Excision

Dependable Precision

PSS400

Semi-Auto Band Saw Machine

OPERATION MANUAL

MACHINE CERTIFICATION AND IDENTIFICATION MARKING

CE	Excision® Dependable Precision	T +61(0)3 5551 4555 E sales@excision.com.au A 35 Peck Street, Hamilton, VIC 3300 Australia W www.excision.com.au	
Machine Model	400PSS		
Serial Number			
Production Date			
Blade Variable Speed	25 - 90 m/min		
Coolant Motor	0,09/0,12kW - 2800 rpm		
Blade Dimension	3850 x 27 x 0.9 mm		
Main Motor	2.2 kW	Current	9.3A
Main Voltage	415 V	Cycle	60 Hz
	Made in Turkey		

NOTE : This manual is a part of the machine and must accompany it if moved within the company or sold.

ATTENTION!!!

BEFORE USING THE MACHINE, PLEASE READ THIS MANUAL CAREFULLY. ALL EXPLANATIONS, INSTRUCTIONS AND WARNINGS ARE INTENDED TO PROTECT YOU!

EC DECLARATION OF CONFORMITY

The manufacturer declares that the machinery described herein conforms to the following EC directives and harmonized standards and relevant essential health and safety requirements.

Manufacturer: Excision Pty Ltd

Address: 35 Peck Street, Hamilton VIC 3300 Australia

Phone: +61 3 5551 4555

Web: www.excision.com.au

e-mail info@excision.com.au

Machine type/model: 400 PSS

Applicable EC Directives:
Machinery Directive 2006/42/EC,
Low Voltage Directive (LVD) 2014/35/EC ve
Electromagnetic Compatibility (EMC) Directive 2014/30/EC

Applicable Harmonized Standards:
TS EN ISO 12100, TS EN ISO 13850, TS EN 349+A1,
TS EN ISO 13850 , TS EN 14120, TS EN ISO 13849–1, TS EN 14119 , TS EN ISO 60204–1, TS EN ISO 14118

WARRANTY CONDITIONS

The machine is under the warranty of Excision Pty Ltd For a period of 2 years for mechanical parts, 1 year for electric and electronic parts from the date of purchase. This warranty is subject to all of the terms and conditions listed below:

1. This warranty is valid only if the **Warranty Registration Form** is filled in and returned to the manufacturer or its authorized dealer within two months after the date of purchase.
2. The obligation of the manufacturer under this warranty shall be limited to repairing or replacing components which proves defective and which our examination shall disclose to our satisfaction to be defective.
3. Defects due to improper operation, misuse, neglect, alteration, irregular voltage conditions, inadequate wiring, improper installation (all electrical and electronic components, all electrical motors etc.) and due to accidents or any damage caused by transportation, flood, fire, natural disasters, theft are not included in this warranty and are strictly the responsibility of the purchaser.
4. Any part returned to Excision or its authorized dealer under the terms of this warranty shall be on the basis of transportation charges prepaid by the customer and must be accompanied by a record of the machine model code and serial number.
5. This warranty does not apply to the following components; band saw blade, blade pressure pads or brackets and blade guide bearings **because of being consumables**.
6. Manufacturer and authorized dealer cannot be blamed within maximum repair period for the material or moral damage. Apart from that act the period as Warranty Conditions and there will not be done any retroactive requirement.

Excision Pty Ltd

Dealer:

WARRANTY REGISTRATION FORM

Machine Model : ……

Serial Number : ……

Invoice Date : ……

Invoice Number : ……

Dealer: **Customer:**

…… ……

Important!

This form must be duly completed and returned to the manufacturer or its authorized dealer within two months after the date of purchase. Failure to do so will void the warranty.

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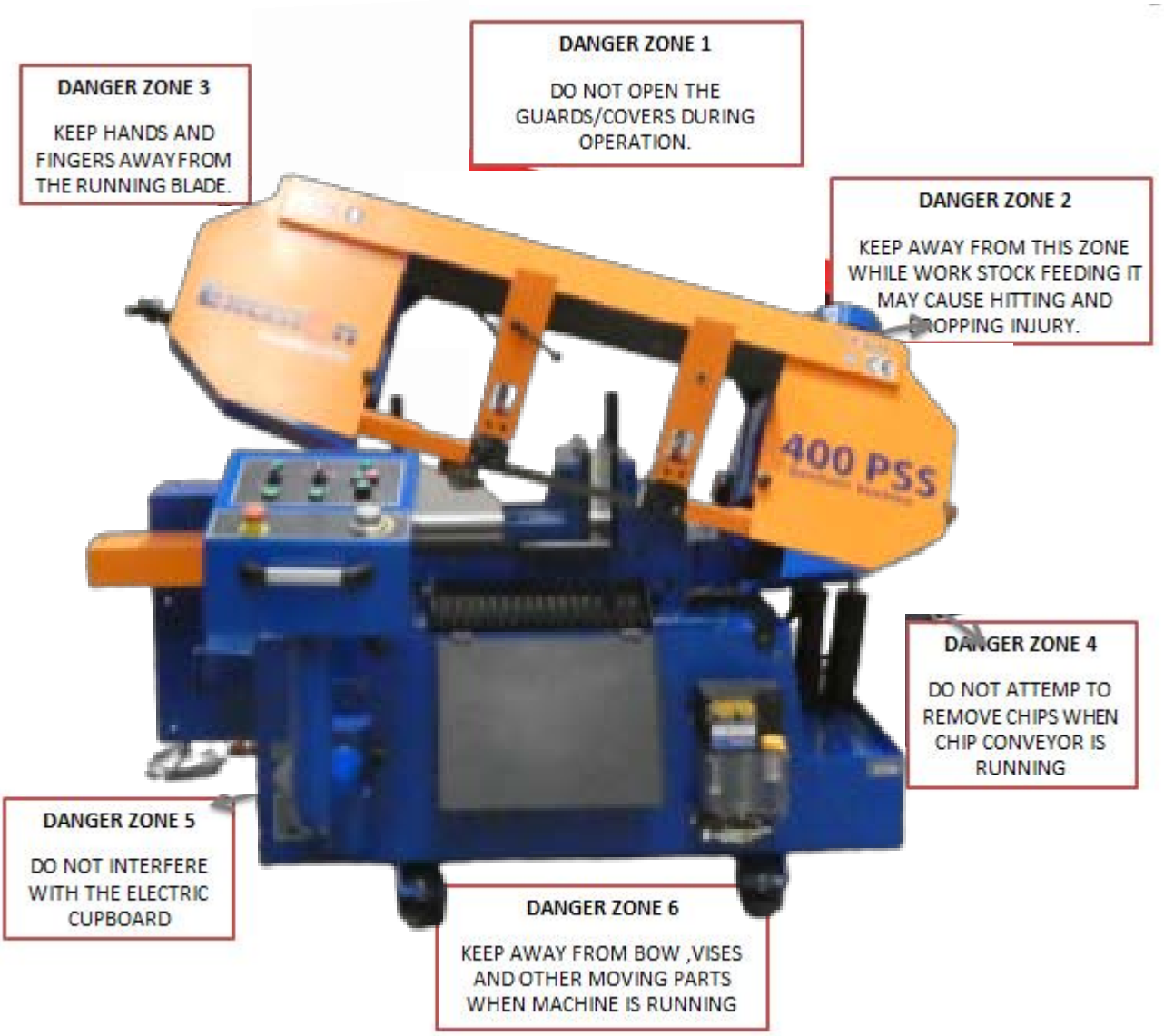
CHAPTER I : SAFETY

