is recommended not to accelerate when a value above 1 mm is entered. Otherwise, the measurement quality will deteriorate and may damage the rim and machine.

Acceleration / deceleration can be applied up to 4x. If the acceleration / deceleration process is applied again after the 4x phrase appears on the screen, the speed returns to 1x, that is the value entered in the Step tab. To return to the value entered in the Step tab, you can click on 1x, 2x, 4x. When pressed on, the speed is automatically set to 1x and the measurement continues.

A WARNING: When the acceleration / deceleration process is done repeatedly and excessively during the measurement, the quality of the measurement taken decreases and causes deformations and marks/lines on the rim.

A WARNING:If there is a problem during the measure-

ment or if you want to stop the measurement, you can stop the measurement with

button

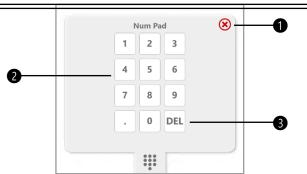
Saving Measurement Points

After the measurement process is completed, the Save Button becomes active. With this button, you can save the points you have taken on the rim and continue the process. Saving is not required. However, if you must return to the main menu during other operations, the points taken on the rim will be deleted. Thanks to the saving process, the measurement is recorded only with the process number and is recorded so that it can be accessed from Open mode. After returning to the main menu, you can enter the Open mode, open the last unnamed record, continue the process and operate with a new process number.

SCREEN WARNINGS:

a. The scanning process will begin. Do you confirm? b. Congratulations. You have completed the scanning process.

3.A NumPad



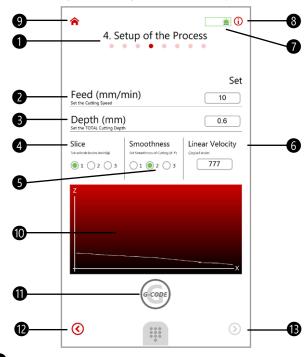
NumPad (numeric keyboard) is designed for you to enter values into input fields more easily. You can enter values with the keyboard in the middle of the screen. You can use the large keyboard that opens automatically when desired.

Kevboard Off

2 Numeric Keyboard Delete Button

4. Process Settings

In this step, G-Code (cutting codes) preparation is made before starting the cutting and simulation process.



Step information **123456739011**8

Feed

Depth

Slice

Smoothness

Linear Velocity

Alarm list

Page Manual

Return to Main Menu

G-Code graphic display

Create G-Code

Previous page

Next page

Feed (mm/min): It is the area where you determine the feed rate of the cutting pen in the Z axis direction. It is recommended to enter a value between 50-450. In the factory settings, the optimum setting is set to 250 mm/minute.

Depth (mm): It is the area where the amount of passes you want to remove from the rim is entered. It is cut on the rim as much as the value entered in this field. It is recommended to enter a value between 0.05-1.00 mm

A WARNING: It is highly recommended not to enter a value of 1 (one) mm or more for long-lasting use of the machine. Otherwise, the cutting pen, axis shafts and bearings, rims, etc. may be damaged.

Slice: It is the area you prefer to cut the value entered in the depth field at the number of times.

For example; The 0.6 mm value entered in the cutting area is cut in two times as 0.3 mm and 0.3 mm if 2 (two) are preferred from the slice area and the desired cutting is completed. If the slice 3(three) is selected, it is cut in three times as 0.2 mm, 0.2 mm and 0.2 mm. If this area is selected as 1, only 0.6 mm cut is made at one time. At each slice transition, the program alerts and asks if you want to switch to the next slice. If you wish, you can complete the cutting process without processing the next slice.

Smoothness: It is the area you will prefer to make the smoothness of the points taken in the measurement process.

When the preference is "1", there is little smoothing, when "2" is medium, and when "3", much smoothing will be applied

A WARNING: It is recommended to select smoothness 2 or 1 for wheels with excessive arm depth. Otherwise, uncut areas or overcut areas may be seen.

Linear Speed: It is the area where you can adjust the rotation speed of the rim. Recommended values for this area are between 200-600. The cutting process starts with high speed in the center of the rim and the speed of the rim towards the end point slows down. As the linear speed value approaches zero, the cutting time increases. Cutting quality may increase or decrease depending on the cutting item used and the raw material of the rim.

G-Code Butonu: After all fields are filled, cutting codes are created by pressing the **G** button. These codes are used in the simulation phase and cutting phase. After creating the G-Code, **3** becomes active so that you can proceed to the next action.

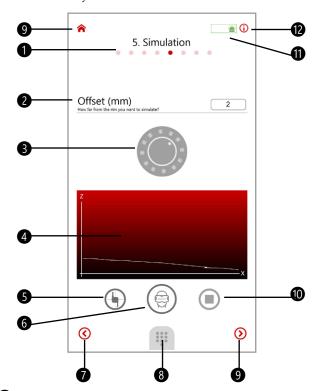
SCREEN WARNINGS:

a. Congratulations. You have completed the G-Code creation process.

b. Would you like to simulate? Simulation will help you to pre-test cutting process and minimize errors.

5. Simulation

It is recommended to proceed to the simulation process after the process settings. Thanks to the HandWheel, before starting the cutting process, you can simulate by moving away from the rim as much as the value you entered in the Offset tab so that you can see if there is an error in the measurements you have taken.



Step information 234567 Offset Handwheel Indicator Graphics simulation Tool holder positioning Start simulation Previous page

8 NumPad 9 Next page Stop Alarm list Page manual

A WARNING: The simulation process minimizes errors and prevents you from damaging the rim and the machine.

Ofset: The cutter moves away from the rim as much as the value you entered in this field, allowing you to simulate the cutting process. You can start the simulation process by pressing the \odot button. During this process, complete the simulation of the cutting process by turning the hand wheel clockwise and proceed to the next step.

A IMPORTANT: Before Simulation process, please make sure that the cutting tool is turned to the cutting position and securely fixed.

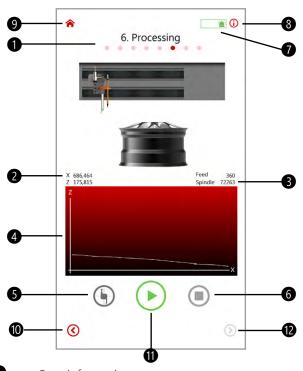
A WARNING: You can proceed directly to the cutting process without completing the simulation process or at all. The responsibility belongs to the operator for the transactions that are not simulated

SCREEN WARNINGS:

a. a. Attention! Please make sure that the cutting tool is turned to the cutting position and securely fixed. b. Congratulations! You have completed Simulation.

