

KS110 ULTRASONIC CUTTING MACHINE

INSTRUCTION MANUAL

Please read this manual before using.

Please keep this manual within easy reach for quick reference.

ENGLISH

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SAFETY INSTRUCTIONS

This instruction manual and the indications and symbols that are used on the device itself are provided in order to ensure safe operation of this device and to prevent accidents and injury to yourself or other people.

CAUTION

This thread cutter system should only be used by operators who have received the necessary training in safe use beforehand.

Attach all safety devices before using the cutting machine. If the device is used without these devices attached, injury may result.

Do not touch any of the moving parts or press any objects against the device while sewing, as this may result in personal injury or damage to the device.

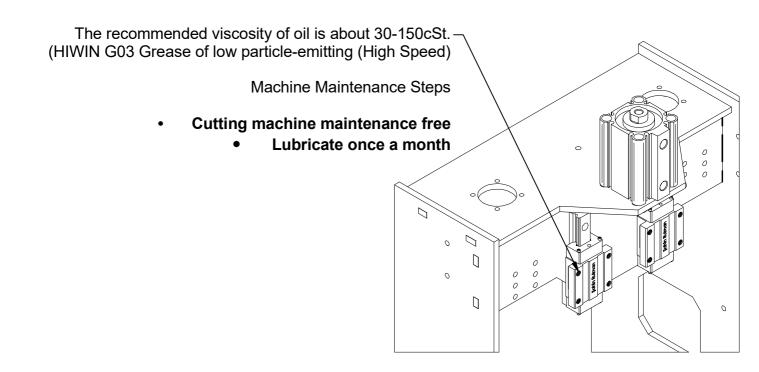
MAINTENANCE INSPECTION

Maintenance and inspection of the device should only be carried out by a qualified technician.

Use only the proper replacement parts as specified by Elite A.G.

If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the device.

Any problems in device operation which result from unauthorized modifications to the device will not be covered by the warranty.



WARNING LABELS

Please follow the instructions on the labels at all times when using the device. If the labels have been removed or are difficult to read please contact ELITE A.G.



INSTALLATION

Parts installation should only be carried out by a qualified technician.

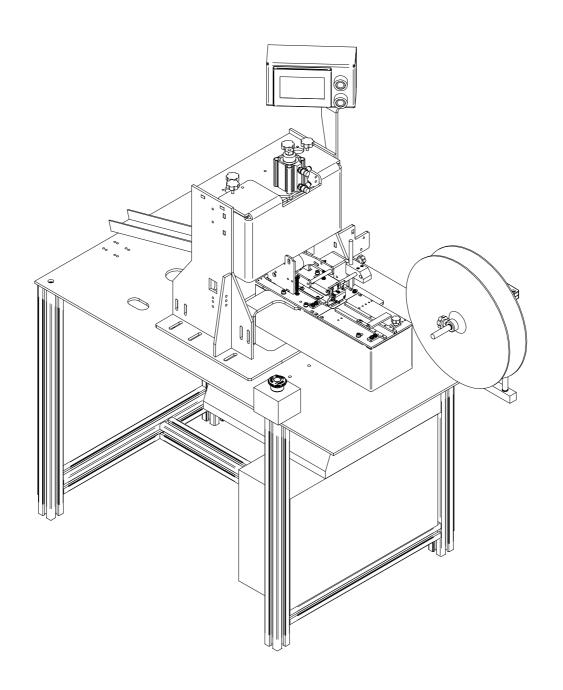
Please contact Elite A.G. for any electrical problem that may need to be repair.

Do not connect the power cord until installation is complete, otherwise the device may operate if the cut switch is depressed by mistake, which could result in injury.

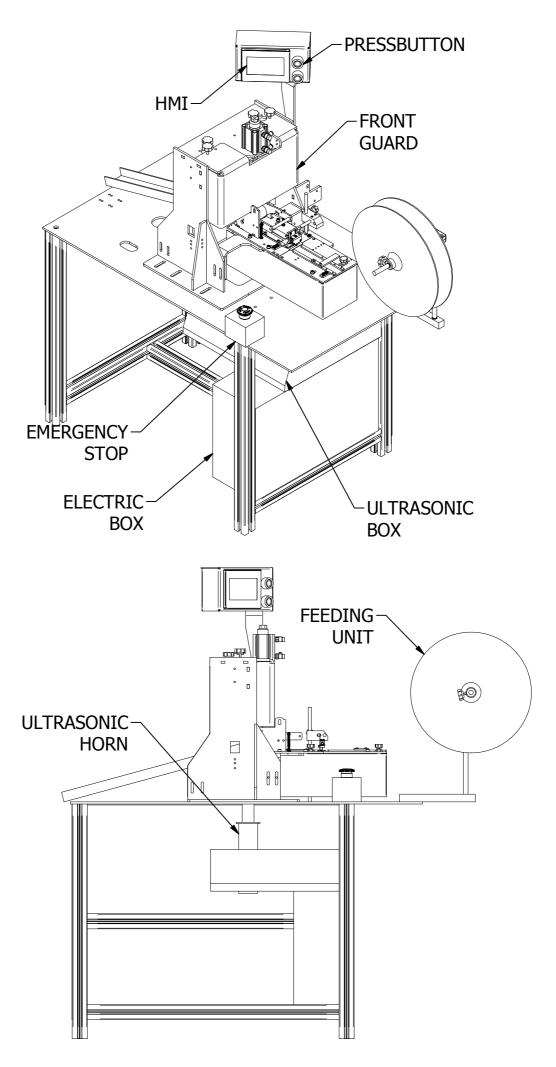
All cord should be secured at least 25mm away from any moving parts. Futhermore, do not excessively bend the cable or secure it too firmly staples, otherwise there is the danger that fire or electric shocks could occur.