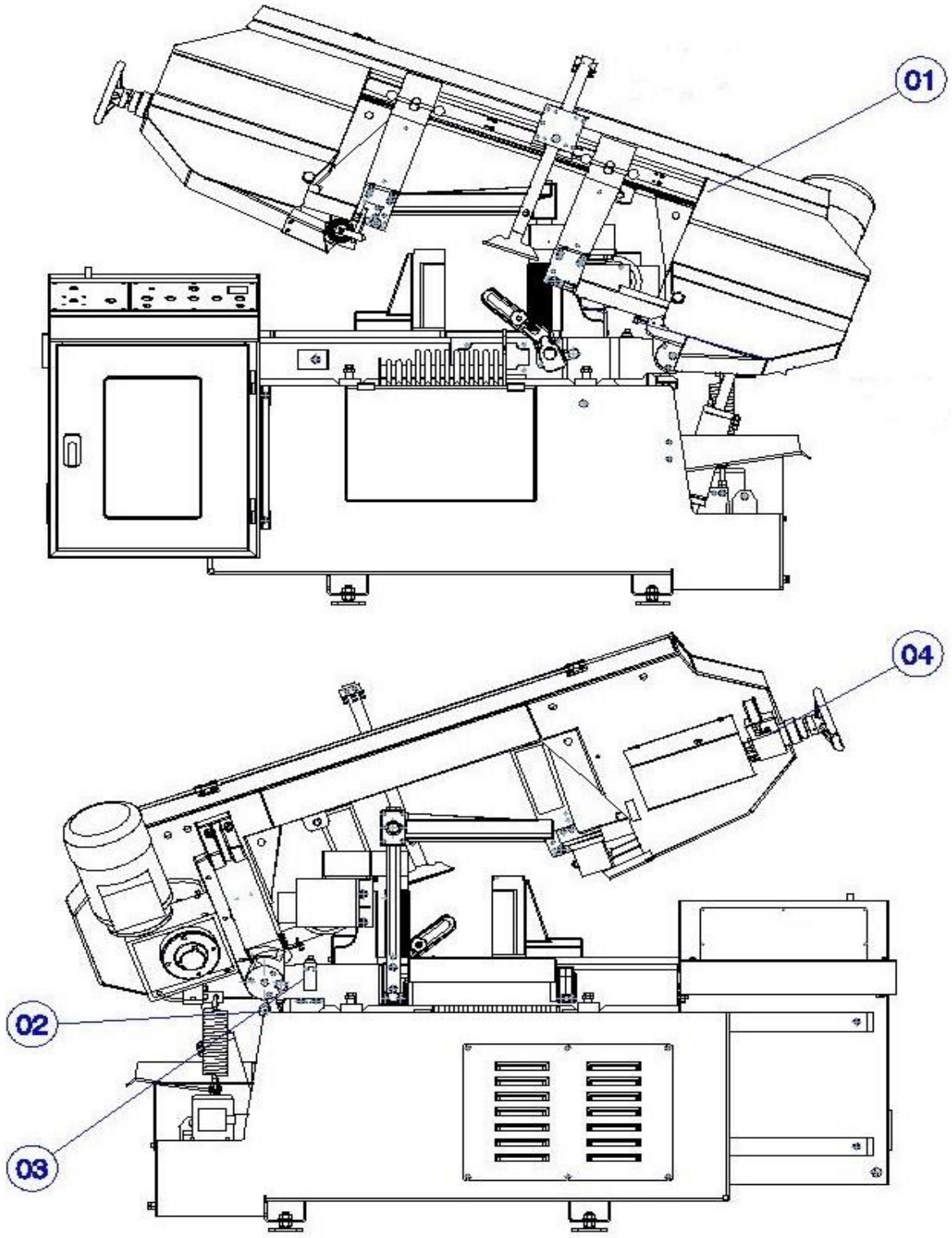
1. Safety Rules

- Never allow unqualified persons to operate or interfere with the machine.
- It is important to develop personal safety awareness. Observe all related safety regulations and pay attention for hazardous conditions. Discuss these conditions with your supervisor.
- You must use personal protective equipment, like safety glasses, gloves, safety work shoes.
- Do not remove warning signs and/or instruction plates off the machine.
- Do not open/remove any door or guard during operation.
- Make sure that all machine controls are set for the desired mode of operation, whenever the setting of the machine control is changed, run the machine in slow mode to make sure it operates as expected.
- Never disable any safety device to avoid its assigned function. These devices are intended to protect both the machine and its operator.
- Do not load, unload, operate or adjust the machine without proper instructions.
- This machine is specifically designed for cutting general metal material. Do not cut wood and analogous material, meat, fishery, food and agriculture products, combustible and radioactive materials.
- Enough space should be provided around the machine to avoid hitting and provide a convenient operation.
- Do not leave any tool on the machine after use. Do not put work stock or tools around the machine, to avoid injury.
- Do not operate the machine with its safety guards removed.
- Do not wear gloves when operating through control panel.
- Wear gloves only when loading/unloading the material, changing the blade and chip brush.
- Never touch the blade, moving work stock, nor put your hands into the vise area or chip conveyor unit until the machine halts completely.
- When selecting blade, blade speed and coolant, please refer to the operation manual or related documents.
- Before installation and operate the machine check the sufficiency of the earth of the machine to your electrician. Do not operate the machine without the earth.
- Determined and declared bench life of the machine by the Ministry of Industry and Trade is 10 years.
- For longevity please follow the maintenance directions at the manual.
- For productive usage of energy and saw blade, use the recommended saw blade by the PLC.

2. Danger Zones on the Machine



3. Safety Equipments and Assignments



01	Cover Switch	150 01 020
02	Down Limit Switch	150 01 254
03	Top Limit Switch	150 01 022
04	Hyd. Band Tension Switch	150 01 050

3.1. Cover Switch

This switch provides to shut down the machine while the bow cover is open. Running the machine may cause wounding and serious gashes. Machine gives aural warning while the cover is open.

3.2. Down Limit Switch

This switch is used to adjust the bow's nadir to goes down. Down limit switch is a factory setting. Please do not tinker with the down limit switch.

3.3. Top Limit Switch

Top limit switch is an adjustable switch and is used to adjust the bow's apex to go rises up.

3.4. Hydraulic Band Tension Switch

This switch is used for to stop the machine while the blade pressure gets smaller than adjusted ones. The main causes of decrease in pressure are; dulling, cracking or breaking of blade. Operating the machine under these conditions endanger the operator.

3.5. Electricity Panel Cover Switch

This switch is used to stop the machine while the cover is open. Operating the machine may causes to electric shocks while the electricity panel cover is open. Machine gives aural warning while the cover is open.

3.6. Emergency Stop Button

MAIN SWITCH

EMERGENCY BUTTON

Emergency stop button, places on the operator control panel- near the main switch, is red button and you can see it easily. In emergency cases, press to this button to stop the machine. Machine does not run while the button is pressed. To rerun the machine, please turn left and release the button.

4. Warning Labels and Assignments

4.1. Glove Label

Please use personal protective equipment, like glove, during operation and while changing the blade.

4.2. Electricity Neutral Warning Label

In this label, we declared the instructions how to make the electric connection before installing machine or after handling the machine.

4.3. High Voltage Label

This label shows high voltage risk parts. All electrical connections should be done by a qualified electrician.

4.4. Safety Equipments Label

All the safety devices and guards are designed to intend to protect the operator. Please do not remove these safety guards.