6. Processing

You are now ready to cut. You can start cutting by pressing the button



Step information Ž Axis coordinates

3 Feed and Spindle speeds

Graphical simulation Tool holder positioning

Stop

Alarm list

5678 Page manual

Return to home page

Previous page Start processing

Next page

A CAUTION: Please make sure that the cutting tool is turned to the cutting position and securely fixed.

To rotate the cutter, press the button to move the tool holder to the rotate position and rotate it so that the cutter faces the rim.

see: tool holder positioning.

WARNING: Make sure the door is closed and locked before starting the cutting process.

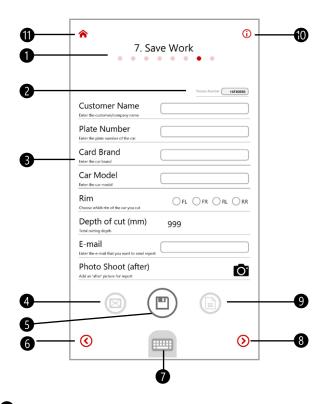
If you selected the Slice field as 2 or 3 in the 4. Process Settings step, after the cutting process is completed, the confirmation screen will appear to switch to the other slice. If you give approval, the cutting process will continue. This process is repeated for the number of slices you selected. After the cutting process is complete, \odot becomes active and you can proceed to the next step.

SCREEN WARNINGS:

- a. Attention! Please make sure that the cutting tool is turned to the cutting position and securely fixed.
- b. b. Attention! Machining will start. Do you confirm?
- c. The Door Is Open. Please close the door and try again.
- d. Attention! Do you want to run next slice?
- e. Congratulations. You have completed process.

7. Save Work

If you do not want to save work, you can go to the Finish step by clicking the ② button. Saving allows you to create your own archive. In this step, a report is automatically prepared for the completed cutting process.



Step information
Process number

Customer / Vehicle / Wheel information

Send report by mail

Save report

Previous page

Keyboard

Next page

9 Print report10 Page manual11 Return to home page

Process Number: Process number is generated automatically and it is unique.

Customer Name: You can enter the customer name or company name in this field.

License Plate: You can enter the license plate of the vehicle in this field.

Brand: You can enter the brand of the vehicle in this field. **Model:** You can enter the vehicle model in this field. **Rim:** From this field, you can choose which rim the vehicle

FL: Front Left **FR:** Front Right

RL: Rear Left RR: Rear Right

Cutting Depth (mm): This field is automatically filled and shows the total depth of cut.

E-Mail: In this field, you can enter the e-mail address you want to send the report to.

Take Photo (After): You can take a after photo to be placed in the report.

Save the process by pressing the "🖃" button. You can now view the saved transaction in Open Mode. After saving, send the report to the e-mail you entered by clicking the 🖾 button. You can view the report you created in PDF format by clicking the 🖹 button.

REMINDER: If you wish, you can enter the Rim Code, which determines the model of the rim, located inside of each wheel or inside of the spokes, in the fields such as Customer, Plate, Vehicle Brand mentioned above. In this way, when in Open Mode, you can search directly by rim code instead of fields such as Customer Name, License Plate

8. Finish



Step information

Repeat process on same settings

Return to home page

Page manual

Return to home page

You have completed the cutting and saving process. If you want to cut again with the same rim size and form, you can cut without repeating the measurement process by pressing the ${\cal C}$ button. When the repeat option is selected, you cannot skip the RunOut Control process. The settings you saved earlier come ready.

This option saves you time by taking measurements again. When the One More Time option is selected, you need to create the G-Code, however, the settings are the same as the previous settings. You can create G-Code by making the necessary corrections or accepting the same settings.

MARNING: Simulation operation is highly recommended when repeat option is selected. There may be differences even on wheels that look exactly the same. Therefore, it is recommended by the factory that you do not skip the Simulation process while in the One More Time option.

With the "a" button, you can directly return to the Main Menu and continue your operation by choosing from other modes.

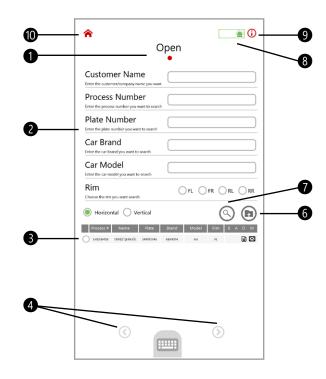
Open Mode 🚹

You can access the previously saved processes from this mode.

WARNING: Unsaved processes do not appear in open mode. In this mode, you can find previously saved processes by filtering by Customer Name, Process Number, Plate, Vehicle Brand, Model and Rim Type, Horizontal / Vertical Cut (varies between models).

Make your search by pressing the "Q" button. The processes saved will be listed below according to the filtering criteria. By selecting a recording from the list, you can open the recording with the button. Make sure that the round indicator (Q), on the left side of the record you selected turns green (Q) after making the selection. You can browse through the records with the previous Q and buttons at the bottom of the page. This option saves you time by taking measurements again. When Open option is selected, you need to create G-Code, however the settings are the same as the previous settings. You can create G-Code by making the necessary corrections or accepting the same settings.

▲ WARNING: Simulation operation is highly recommended when Open option is selected. There may be differences even on wheels that look exactly the same. Therefore, it is recommended by the factory that you do not skip the Simulation process when you are in the Open option.



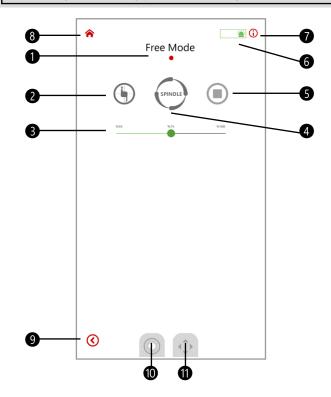
Menu information
Saved Customer / Vehicle / Wheel information
Saved Customer / Vehicle / Wheel list
Next and previous pages
Keyboard
Open selected process
Search saved information
Alarm list
Page manual
Return to home page

Free Mode X

Free Mode is designed for free cutting and manual trimming. You can rotate the wheel using the Spindle (Θ) button. You can rotate the rim at 50%, 75% and 100% speeds with the cursor positioned under the " Θ " button.

WARNING: When the door is open, a maximum speed of spindle is 100 rpm.

WARNING: Follow all instructions and cautions of Safety Instructions part of this manual, while door is open and turning and moving parts are working.