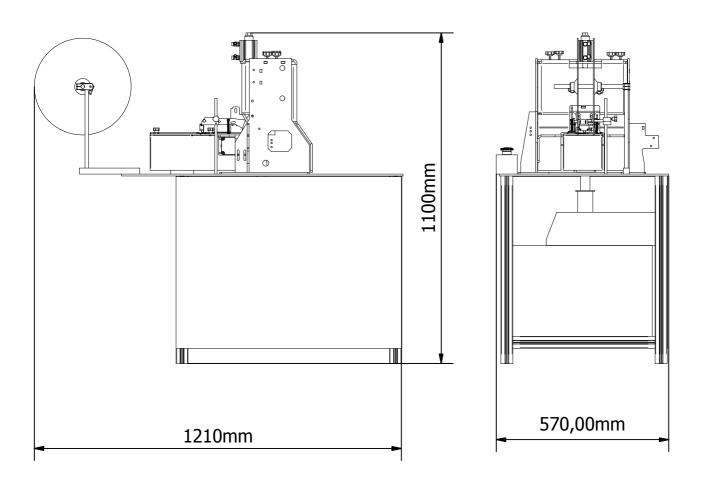
Be sure to connect the ground. If the ground connection is not secure, you run the risk of receiving a serious electric shock, and problems with correct operation may also occur.

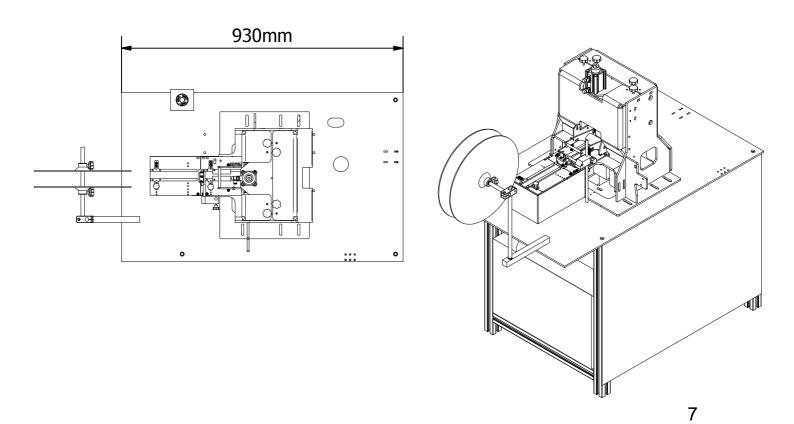
TECHNICAL DATA



MACHINE TECHNICAL DATA			
1	2		
Air Consumption	2lt/Min		
Energy	220v		
Valve	5/2		
Valve Pressure	0.15-0.8Mpa		
Valve Energy	DC24V 25W 21.6-26.4V		
Regulator Setpress	0.05-0.05 Mpa		









文書 No.: CJ2*-SM0001N

信頼性特性データ:エアシリンダ

<u>型式:標準形/CJ2、低摩擦形/CJ2Q、低速シリンダ/CJ2Xシリ</u>ーズ

B10 データ

エアシリンダ CJ2 標準形、低摩擦、低速シリンダシリーズの以下の耐久性試験結果から、故障確率分布をワイブル分布と仮定した場合の、B10 データの推定値(信頼水準 90%)を以下に示します。

	B10
標準形/CJ2シリーズ	2, 280 万回
低摩擦形/CJ2Qシリーズ	410 万回
低速シリンダ/CJ2Xシリーズ	80 万回

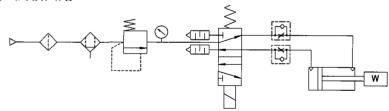
※上表の値は下記耐久試験における部品固有の値ですので、安全機能における本製品の使用可否につきましては、設備設計仕様の枠内においてご判断ください。