CHAPTER II : DESCRIPTION AND PROPERTIES

1. Technical Properties of the Machine

MAIN MOTOR	2,2 kW, 1400 rpm
HYDRAULIC MOTOR	0,37 kW, 1400 rpm
COOLANT PUMP	0,09 kW, 2800 rpm
CUTTING SPEED	25-90 m/min
BLADE DIMENSIONS	3850x27x0,9
BLADE TENSION	Min. 30 bar -Max. 50 bar
BLADE QUALITY	Bi Metal
WORK STOCK DRIVE MECHANIZM	Infinite
HEIGHT OF VISE BED	750 mm
WEIGHT	900 Kg.
MACHINE DIMENSIONS	1195x1870x1200 mm
VOLTAGE	460 VAC
NUMBER OF PHASE	3 ~
FREQUENCY	60 Hz
MAX. CURRENT	9,3 A

2. Standard Equipment

Hydraulic Vise
Inverter
Hydromechanic Band Tension
Material Feeding Table with Rolls
1 Bandsaw Blade

3. Optional Equipment

Laser Line
Bundle Cutting Table
Chip Conveyor
Hydraulic Top Pressure

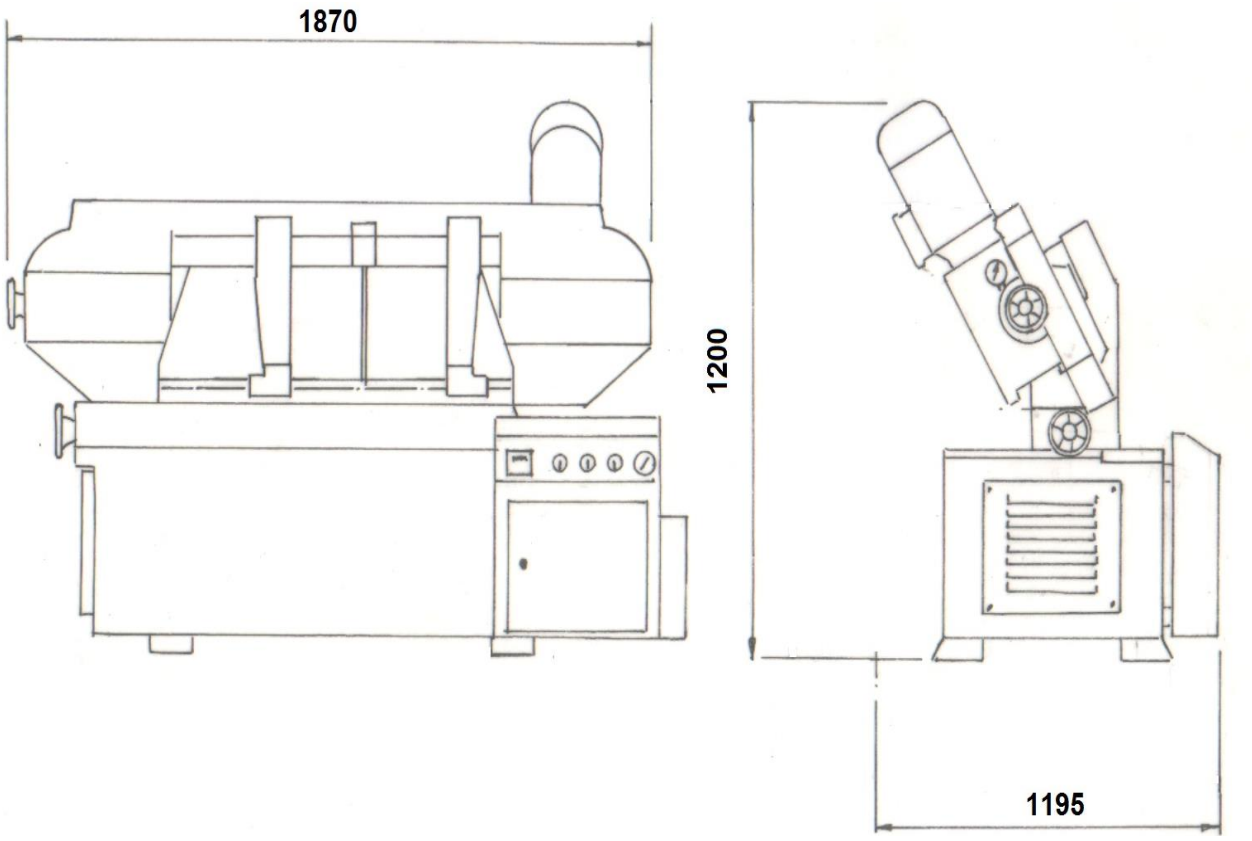
4. Noise Level

In accordance with the Machinery Directive 2006/42/EC

- The A-weighted continuous acoustic pressure does not exceed 70 dB (A).
- The maximum level of the C-weighted instantaneous acoustic pressure is always less than 130 dB.

NOTE: With the machine operating, the noise level will vary according to the different materials being processed and setting up.The user must therefore assess the intensity and if necessary provide the operators with the necessary personal protection.

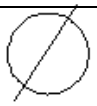
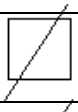
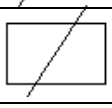
5. Machine Dimensions



6. Properties Table According to Metal Sawdust

Filing								
Shape of the sawdust	Thick, hard and short	Thick, hard and brittle	Thick, hard and curled	Thick, hard and curled	Thin, spiral and curled	Thin, spiral and curled	Like dust	Thin and very curled
Color of the sawdust	Blue or brown	Blue or brown	Silver or yellow	Silver	Silver	Silver	Silver	Silver
Band saw speed	Decrease	Decrease	Suitable	Increase	Suitable	Suitable	Decrease	Suitable
Advance speed	Decrease	Decrease	Decrease a little	Decrease	Suitable	Increase	Increase	Decrease
The others	Control lubricant coolant level	Control lubricant coolant level	Control number of teeth	Control number of teeth				Use thick pitch saw