You can use the HandWheel and Jog Pad to operate in Free Mode

Step Information

Tool holder positioning

Speed Adjustment Cursor

Spindle Rotation

Stop

Alarm list

234567399 Page manual

Return to Home page

Previous page

Handwheel (see: Handwheel Page No) Ŏ

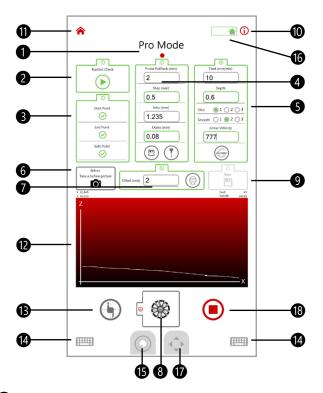
Jog Pad (see: Jog Pad page No)

Pro-Mode 72

With Pro Mode, where each step in the new mode is collected on a single page, it is aimed to perform faster operations. All steps are placed in the box and you can find out which step you are in thanks to the numbers at the top of the boxes. The tile for each successfully completed step turns from gray to green. As the steps are completed, the box for the next step changes from light gray to dark gray, and once it turns green, you can proceed to the next step. Pro Mode does not have many necessary warnings and saves you time.

A WARNING: Only critical alerts are available in Pro Mode. Responsibility belongs to the operator.

A WARNING: It is harmful for users who are trained in machine use but do not have sufficient experience to switch to Pro Mode. Responsibility belongs to the operator.



Step information RunOut Control

Position Teach

Scan Settings

Process Settings

Take a Photo

Simulation

2

ğ

4

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8

1

Ŏ

Processing

Save Work

Page manual

Return to home page

12 13 14 15 Graphic simulation

Tool holder positioning

Keyboard

HandWheel

Alarm List

1 JogPad Ŏ

Stop

Ŏ Acceleration (1x, 2x, 4x) Deceleration (-1x, -2x, -4x)

♀ SCREEN WARNINGS:

a. Attention! You are being directed to professional mode. There are only critical warnings in this mode. Responsibility lies with operator. Do you confirm?

Settings 🌣

The settings page is designed to facilitate daily use of the software, to reset equipment such as tool and measuring probe/laser, and to change various settings. You can access the settings page with the (settings button) button in the main menu.

Default Settings

In the default settings tab, you can save the settings you use daily in order not to enter them repeatedly and when you come to the relevant step, you can have these settings appear automatically. The values you enter in this field are recorded after the (save button) button is pressed and automatically appears when you start a new operation. You can save the following settings in the presets screen.

- Probe Pullback
- Step
- Intro
- Outro
- Feed
- Depth
- Slice
- Smoothness
- Linear Velocity
- Offset

CNC Settings

With CNC Settings tab, you can adjust the speeds of the components such as axes, spindle and probe in the control unit of the machine and set by the factory. You can save the following settings in the CNC settings tab.

WARNING: Consult the manufacturer or authorized dealer before changing these settings.

- Jog Speed
- G0
- Spindle Speed
- Runout Test Duration
- Probe Radius
- Tool Radius

You can find two important settings under the CNC Settings tab, which you should use constantly, Probe Radius and Tool Radius.

Probe Radius: It is the area where you will enter the radius of the stylus of the probe used when measuring and recording points on the rim. It is important to check again when you change/renew the probe stylus.

Tool Radius: It is the area where you will enter the radius value of the insert at the tip of the cutter used for cutting. The radius value on the box of the inserts you are using shows the value you need to enter in this field. It is important to check again when you change/renew the insert. Do not forget to ask your tool supplier about the radius value.

WARNING: Check the tool radius and probe radius before each time the zeroing is done. Otherwise, you may damage the rim and machine..

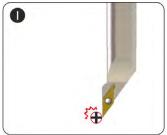
After making the necessary changes, save and exit using the \blacksquare button.

Zeroing

It is the setting page you will use to reset the probe/laser, tools and axes.

Zeroing should be done for probe and cutting tool as follows:

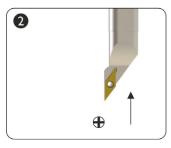
- 1- Before starting the reset process, check the Probe Radius and Tool Radius fields under the "CNC Settings" tab and enter the radius values of the equipment you use..
- 2- Open the Zeroing bar, which is located behind the moving axes, to the center of the spindle.
- a. Make sure that there is no chips on the connection point of the opened shaft.
- b. If there is chips, clean it with air and make sure it fits comfortably.
- 3- Select Zeroing tab on the Settings page and choose the direction (horizontal or vertical) you want to apply zeroing process.
- a. This selection screen may differ between models.
- 4- Using the Handwheel tab at the bottom of the screen, bring the equipment you want to apply zeroing near the side of the zeroing bar and touch it so that the light turns on (Figure 1)
- a. The equipment you want to zero should be touched so that it is tangential to the zeroing bar and the light is on.

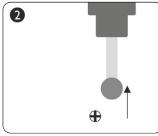




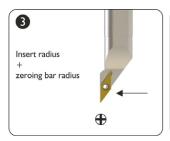
Teroing bar (Radius: 1.5 mm)

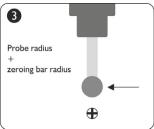
After making sure that the tip of the equipment you want to make zero is tangent to the zeroing bar, remove it from the zeroing bar by lifting it up in the Z + direction (Figure 2)





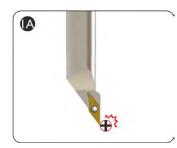
The purpose of this step is to bring the tip of the equipment you want to apply zeroing to the middle of the zeroing bar (Figure 3). For this reason, follow the steps below carefully.



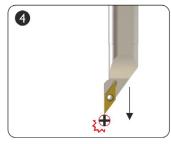


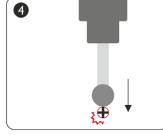
- For the left-side cutter insert: Move the Tool radius + Zeroing Bar radius (1.5 mm) in the X- direction.
- For example: For a cutting tip with a 0.4mm Tool Radius, take the speed adjustment bar in the Handwheel tab to X100 (0.1mm) and turn it 4 (four) steps.
- For the 1.5 mm zeroing bar radius, set the speed adjustment bar to X250 (0.25 mm) and turn it 6 (six) steps.

b. Do the same for the right-side cutting insert on the reverse (Figure 1A).



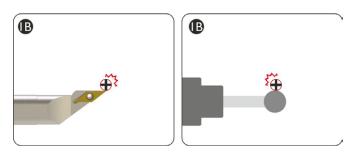
- c. The probe styluses supplied by the factory are 3mm or 4mm (radius 1.5mm and 2mm).
- For a 1.5 mm radius stylus, you can move it 6 steps at the X250 (0.25 mm) speed setting to bring it to the center of the zeroing bar.
- Bring the probe stylus over the zeroing bar by radius + zeroing bar radius.
- Move the equipment you want to reset on the zeroing bar and gently touch it (Figure 4).





- a. While doing this, make sure that the speed setting is at X10 (0.01mm).
- b. Stop when the light turns on
- After making sure that the light is on, start the zeroing process by clicking the relevant button on the screen. a. Confirm the warning that appears when you are sure about the zeroing. (If you are not sure about zeroing, repeat the process.)
- Repeat this process for other equipment.