耐久試験結果

- ・ 標準形/CJ2シリーズ:15台の試験を行い、2,500万回経過後、故障数0個
- ・ 低摩擦形/CJ2Qシリーズ:10台の試験を行い、500万回経過後、故障数0個
- ・ 低速シリンダ/CJ2Xシリーズ:10台の試験を行い、100万回経過後、故障数0個

耐久試験条件

① 試験回路



② 圧力 : 0.5MPa ③ 給油 : 無給油

④ 空気源 :ドライエア

⑤ 作動頻度: CJ2&CJ2Q: 120 回/秒

CJ2X:60回/秒

⑥ 実験場所:ライフ室

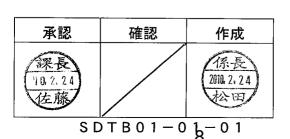
⑦ 周囲温度:常温

⑧ 負荷 :

CJ2&CJ2Q:軸受部分に加わる横荷重が出力

の 1/40 となる負荷

CJ2X:無負荷





Reliability characteristic data for: Air cylinder

Model number : Standard type/CJ2 series

: Low friction type/CJ2Q series

: Low-speed cylinders/CJ2X series

B₁₀ data

Based on the following endurance test results of the cylinder CJ2 series, and assuming a failure mode following the Weibull distribution the following B10 data has been estimated. (90% confidence level)

	B10
Standard type/CJ2 series	22.8 million cycles
Low friction type/CJ2Q series	4.1 million cycles
Low-speed cylinders/CJ2X series	0.8 million cycles

NOTE:

The estimated reliability data provided is only applicable to the component in the stated operating conditions. Use of this data for any assessment under standards or otherwise, is at the sole risk of the user. This product is not a safety component and is not supplied to provide a safety function.

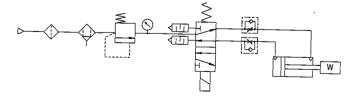
Endurance test results

For reference

- Standard type: 15 pieces were tested up to 25 million cycles, and found to have zero failure.
- Low friction type: 10 pieces were tested up to 5 million cycles, and found to have zero failure.
- Low-speed cylinders: 10 pieces were tested up to 1 million cycles, and found to have zero failure.

Endurance test conditions

1) Test circuit



2) Pressure: 0.5MPa

3) Lubrication: None

4) Air supply: Dry air

5) Operating freq.: cJ2&CJ2Q: 120times / sec.

CJ2X : 60 times / sec.

6) Laboratory: Life test room

7) Ambient temp.: Normal temp. (13 to 33 °C)

8) Load:

CJ2&CJ2Q: The load whose lateral load applied to the bushing is 1/40 of the

maximum theoretical output/

CJ2X: No load

Prepared	T. MATS VDA Feb-24-2010
Checked	and and
Approved	T. Lato Feb- 24-2010



Reliability Data: Compact Cylinder

Model:CQ2 series

Prepared	H.GOTO 12.JUL.2018
Checked	K.NIKAIDO 12.JUL.2018
Approved	M.OKUMA 12.JUL.2018

B₁₀data

Based on the life test results of CQ2 series, assuming that a failure mode following the weibull distribution, the following B_{10} data has been estimated (90% confidence level).

Model/Series	B ₁₀	Pressure (MPa)	Load
CQ2 series (φ12~200)	8 million cycles	0.5MPa	Maximum allowable lateral load applied to the bushing is 1/20 of the maximum cylinder force.

Notes)

The determination of B_{10} is generally based on the methods described in ISO19973, except for pressure, load.

Warning)

SMC does not take any responsibility for the use of this data or for the use of the product when used in the safety related part of a control system (SRP/CS) according to ISO13849-1.

CE CERTIFICATE



EC Declaration of Conformity

Product Name: Human Machine Interface (HMI)

Rev.23

Product identification (catalogue number): DOP-B series

See Appendix for details

are in conformity with the provisions of the following EC Directive(s) when installed in accordance with the installation instructions contained in the product documentation:

We declare under our sole responsibility that the product

2014/35/EU

Low Voltage Directive (LVD)

2014/30/EU

Electromagnetic Compatibility Directive (EMC)

is herewith confirmed to comply with the requirements set out in the Council Directive(s) for electrical equipment used within certain voltage limits. For the evaluation of the compliance with the Directive(s), the following standards were applied:

LVD:

EN 61131-2:2007-07

EN 61131-2: 2007, EN 61000-6-1: 2007, EN61000-6-2: 2005, EN61000-6-4: 2007/A1:2011

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation: Directives 2006/95/EC and 2004/108/EC(until April 19th, 2016) and Directive 2014/35/EU and 2014/30/EU(from April 20th, 2016).