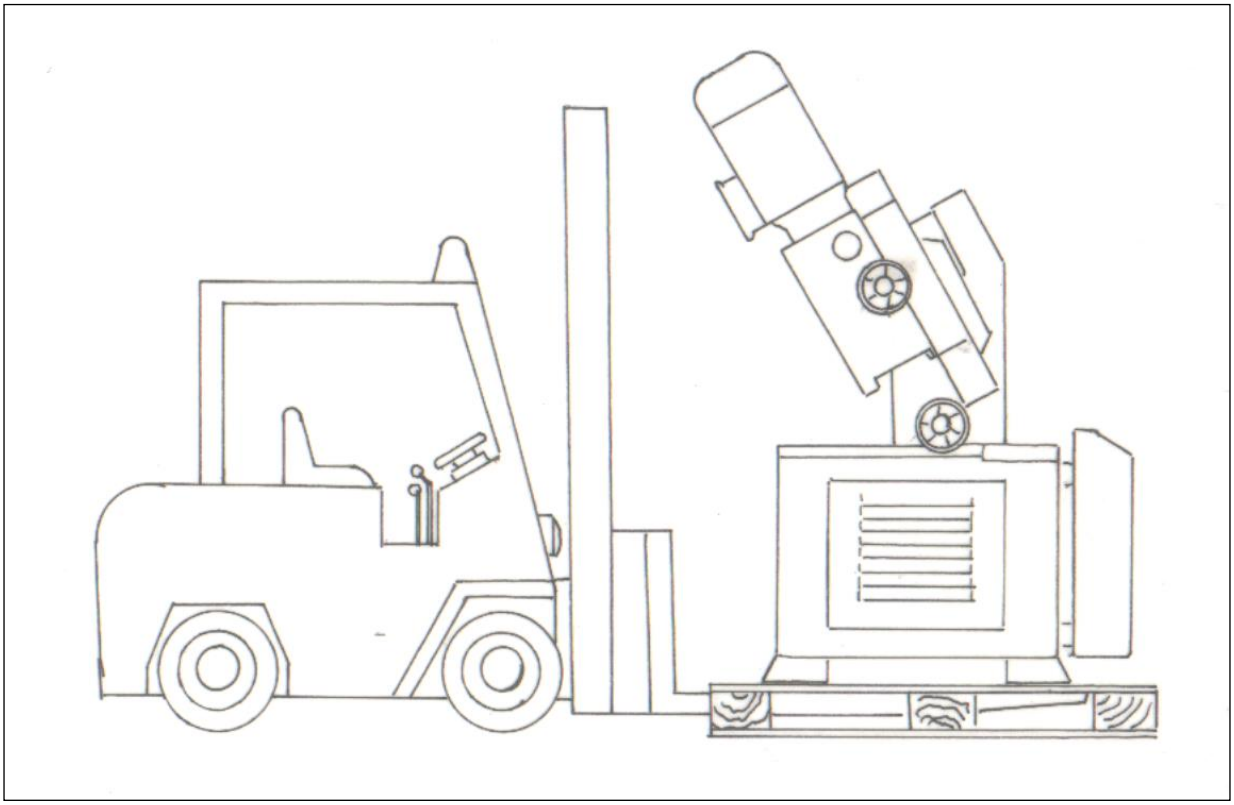
7. Band saw Machine Cutting Capacity

	**0 °**
	**300 mm**
	**300 mm**
	**300 x 350 mm**

CHAPTER III : TRANSPORTATION AND INSTALLATION

1. Handling the Unpacked Machine

Make sure the machine is safely loaded and balanced when moving it with a forklift, failing to do so may cause personal injury or damage to the machine



2. After Unpacking the Machine

Put the machine in a dry and sheltered place to prevent damage to the electrical and mechanical components. Apply appropriate lubricant (machine oil or grease) on the slide ways and non-painted areas to prevent rust.

3. Environmental Conditions

- Mains voltage and frequency complying with the machine motor characteristics.
- Environment temperature from -10° C to 50° C.
- Relative humidity is %5 to %90.

4. Shipping Brace

A shipping brace has been used to secure the saw frame to the saw base. Do not remove this brace until the machine is properly installed.

5. Machine Placement and Position

The followings should be considered when positioning the machine:

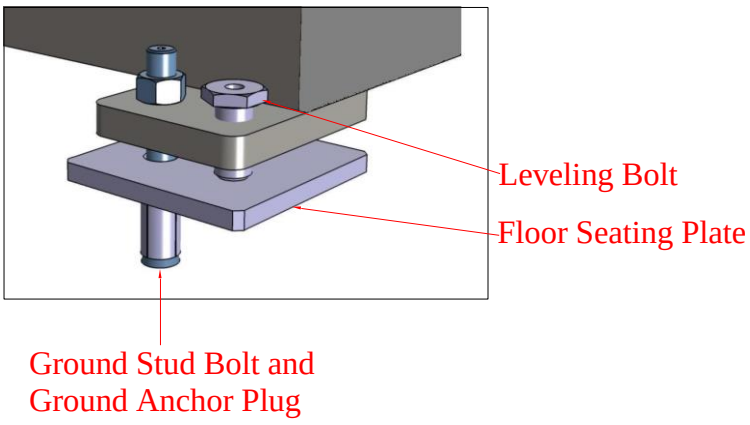
The floor: The machine should be placed on a levelled concrete floor.

Working area: Sufficient space should be allocated around the machine for comfortably loading and unloading work stock and for easy access during maintenance and repair. When necessary, all doors and access panels should be opened without interference.

Lighting: The machine and its surroundings should be well lit for operator's safety and for a convenient operation and maintenance.

Leveling: Once the machine has been positioned on the floor, it must be leveled. Adjust the leveling screws so that the machine is leveled on a horizontal plane in two directions; side-to-side and front-to-back within a tolerance of 0.1/1000 mm. Use vise bed surface to place the machinist's level. All of the four leveling screws should be supporting the machine. After leveling, make sure that the nuts are tightened if the stud bolts are used. Leveling is very important to obtain consistent and accurate cuts.

Note: After leveling, the shipping brace should be removed from the saw.



CHAPTER IV : PREPARATION BEFORE OPERATION

1- Cleaning

Unpainted and uncoated machine surfaces were coated with a rust inhibitor prior to shipment. The rust inhibitor should be cleaned with an appropriate solvent. To prevent rust on unpainted surfaces, a light coat of machine oil can be applied.

2- Removing the Shipping Brace

After positioning and levelling the machine, the shipping brace which secures the saw frame to the saw bed should be removed. The shipping brace is **located near the** the back of idler band wheel. Keep the shipping brace for later use.

3- Lubricating

Lubricate all the sliding parts before starting.

4- Hydraulic

The hydraulic **system** is shipped complete with hydraulic fluid. Before using the machine, the level of hydraulic fluid should be checked. A sight gauge is mounted on the machine base to check oil level. If the oil level is low, add grade 46 hydraulic oil or equivalent up to the indicated point.

5- Coolant

The machine is shipped with the coolant reservoir empty. Fill the reservoir with coolant until it is full. A sight gauge is mounted on the machine base to check coolant level.

Caution: Do not run the coolant pump without coolant in the reservoir. Otherwise, the coolant pump will be damaged.

Electrical Power Connection

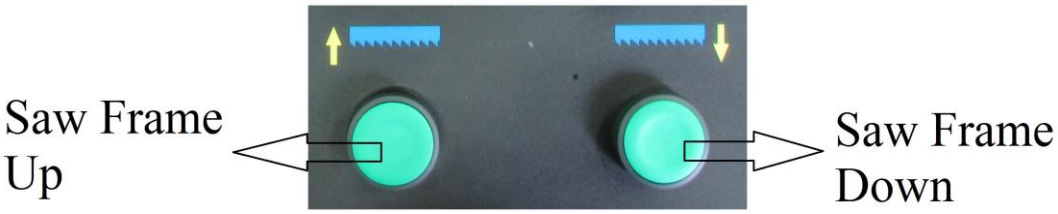
1. Electrical connection must be done by a qualified electrician, in conformance with the required electrical standards of your area.
2. Turn off the main circuit breaker of the area in which the machine will be located.
3. Machine's power cord should be connected to an appropriate power source; make sure the voltage rate matches the one required for the machine.

4. It is important that the shipping brace should be removed from the saw before taking any further step.

5. Turn on the machine's main switch.

Note: If the 'emergency stop button' is depressed, it must be released for the machine to run.

6. After turning the main switch on, wait until the monitor displays "Manual mode" page. While in this page press the "△" 'key just underneath the "saw frame" icon as shown in the following figure. The saw frame (bow) should rise. If the saw frame does not rise, change power lead connections, by reversing any two of the power leads in the power cord. Make sure you repeat steps 2 to 6 of this procedure.



Final Inspection Checklist before Operation

After installing the machine, a final inspection should be performed by considering the following checklist;

Any missing components, guards or panels

Removal of the shipping brace

Lost fasteners and fittings, hoses and conduit

Missing or damaged items

Coolant, oil, or hydraulic leads

Tools and others materials left on saw

Safety measures, general condition and readiness for use

CHAPTER V: OPERATION

In this section, the functions of the machine will described to guide the operator to become familiar with the machine and its components.

1- Control Panel

The following figure shows a general view of the machine control panel. The control elements on the panel will be described next.