10-For vertical zeroing, repeat the same steps in appropriate positions (Figure 1B)



(i) **NOTE**: The red LED light above the zeroing bar lights up only when a metal object is in contact. For this reason, the light will not turn on when using ceramic probe stylus and coated cutting inserts.

REMINDER: The zeroing bar is powered by 2 standard LR44 batteries. Replace the batteries with the same ones as needed and continue using it.

Axes zeroing: The axes zeroing process must be done periodically. When you press the houtton, the axes will move to the zero point automatically and the reset is performed.

Never apply the resetting process without consulting the manufacturer or authorized service.

E-Mail Settings

The machine can send e-mails with the e-mail sending button on the Save Work step and the e-mail sending button on the Open page.

You can register the e-mail you will use in the e-mails you want to send via the machine on this setting page. Only G-Mail and corporate e-mails on Yandex servers are supported for now.

After the G-Mail settings are made, permission must be given from the "Third party Applications" section in G-Mail.

E-Mail: sample@sample.com Host: sample.sample.com

Port: e.g; 123

Password: E-Mail Password

SSL: Yes or No

Click the save button to save the settings

Background and Logo

You can change this setting by consulting your sales representative or manufacturer.

Saving Location

The computer used on the machine comes with a certain memory. (May vary between models). In case the capacity is full, you can increase this memory by placing a new hard disk on the back of the panel. Select the new save location by pressing the change button and confirm.

ATTENTION: This process cannot be undone.

Once the saving location is selected, all previously saved transactions are transferred to the new location. This process may take some time.

Language settings

The machine comes with 6 (six) language packages as ready. You can save the language you want to use by selecting it from the list below and start using it after returning to the main menu.

Click on the language you want to choose and click the save button. Make sure that the green indicator next to the selected language is active.

To add a new language, select the language pack by clicking the Add Language button. Repeat the same process for the flag of the language you want to add and click the save button. The language you add will be automatically added to the list below.

Configuration

This area is reserved for factory settings and can only be accessed by the manufacturer and authorized services.

Factory Defaults

You can return to the factory settings with the button in this area. When the factory settings are restored, the following settings are automatically restored to the factory-adjusted settings.

- Probe Retraction
- Step
- Intro
- Outro
- Feed

- Depth
- Slice
- Smoothnes
- Linear Velocity
- Offset
- Jog Speed
- G0
- Spindle Speed
- Runout Test Duration
- Probe Scanning Speed

ATTENTION: This process cannot be undone.

About

It is the area where you can get information about the machine and the manufacturer.

Application Version: It is the version information of the application on the machine.

Serial Number: The serial number of the control unit. **System Version:** It is the version of the Control Unit. **Unit IP:** It is the IP number reserved for the unit.

Remaining Capacity: KIt is the remaining capacity of PC. **Network Status:** Displays whether or not connected to the Internet. If "Successful", the machine is connected to the internet. If "Not Successful", the machine is not connected. to the Internet.

Product Serial Number: The serial number of the machine.

Model No: It is the model of the machine and determines the configurations.

Support ID: It is the Support ID used to connect to the machine remotely.

Maintenance and Lubrication 28

NU.	Description	Daily	Weekly	Monthly	Every Six Mo	Semi-Annually
1	Electrical cables and warning signs	0				
2	Air and power input	0				
3	Computer and software	0				
4	Machine work area	•				
5	Cutting tools					
6	Electric and pneumatic installation		0			
7	Probe or Laser Sensor		0			
8	Motor mounting bolts			Δ		
9	X and Z slides/guideways (Lubrication section fig. C-1, C-2)		•	*		
10	Machine floor installation			Δ		
11	X and Z guides, ball screw, bearings connecting bolts			Δ		
12	Spindle bearings (Lubrication section figure D)				*	
13	Repeating precision				0	
14	X, Z axis and spindle belts (Figure A, B)				*	
15	The parameters entered and the accuracy of the results					0
16	Is there any other problem?					0

If there are negative symptoms in the control results, please contact the technical service.