The following manufacturer/importer is responsible for this declaration:

Delta Electronics, Inc.

(Company Name)

No. 18, Xinglong Rd., Taoyuan City 33068, Taiwan.

(Company Address)

Person responsible for making this declaration:

Brad Wang

(Name)

Industrial Automation Business Group / QE Manager

(Position/Title)

886-3-362-6301 / 886-3-362-7267

(TEL / FAX)

(Place)

(Date)

The First CE Taken Date on April 7th, 2008 Rev. 1.0 was issued on April 17th, 2008

Rev. 2.0 was issued on July 3rd, 2009

Rev. 3.0 was issued on Dec. 25th, 2009

Rev. 4.0 was issued on July 28th, 2010

Rev. 5.0 was issued on Sept. 17th, 2010

Rev. 6.0 was issued on Oct. 19th, 2010

Rev. 7.0 was issued on Feb. 10th, 2011

Rev. 8.0 was issued on Feb. 17th, 2011

Rev. 9.0 was issued on Sep. 15th, 2011

Rev. 10.0 was issued on Oct. 25th, 2011

Rev. 11.0 was issued on Dec. 5th, 2011

Rev. 12.0 was issued on Dec. 28th, 2011

Rev. 13.0 was issued on Mar. 27th, 2012 Rev. 21.0 was issued on Aug. 10th, 2015

Rev. 14.0 was issued on Jun. 7th, 2012 Rev. 15.0 was issued on Sep. 3rd, 2012

Rev. 16.0 was issued on Nov.29th,2012

Rev. 17.0 was issued on Jan.07th,2013

Rev. 18.0 was issued on May.16th,2013

Rev. 19.0 was issued on Oct. 22nd, 2013

Rev. 20.0 was issued on May. 23rd, 2014

Rev. 22.0 was issued on Oct. 21st, 2015

Issued to: SICK PRODUCT CENTER ASIA PTE LTD

8, Admiralty Street #04-11, Admirax

Singapore757438 SG

This is to certify that PROXIMITY SWITCHES representative samples of

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60947-1 - Low-Voltage Switchgear and Controlgear -

Part 1: General Rules

UL 60947-5-2 Low-voltage Switchgear and Controlgear - Part 5-2: Control Circuit Devices and

Switching Elements - Proximity Switches

CSA C22.2 No. 60947-1 Low-Voltage Switchgear and

Controlgear - Part 1: General Rules

CSA C22.2 No. 60947-5-2 Low-voltage switchgear and Controlgear - Part 5-2: Control circuit devices and switching

elements - Proximity switches

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Class 2, Photoelectric Proximity Switches, Series KT, consisting of Models KT, followed by M, followed by -W, -M, -R, -G, -B, -L or -S, followed by N, P, B or 0, followed by 4 numbers or characters, followed by 0, 1, 2, 3 or 4, followed by P or V, may be followed by a character, may be followed by 2 numbers.

Class 2, Photoelectric Proximity Switches, Series CS, consisting of Models CS, followed by M, followed by –W or -S, followed by N, P, B or 0, followed by 4 numbers or characters, followed by 0, 1, 2, 3 or 4, followed by P or V, may be followed by a character, may be followed by 2 numbers.

Class 2, Photoelectric Proximity Switches, Series LUT, consisting of Models LUT, followed by M, followed by –B, -U or -S, followed by N, P, B or 0, followed by 4 numbers or characters, followed by 0, 1, 2, 3 or 4, followed by P or V, may be followed by a character, may be followed by 2 numbers.



Appendix

Product p/n.				
DOP-B03S210	DOP-B07E411	DOP-B07S401K	DOP-B08E515	DOP-B10S511Z0
DOP-B03E211	DOP-B07E415	DOP-B07E415 DOP-B07S410 DOP-B08S515 DOP-B		DOP-B10S615
DOP-B03S211	DOP-B07E515	DOP-B07S411	DOP-B0S211	DOP-B10S651
DOP-B03S211Z0	DOP-B07HE415	DOP-B07S411K	DOP-B10E515	DOP-B10VS511
DOP-B04S11	DOP-B07PS415	DOP-B07S411Z0	DOP-B10E615	DOP-B10WE615
DOP-B04S211	DOP-B07PS515	DOP-B07S411Z1	DOP-B10HE615	-
DOP-B05S100	DOP-B07S200	DOP-B07S411ZF	DOP-B10PE515	_
DOP-B05S101	DOP-B07S201	DOP-B07S415	DOP-B10S411	-
DOP-B05S111	DOP-B07S201A	DOP-B07S515	DOP-B10S411Z0	-
DOP-B07410	DOP-B07S211	DOP-B07WE415	DOP-B10S511	- n