Main Power Switch

The main power switch is located on the door of the control panel. When this switch is turned on, the LCD display comes on, indicating that the machine is ready to operate.

Emergency Stop

The "Emergency stop" push button stops *all functions* of the machine. The machine will not function until "Emergency stop button' is released. To release the emergency button, turn it in the direction indicated on its hub.

Caution: The "Emergency stop" push button does not disconnect the machine from the main power supply. To avoid from serious injury or death due to electricity shock, turn the main power switch off or disconnect the machine from the main supply before servicing it.

Feed Rate Valve

The feed rate valve is used to adjust the speed at which the blade (saw head) feeds into the workpiece during cutting. When this valve is set to zero, the blade does not feed into the material. To increase the feed rate; turn the valve in the direction in which the arbitrary numbers increase.

Feed Pressure Valve

The feed pressure valve is used to adjust the pressure which the saw frame applies to the work stock during cutting. The feed pressure can be easily adjusted via a colour coded feed pressure selector.

2- Blade Changing Procedure

In order to achieve accurate and efficient cuts, it is important to use a sharp and correct blade for the material being cut.

1- Raise the saw frame to its highest position

2- Turn the hand-wheel to left to loosen the blade.

3- Switch off the main power switch of the machine.

Caution: Avoid serious injury by turning the machine's power off at the main switch before adjusting, servicing, or cleaning the saw.

4- Open all the wheel covers on the saw frame.

5- Loosen the knurleb knobs on the carbide blade guides. Lower the blade from bandsaw guides.

6- Lower the chip brush away from the blade by loosening the chip brush locking lever.

Caution: Wear heavy protective work gloves and safety glasses when handling blades to avoid injury.

7- Carefully remove the blade from the saw.

8- Uncoil the new blade and insert the blade around the band wheels.

Warning: New blades are generally shipped in a coiled form. This puts them under tension and can suddenly be uncoiled. Take extreme caution to prevent injury when uncoiling the new blade. Make sure you wear safety gloves and glasses. Locate back of edge the blade into the carbide inserts (pressure pads) and guide bearings so the teeth point in downward direction.

9- Press the back edge of the blade firmly against the back-up of the carbide guides, and turn the knurled knobs lightly to hold the saw blade in position

10- Turn on the main switch of the machine.

11- Turn the hand-wheel to right (to tensioning position) to apply a *light pressure*.

12- Press the back edge of the blade firmly against the flange of each band wheel.

13- Turn the hand-wheel to right (tensioning position) to exert sufficient tension on the saw blade.

14- Turn off the main switch of the machine.

15- Turn the knurled knobs clockwise to tighten the carbide pressure pads against the blade. Tighten the carbide guides by hand only.

Note: Do not over-tighten the carbide pressure guides.

16- Adjust the position of the chip brush so that the bristles reach fully into the gullet of the blade without extending beyond. Then lock the chip brush in place.

Important: Improper positioning of the chip brush will result in excessive blade or chip brush wear.

17- Make sure that you close and secure the band wheel covers and blade guards at the end of this process.

CHAPTER VI: MAINTENANCE

The maintenance schedule is listed below on the basis of daily, weekly, monthly and six-monthly intervals. Utmost care should be given to the maintenance. Poor maintenance or neglecting some of its requirements will result in premature machine failure and/or unsatisfactory performance.

1- DAILY MAINTENANCE

- Clean/empty the chip reservoir whenever necessary.
- Use suitable brush with soft bristles. Do not use hard materials to clean the machine.
- Check whether the emergency stop button functions properly. Check that the entire wheel covers other safety guards are in place and fixed properly.
- Check the wear on the teeth of the saw blade.
- Check the level of coolant.
- Do not use pressured air for cleaning the machine; except for unblocking the coolant pipes.

2- WEEKLY MAINTENANCE

- Clean the wheels, vise, slides and bearings.
- Pull the movable jaws of the vise back and clean the slides, beds and other moving components and lubricate with thin grease.
- Apply grease to the main vise roller drive mechanisms gearbox and vise roller bearings. Check the condition of these mechanisms and clean them if necessary before applying grease. Use EP type grease for vise roller drive mechanisms gearbox.
- Test the quality/condition of the coolant and water/boron oil ratio; if necessary renew it.
- Non-painted parts should be wiped with a clean cloth and oiled with protective machine oil to prevent rust.
- Coolant tank should be cleaned against chips to prevent them accumulating onto the floor of the tank.

3- MONTHLY MAINTENANCE

- Check the level of hydraulic oil from the site gauge. If the level drops below indicated min. line, add hydraulic system oil of grade 46.
- Check the conditions of saw blade guide bearings and carbide pressure pads at the ends of guide arms. They should be replaced when they become worn or loose.
- Check the gaps in the bearings of the wheels. Replace them if they are worn.
- Check the condition of hydraulic systems (cylinders/pistons, pipes/hoses, sealants and hydraulic couplings).

4- SIX-MONTHLY MAINTENANCE

- Perform all monthly maintenance checks for six-monthly maintenance too. And replace those parts of the machine that do not function as expected or that are excessively worn.
- Check the work stock feeding rollers for wear and renew them if necessary.
- Check the vise roller drive mechanisms gearbox; renew the worn gear wheels if necessary.

5- PERIODIC MAINTENANCE

- Renew the wheel bearings.
- Renew the carbide pressure pads and the saw blade guide bearings.
- Check the viscosity/condition of the hydraulic oil. Renew if it is necessary.

Renew the worn/damaged/malfunctioning components that do not function properly.

CHAPTER VII: TROUBLESHOOTING

Some of the generally faced troubles and their possible causes and/or remedies are presented in the following table.

PROBLEMS/FAULTS	POSSIBLE CAUSES AND REMEDIES
Non-straight cuts	• Insufficient blade tension • Incorrect or loose work stock clamping • Use coarser blade pitch • High feed rate or pressure • Tooth set damage • Guide arms are loose or set too far apart
Premature blade breakage, premature tooth wear and chipped tooth	• Feed rate too high or too low • Check your coolant • Check/adjust carbide blade pressure pads • Check wheel alignment • Allow enough clearance before starting cut • Reduce band tension when the machine isn't operated • Cutting speed too high • Wrong tooth pitch • Incorrect or loose work stock clamping • Ineffective coolant application • Improper break-in period • Perform scheduled maintenance
Despite taking all necessary action, if a fault persists, you should call the service	

CHAPTER VIII: DISMANTLING

If the machine is to be scrapped;

1. Qualified personnel should carry out all dismantling process.
2. Switch the machine off and disconnect the power supply.
3. Drain the hydraulic oil and coolant.
4. Revert the preceding setting procedure for dismantling the machine.
5. Separate the material to be disposed of depending on their types and composition and have them collected and/or recycled by waste disposal services.