Check, change if needed Check, adjust if needed See related part of manual

FIGURE A

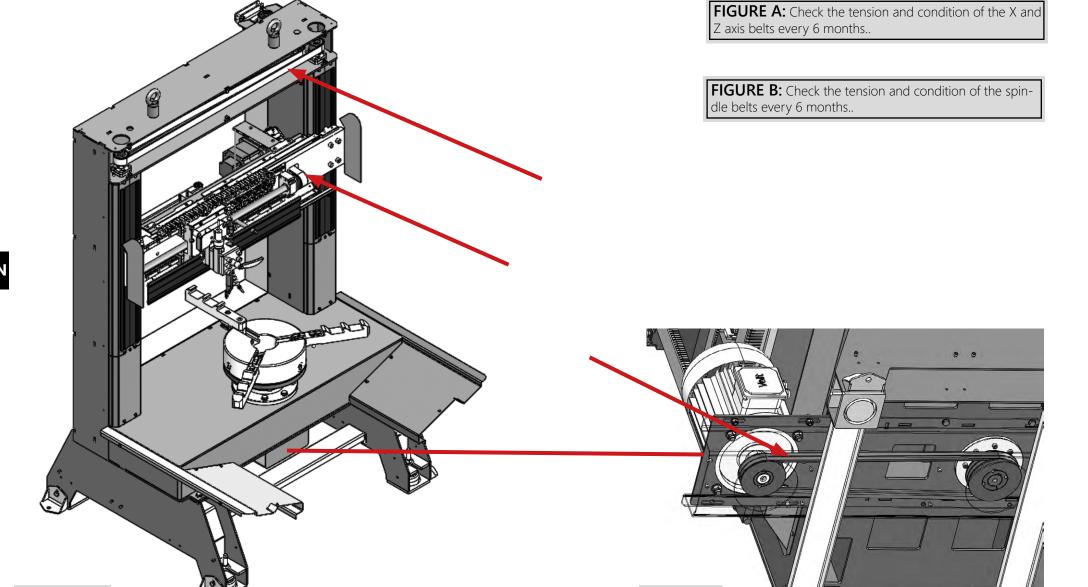
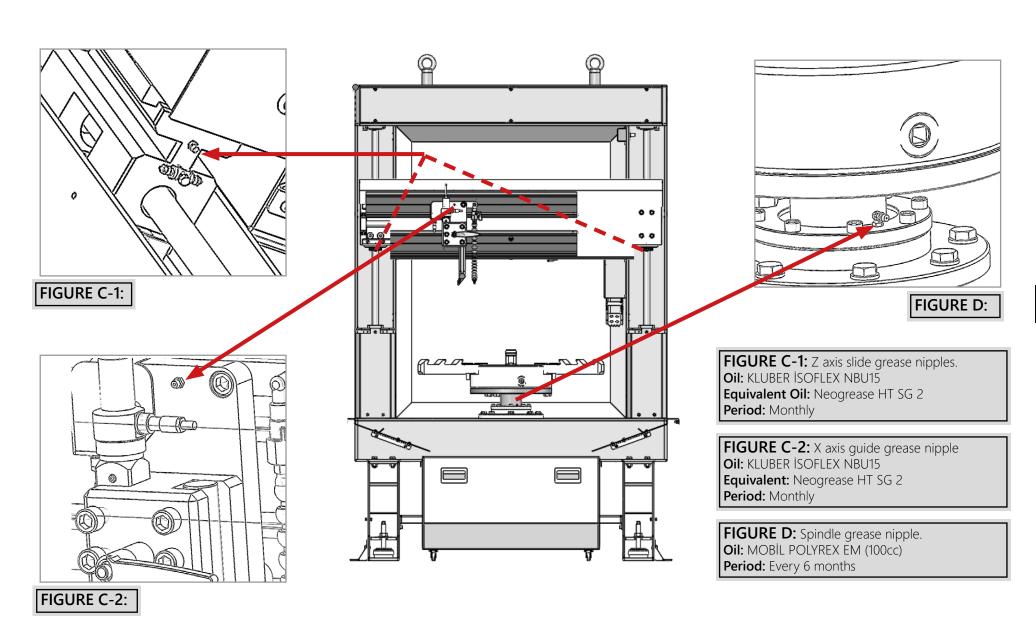
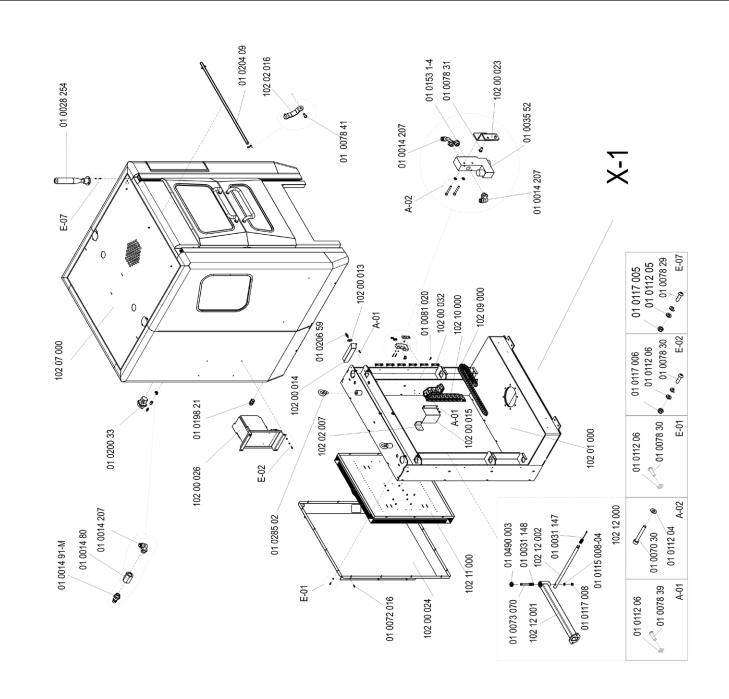
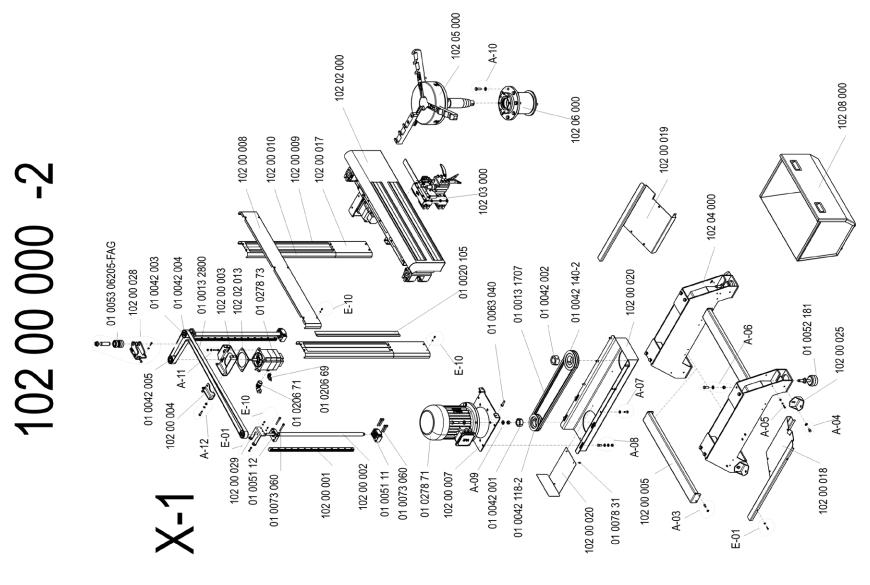