The First CE Taken Date on April 7th, 2008 Rev. 1.0 was issued on April 17th, 2008 Rev. 2.0 was issued on July 3rd, 2009

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Rev. 6.0 was issued on Oct. 19th, 2010 Rev. 7.0 was issued on Feb. 10th, 2011 Rev. 8.0 was issued on Feb. 17th, 2011 Rev. 9.0 was issued on Sep. 15th, 2011

Rev. 10.0 was issued on Oct. 25th, 2011 Rev. 11.0 was issued on Dec. 5th, 2011

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Rev. 15.0 was issued on Sep. 3rd, 2012

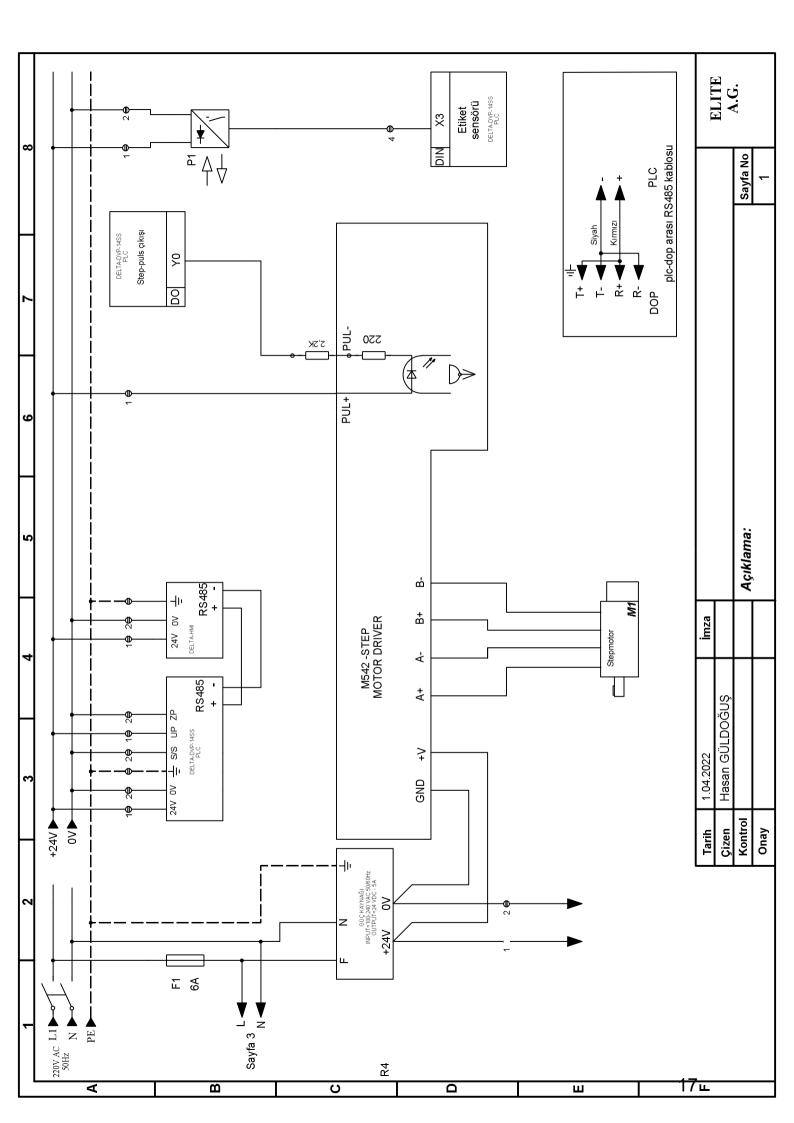
Rev. 16.0 was issued on Nov.29th,2012 Rev. 17.0 was issued on Jan.07th,2013