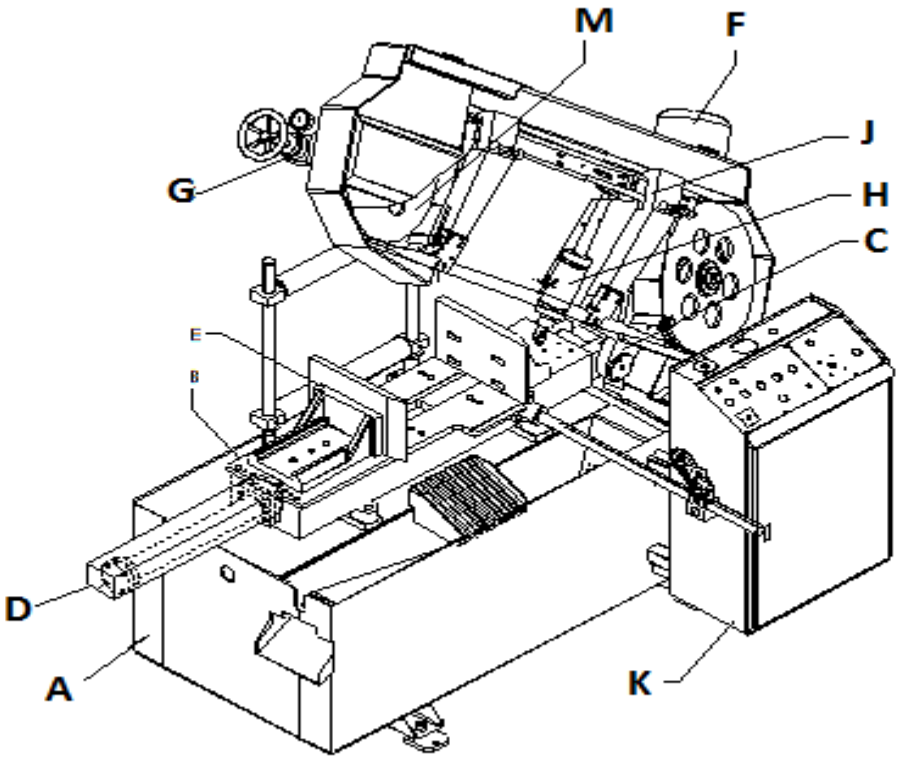
ORDERING SPARE PARTS

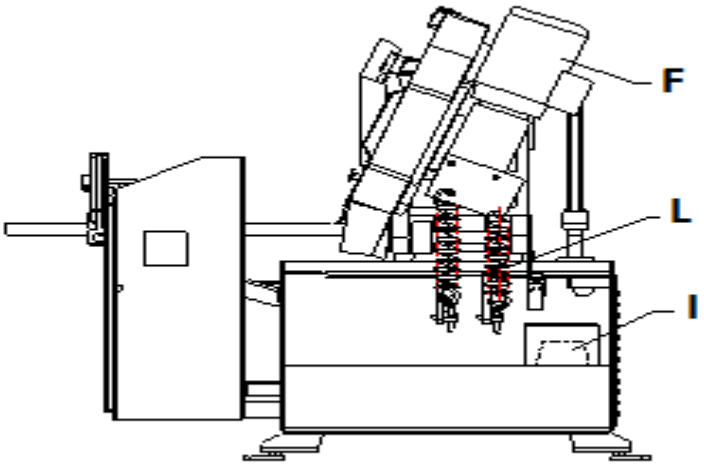
When ordering spare parts, you must state;

MACHINE MODEL :
SERIAL NUMBER :
PART REFERENCE NUMBER :
PART NAME :

Without these references we will not supply the spare parts.

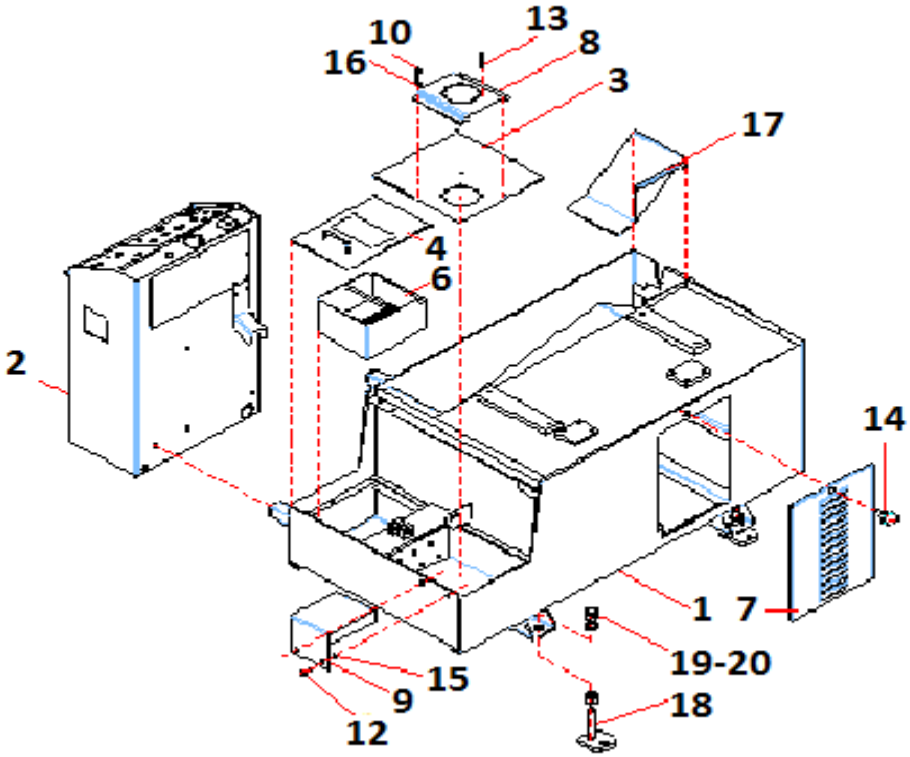
CHAPTER IX: SPARE PART LIST

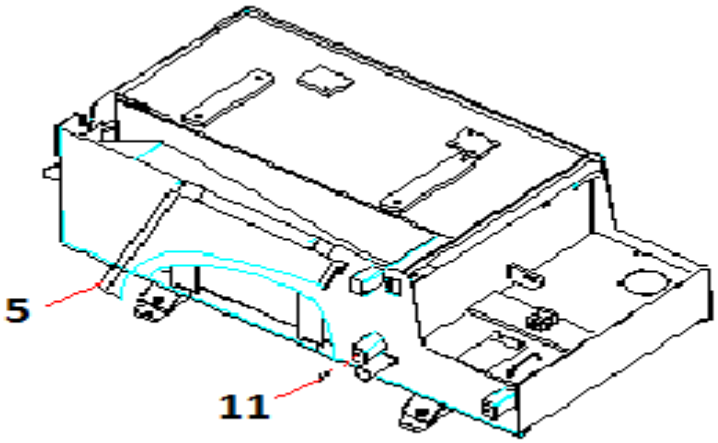




M	Band Tension Group	1	09 11 000
L	Spring Group	1	09 16 000
K	Electricity Group	1	04 09 000
J	Bandsaw Guide Group	1	09 15 000
I	Coolant Group	1	09 05 000
H	Hydraulic Group	1	09 12 000
G	Hydro mechanic Band Stretching Group	1	09 10 000
F	Gearbox Group	1	09 08 000
E	Vise Group	1	10 06 000
D	Motion With Hydraulic Vise Group	1	09 22 000
C	Joint Frame Group	1	09 03 000
B	Vise Undertray Group	1	09 02 000
A	Cupboard Group	1	09 01 000
Part No	**Description**	**Q.ty**	**Part Code**
		NO:10 00 100	