FIGURE B

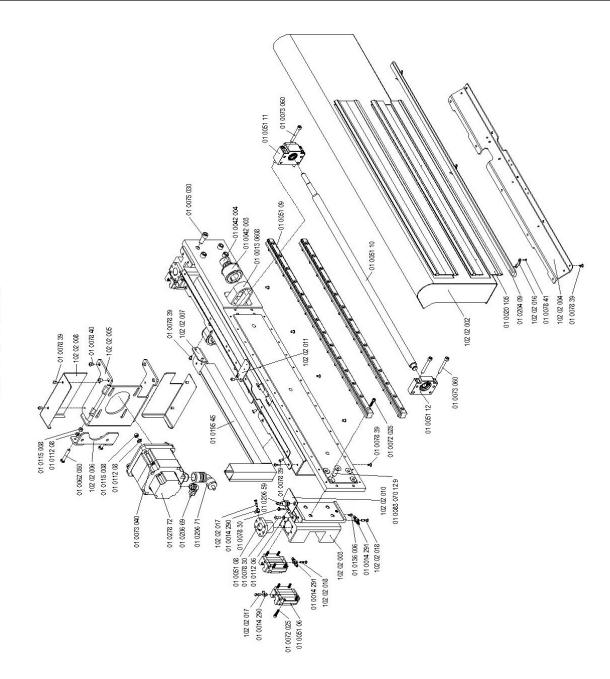


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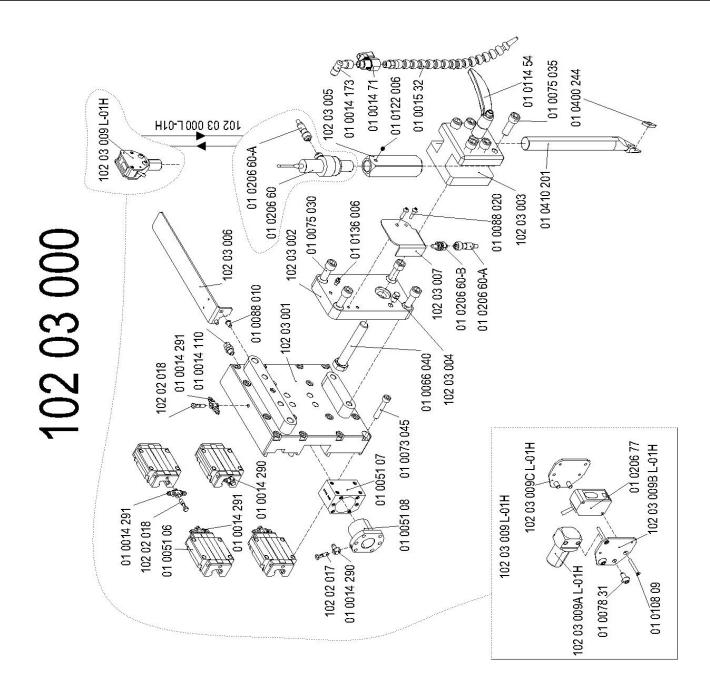


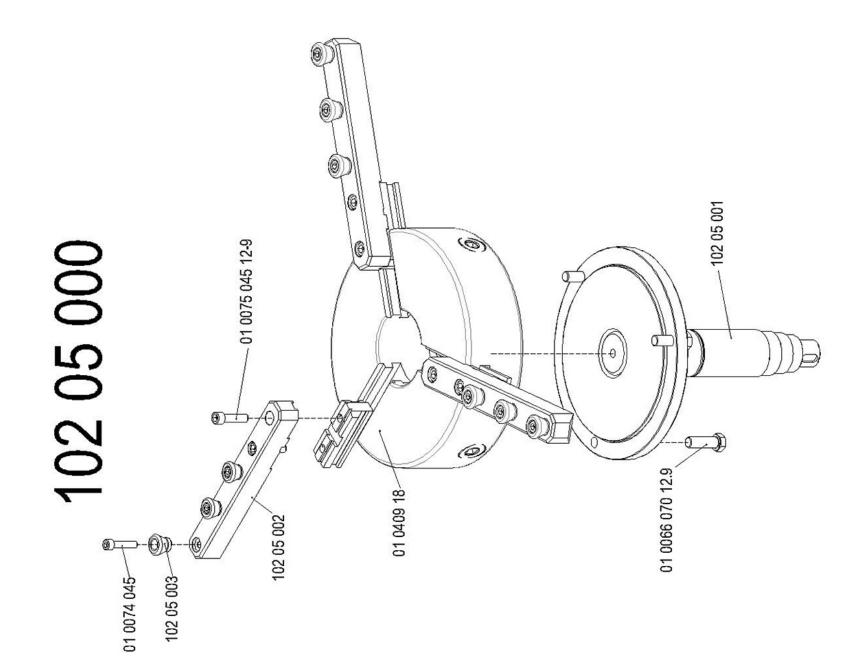


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© 01 0063 025 © 01 0112 10 © 01 0117 010 A-08	01 0112 05
01 0112 10 01 0063 025 A-07	01 0112 06 01 0078 30 E-01
9 01 0064 035 0 01 0112 12 0 01 0117 012 A-06	9 - 01 0062 035 0 - 01 0112 08 0 - 01 0115 008 A-12
01 0117 06 01 0117 06 01 01072 020 04-05	01 0117 008 0 01 0112 08 0 01 0073 040 0 0-11
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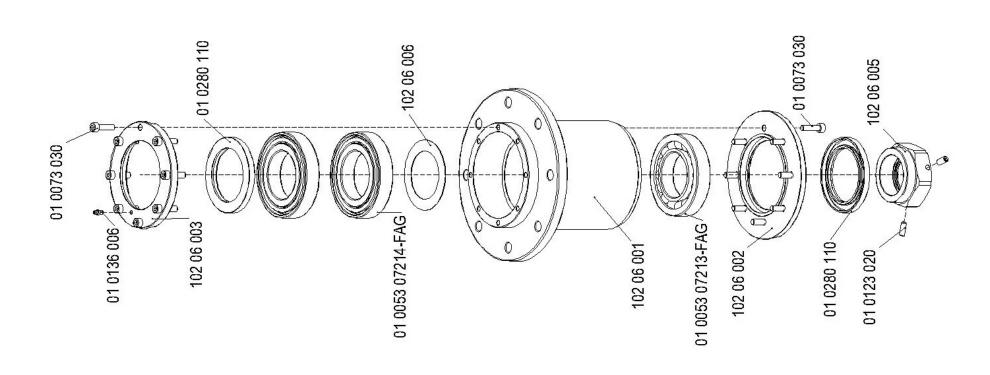


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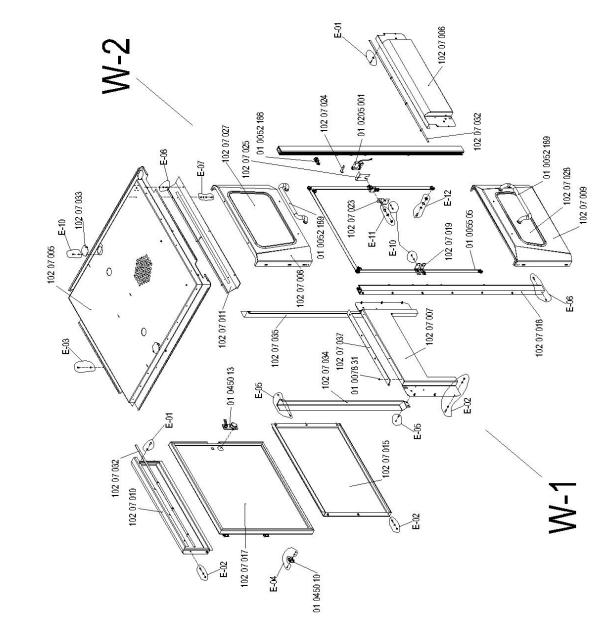