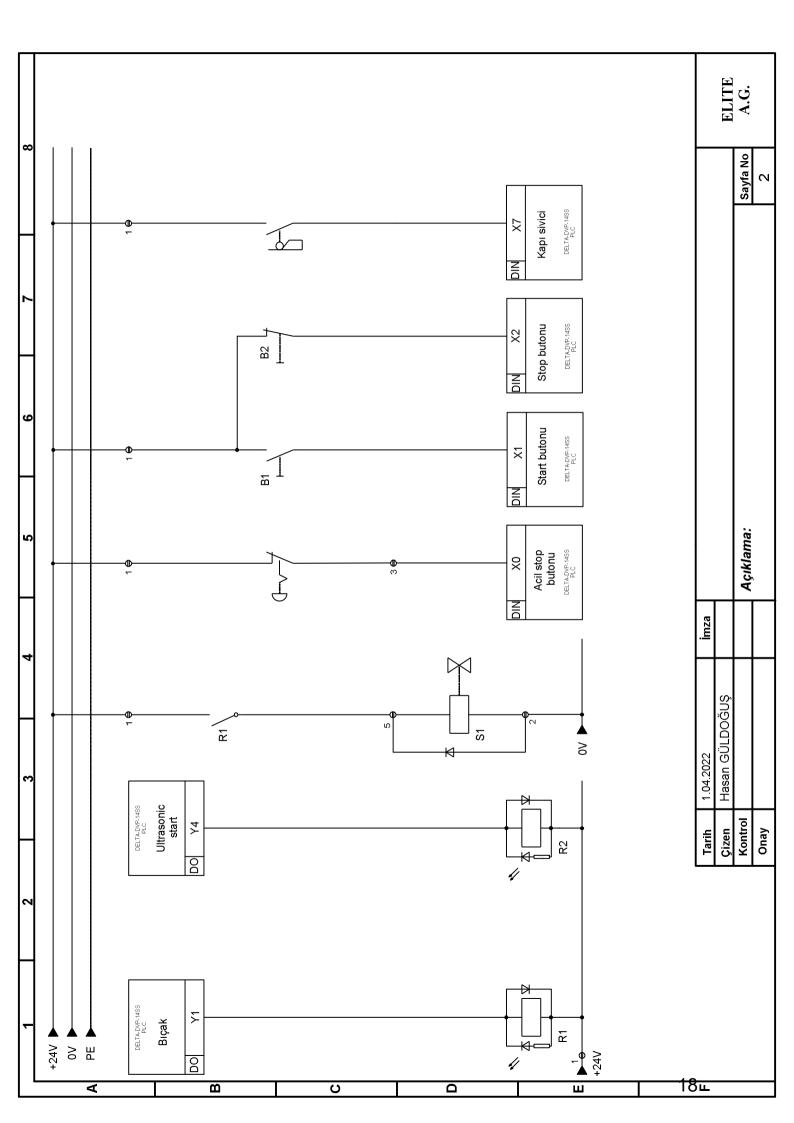
Rev. 18.0 was issued on May.16th,2013 Rev. 19.0 was issued on Oct. 22nd, 2013

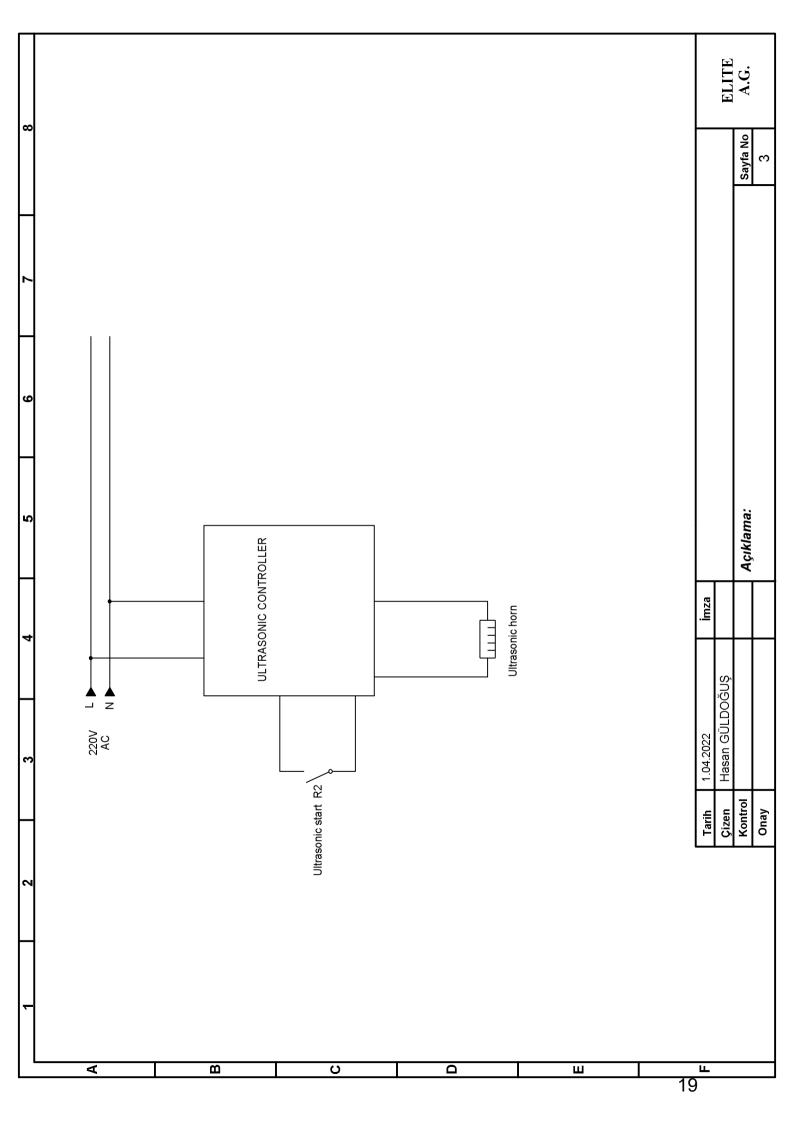
Rev. 12.0 was issued on Dec. 28th, 2011 Rev. 20.0 was issued on May. 23rd, 2014