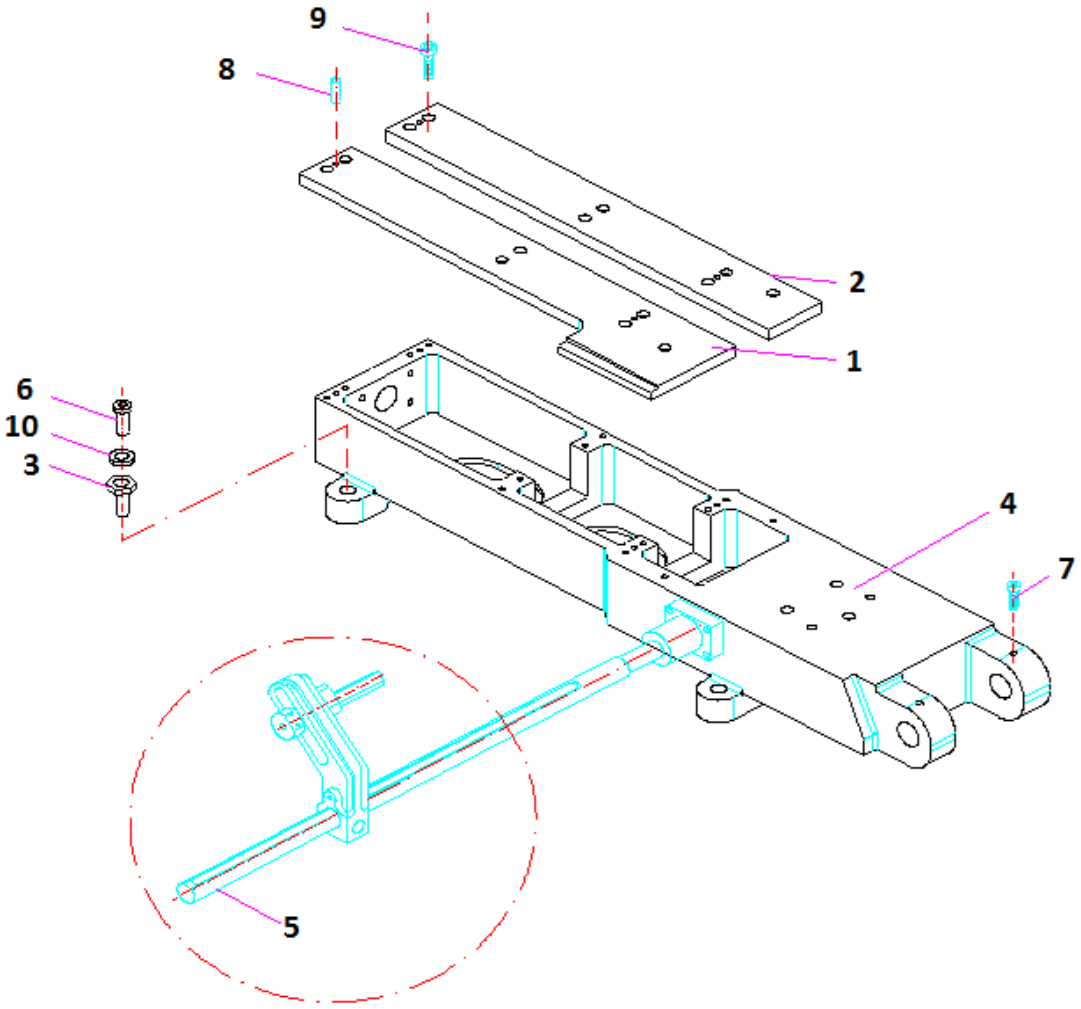
9.1. CUPBOARD GROUP





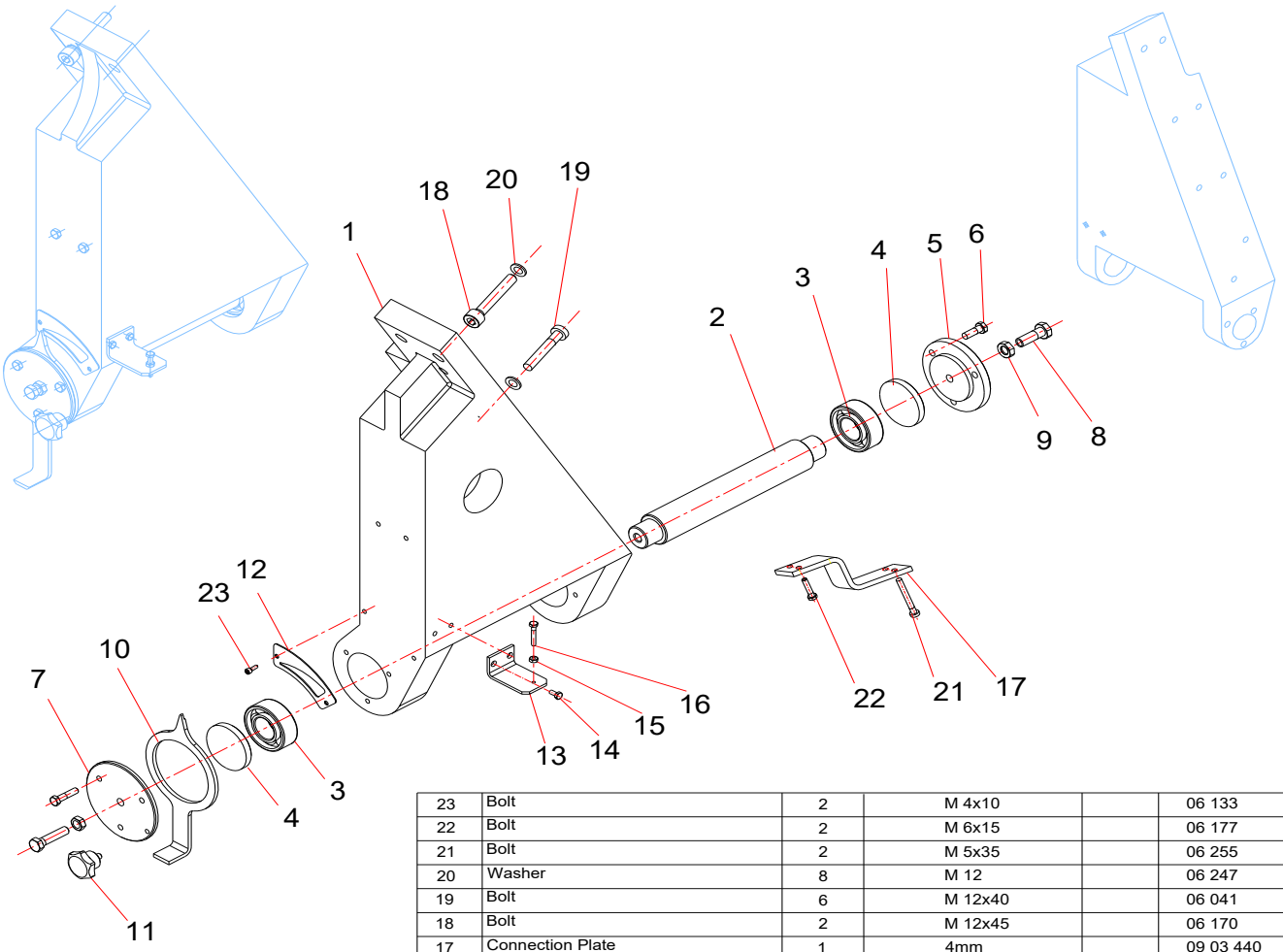
20	Washer	4	06 014
19	Nut	8	006 018
18	Cupboard	4	09 01 950/06 129
17	Front Cover	1	09 01 550
16	Washer	2	06 055
15	But	2	06 392
14	Handle	1	06 256
13	Plate	4	06 531
12	Bolt	2	06 255/259
11	Bolt	3	06 199
10	Bolt	2	06 134
09	Pump Protection Plate	1	09 01 900
08	Cool. Pump Conn. Additional Plate	1	09 01 800
07	Side Cover	1	09 01 700
06	Sawdust Basket	1	09 01 600
05	Cupboard Protection Cover	1	09 01 500
04	Oil Depot Cover	1	09 01 400
03	Coolant pump Connection Plate	1	09 01 300
02	Electricity Panel	1	09 01 200
01	Cupboard Skeleton	1	09 01 100
Part No	**Description**	**Q.ty**	**Part Code**
Name of the group**: Cupboard Group**		**NO:09 01 000**	