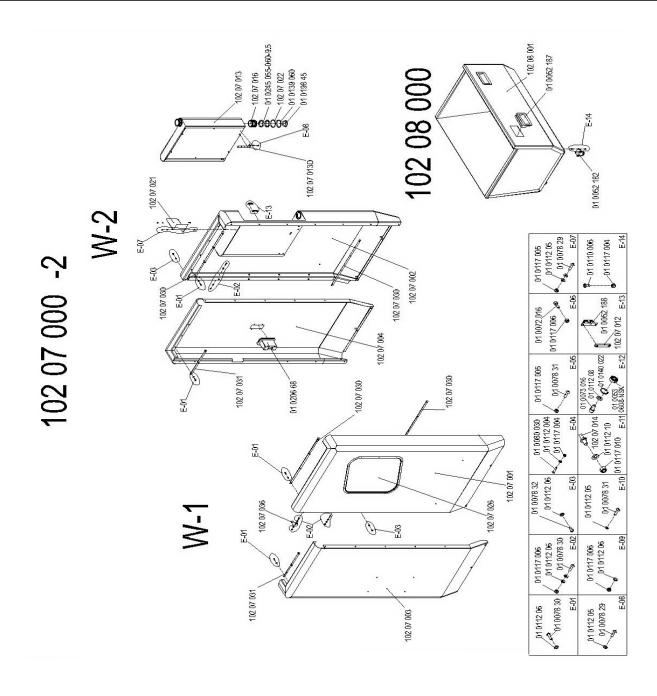
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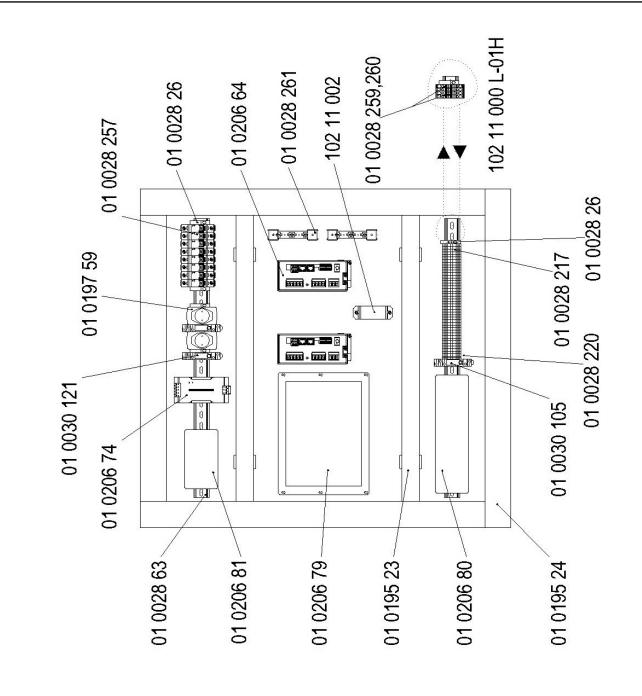
102 07 000 -1



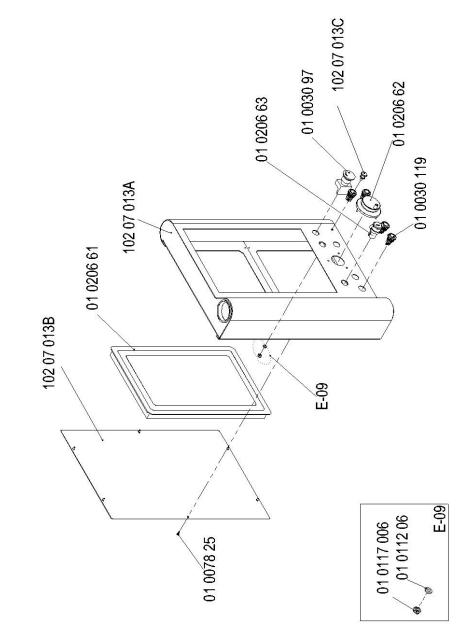
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01 0072 016 01 0117 006 🔊 E-06	01 0052 188 102 07 012 E-13
01 0117 005 01 0078 31 E-05	102 07 014 (2 010172 08 07 0112 10 07 01083 (2 0112 10 01083 (2 0112 10 01083 (2 0112 10 01083 (2 0112 112 0108 0112 0112 0112 0112 0112
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01 0078 32 01 0112 06	01 01
01 0117 006 01 0112 06 01 0078 30 E-02	01 0117 006 01 0112 06 E-09
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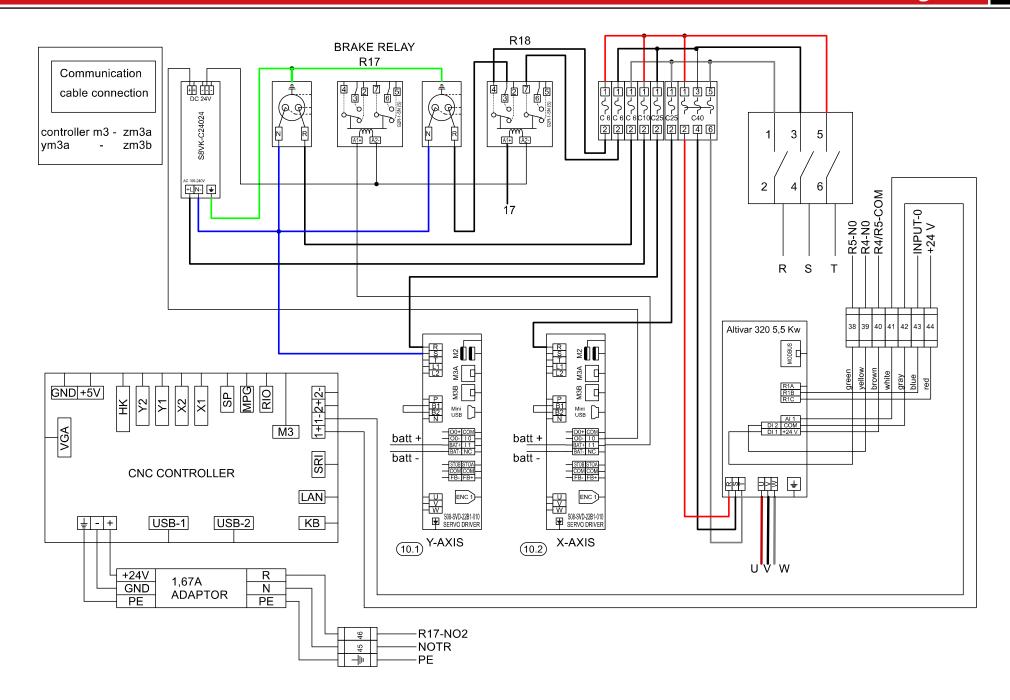