Rev. 22.0 was issued on Oct. 21st, 2015

ELECTRICAL DRAWING







ELITE A.G. USER MANUAL



Main screen function buttons;

SETTINGS: Enter settings menu.

CUT: Manual knife cutting.(Only works on when machine STOP).

PULLER: Increase or Decrease puller.

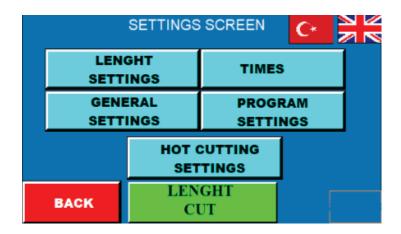
JOG: Manually working freeding motor. (Only works on when machine STOP).

QTY: Enter working quantity.

COUNTER: Already finish quantity. You can reset with **RESET** button.

TOTAL COUNTER: This shows total working quantity, from beginning. You can RESET if you wish.

READY!: It show all problems about machine in this area. READY! You can start working.



LENGHT SETTINGS: Enter for adjust lenght.

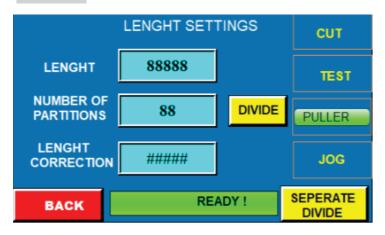
TIMES: Enter for adjust cutting time.

GENERAL SETTINGS: Enter for adjust machine general settings.

PROGRAM SETTINGS: Enter for save or load your ADJUSTMENTS.

HOT CUTTING SETTINGS: Enter for adjust temperature.

BACK: Enter for back to previous menu.



LENGTH: Enter you lenght with Milimeter.

TEST: Push for test your lenght.

NUMBER OF PARTITIONS: After entering the lenght, lenght is taken into the memory of the machine by pressing this button. Press the divide button each lenght change.

LENGHT CORRECTION: If machine give shorter than your lenght you can make correction from here.



KNIFE-PEN DISTANCE CANNOT BE ENTERED LESS THAN 104MM

DIFFERENT DIVISION SETTINGS			
Residual value ######	Number of divisions		
88888 1	88888 4		
88888 2	88888 5		
88888 3	88888 6		
BACK	NEXT		

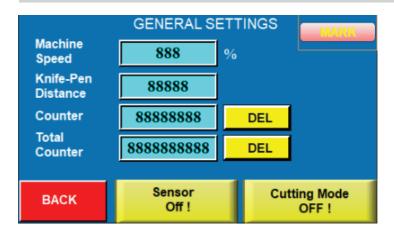
RESIDUAL VALUE: INCREASING VALUE FROM INTEGER.

NUMBER OF DIVISIONS: THE DESIRED PARTITION RANGES VALUE

IS ENTERED

TIME SETTINGS			KNIFE
Cutting Time	88888	milliseconds	
Marking Time	88888	milliseconds	
BACK			

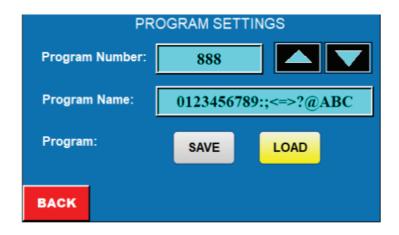
Knife cutting time and marking time are precisely adjusted in mm on this screen.



Knife-Pen Distance: Measure the distance between the pencil and knife and entered mm. The machinbe only uses this value in marking mode. (DONT CHANCE THIS SETTINGS UNLESS THE KNIFE-PEN CHANGES.)

If you read empyt program, the value here may be zero. In this case, the blade spacing value must be entered here again.

If cutting is disabed the machine works without cutting.



You can SAVE or LOAD your programs from this MENU. You can SAVE maximum 900 programs to memory

SAVING PROGRAM;

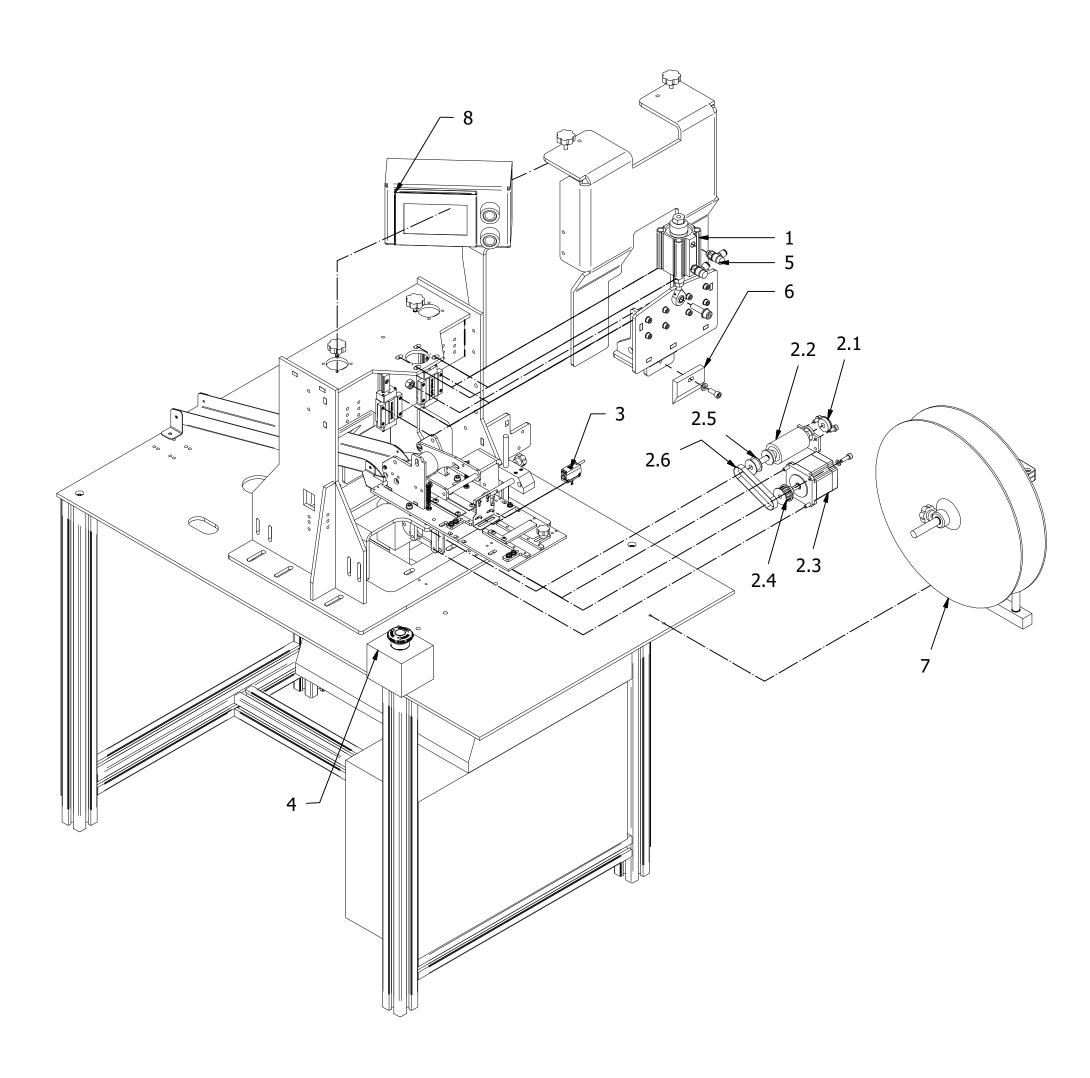
- 1. First enter Program Number and Name.
- 2. Push SAVE 2 secs for save it.

LOADING PROGRAM;

- 1. First enter Program NO.
- 2. Than push LOAD 2 secs.

Please dont save empty programs than you should adjust that.

PART LIST



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	CDQ2WB40TF-20 Compact Cylinder	CDQ2WB40TF-20
2.1	4	Bearings	KS110_UC_037
2.2	1	Bottom Roller	KS110_UC_038
2.3	1	Stepper Motor	KS110_UC_026
2.4	1	Pulley	KS110_UC_048
2.5	1	Pulley	KS110_UC_049
2.6	1	Belt	KS110_UC_050
3	1	Sensor	KS100-A_066
4	1	Emergency Button	KS110_UC_065
5	2	Speed Controller With One Touch Fitting/Elbow Type	KS110_UC_069
6	1	Knife	KS110_UC_071
7	2	Feeding Unit	KS110_UC_072
8	1	нмі	KS110_UC_078



MAKINE SAN.TIC.LTD.STI

YENIGUN MAHALLESI BAGCILAR CADDESI 615 SK. NO 14/A BAGCILAR/ISTANBUL/TURKEY