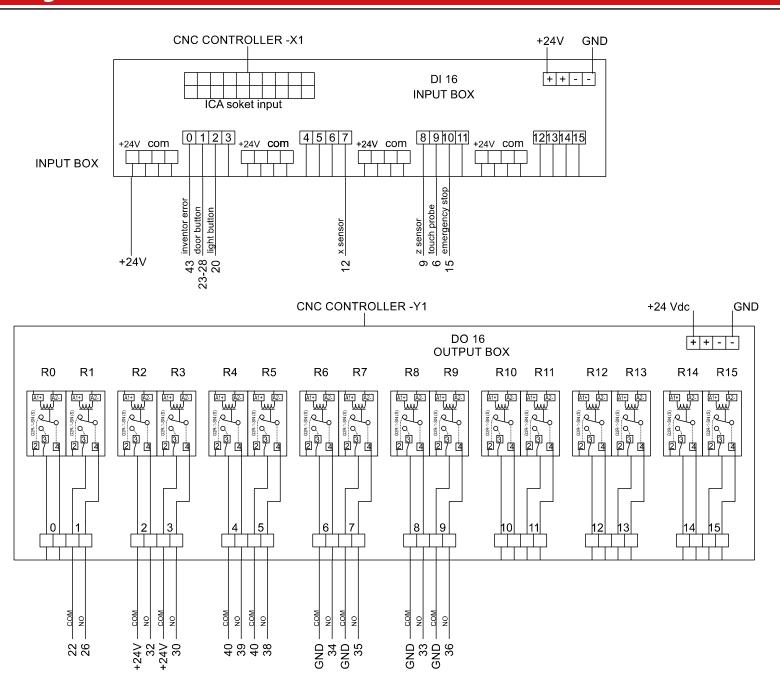
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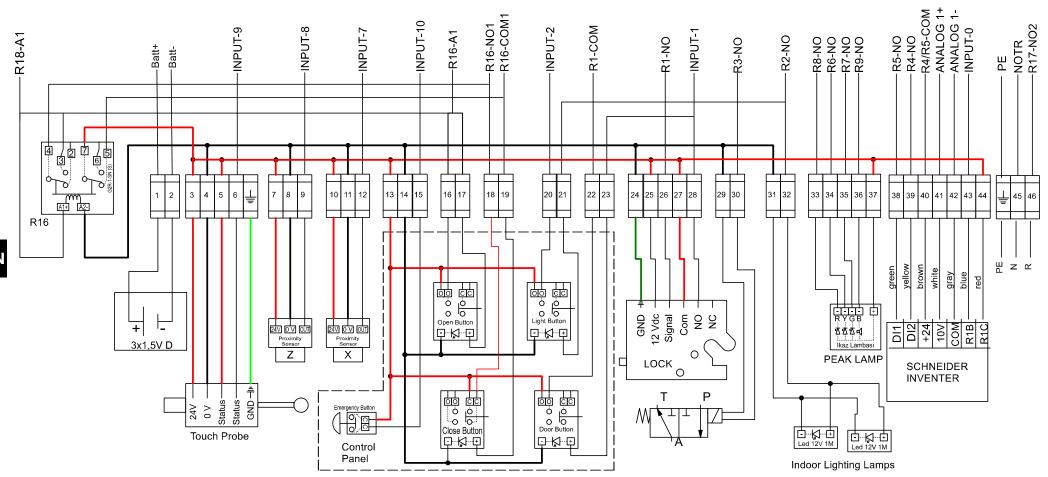


102 07 013









EC DECLARATION OF CONFIRMATION AT



http://www.unitrol.com.pl.

UNI - TROL Co. Ltd.

ul . Estrady 56 , 01 - 932 Warsaw , Poland tel.(+4822) 8179422 or 8349013 or 8349014 int. 117 fax(+4822) 8179422 or 8349013 or 8349014 int. 115 e-mail: office@unitrol.com.pl; office@unitrol.pl

WHEEL BALANCING MACHINES RIM STRAIGHTENING MACHINES TYRE CHANGERS EQUIPMENT FOR TYRESHOPS

Account: for EURO: ALIOR BANK SA for EURO: no. PL 96 2490 0005 0000 4600 4784 6179 (swift code: ALBPPLPW)



EU Declaration of Conformity

in accordance with directives : 2006/42/EU, 2014/35/EU, 2014/30/EU and 2014/68/EU

we: Uni-trol Co. Ltd.

UI. Estrady 56 01-932 Warsaw

Poland

declare, on our joint responsibility with the manufacturer, that the product:

Tyre changer
Electro-mechanical device,
Type: CNC ELEGANCE CHV,
Serial number

concerned by this declaration, complies with all relevant requirements of the Machinery Directive:

- directive 2006/42/EU (safety machines),

applicable in the essential requirements and relevant conformity assessment procedures, as well as on the essential requirements of the following directives:

- directive 2014/35/EU (the low voltage);
- directive 2014/30/EU (the electromagnetic compatibility);
- directive 2014/68/EU (pressure).

In order to verification of compliance with the applicable legal regulations have been consulted harmonized standards and other normative documents:

PN-EN ISO 12100:2012P

Safety of machinery -- General principles for design - Risk assessment and risk reduction

PN-EN 61000-6-3:2008P

Electromagnetic compatibility (EMC) -- Part 6-3: General standards -- Emission standard for environments: residential, commercial and light industrial

PN-EN 61000-6-4:2008P

Electromagnetic compatibility (EMC) -- Part 6-4: General standards -- Emission standard for industrial environments

PN-EN ISO 13857:2010P

Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs

PN-EN 349+A1:2010P

Safety of machinery - Minimum gaps to avoid crushing of parts of the human body

PN-EN 60204-1:2018P

Safety of machinery -- Electrical equipment of machines -- Part 1: General requirements

PN-EN 61293:2000P

Marking of electrical equipment with ratings related to electrical supply -- Safety requirements

PN-EN ISO 4414:2011E

Pneumatic fluid power - General rules and safety requirements for systems and their components

PN-EN ISO 11201:2012P

Acoustics -- Noise emitted by machinery and equipment -- Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections

PN-EN ISO11202:2012P

Acoustics -- Noise emitted by machinery and equipment -- Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections

PN-EN ISO 4871:2012P

Acoustics -- Declaration and verification of noise emission values of machinery and equipment

PN-EN 50419:2008P

Marking of electrical and electronic equipment in accordance with Article 11 (2) of Directive 2002/96/CE (WEEE)

The technical documentation of this device, referred to in point 1 of Annex VII A of the Machinery Directive, is located in the headquarters of manufacturer and will be made available to the competent national authorities for at least 10 years after the last piece.

The person responsible for the preparation of the technical documentation of the product and introducing changes in it, is MSc. Gregory Tworek.

This EC Declaration of Conformity will be kept by the manufacturer of the product for 10 years from the date of produce the last unit and will available for market supervisory authorities for verification.

	MSc. Gregory Twore
Warsaw, 30.10.2019	
,	Signature