9.2. VISE UNDERTRAY GROUP



10	Washer	4	06 247
09	Bolt	14	06 201
08	Pin	4	06 198
07	Bolt	2	06 040
06	Bolt	4	06 034
05	Tampon Group	1	09 02 500
04	Vise Undertray Group	1	09 02 400
03	Vise Setting Nut	4	09 02 300
02	Vise Sledge Plate	1	09 02 200
01	Vise Sledge Plate	1	09 02 100
Part No	**Description**	**Q.ty**	**Part Code**
Name of the group**: Vise Undertray Group**		**NO:09 02 000**	

3. JOINT FRAME GROUP



No. of Part	Description	Q.ty	Dimensions		Part Code
23	Bolt	2	M 4x10		06 133
22	Bolt	2	M 6x15		06 177
21	Bolt	2	M 5x35		06 255
20	Washer	8	M 12		06 247
19	Bolt	6	M 12x40		06 041
18	Bolt	2	M 12x45		06 170
17	Connection Plate	1	4mm		09 03 440
16	Bolt	1	M 6x30		06 486
15	Nut	1	M 6		06 293
14	Bolt	2	M 6x16		06 255
13	Connection Plate	1	4mm		09 03 450
12	Level Indicator Label	1	1mm		09 03 420
11	Handle	1	M 6x15		06 498
10	Level Indicator Plate	1	4mm		09 03 430
9	Nut	2	M 10		06 317
8	Bolt	2	M 10x30		06 040
7	Level Indicator Flange	1	Ø 90		09 03 410
6	Bolt	6	M 6x25		06 019
5	Murmel Cover	1	Ø 80		09 03 200
4	Pressure Washer	2	Ø 50		09 03 300
3	Bearing	2	d:25 D:52 B:12		06 023
2	Vise Undertray Mile	1	Ø 35X250		09 03 100
1	Vise Undertray	1	120X270X500		09 03 500

Name of the Operation	Working Time 1 Piece/minute	Machine Adjusting Time

Used in	280 OSA ☒

DIN 7168	Thin ☐	Middle ☒	Rough ☐

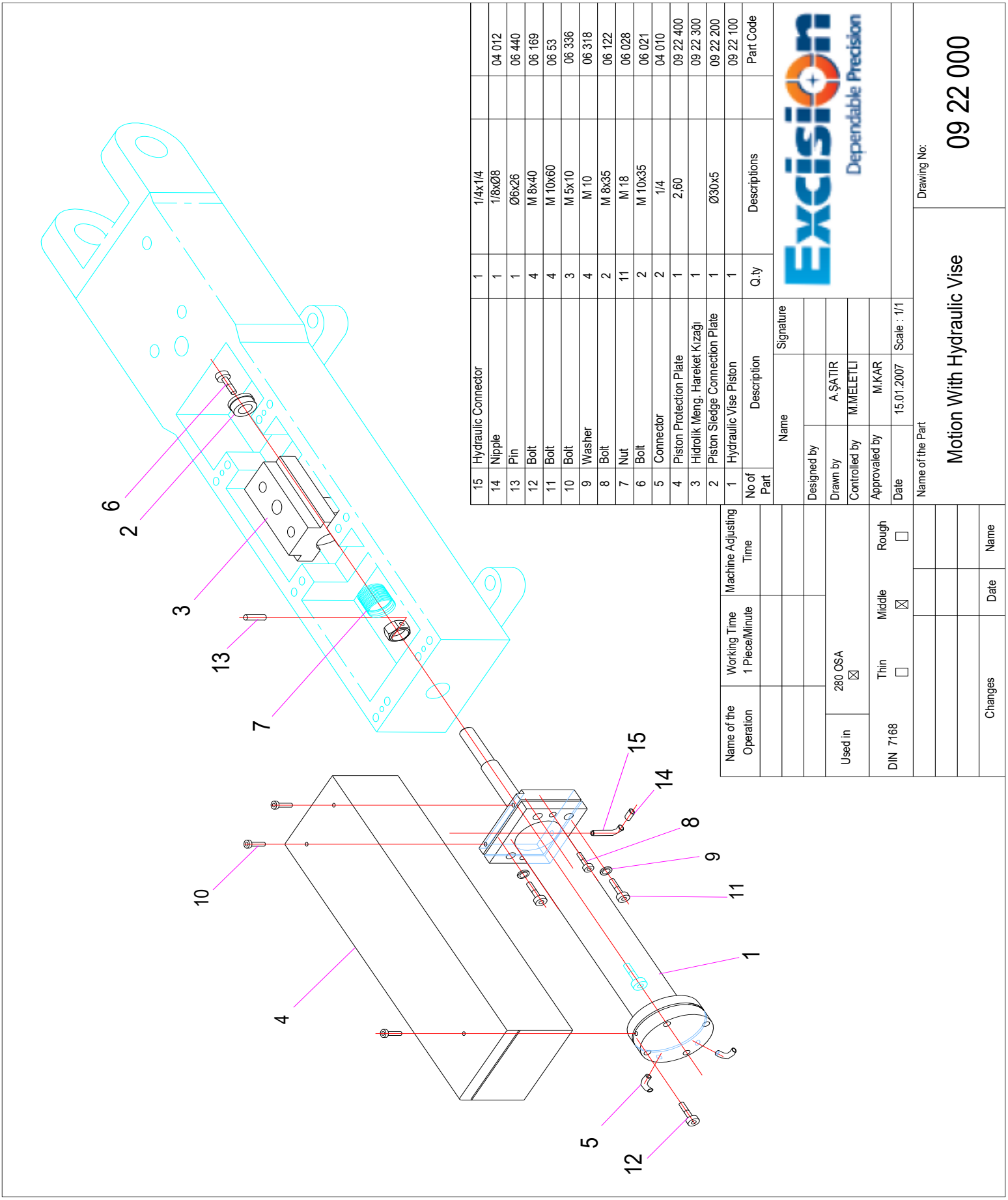
Changes	Date	Name

	Name	Signature
Designed by	H.BURUCU	
Drawn by	R.ÖZDEMİR	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	10.01.2007	

Excision
Dependable Precision

Name of the Part	Drawing No:
Joint Frame Group	09 03 000

9.4. MOTION WITH HYDRAULIC VISE GROUP



No of Part	Description	Q.ty	Descriptions	Part Code
15	Hydraulic Connector	1	1/4x1/4	04 012
14	Nipple	1	1/8xØ8	06 440
13	Pin	1	Ø6x26	06 169
12	Bolt	4	M 8x40	06 53
11	Bolt	4	M 10x60	06 336
10	Bolt	3	M 5x10	06 318
9	Washer	4	M 10	06 122
8	Bolt	2	M 8x35	06 028
7	Nut	11	M 18	06 021
6	Bolt	2	M 10x35	04 010
5	Connector	2	1/4	09 22 400
4	Piston Protection Plate	1	2,60	09 22 300
3	Hidrolik Meng. Hareket Kizağı	1		09 22 200
2	Piston Sledge Connection Plate	1	Ø30x5	09 22 100
1	Hydraulic Vise Piston	1		

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

	Name	Signature
Designed by		
Drawn by	A.ŞATIR	
Controlled by	M.MELETLİ	
Approvaled by	M.KAR	
Date	15.01.2007	Scale : 1/1

Excision Dependable Precision

Used in: 280 OSA ☒

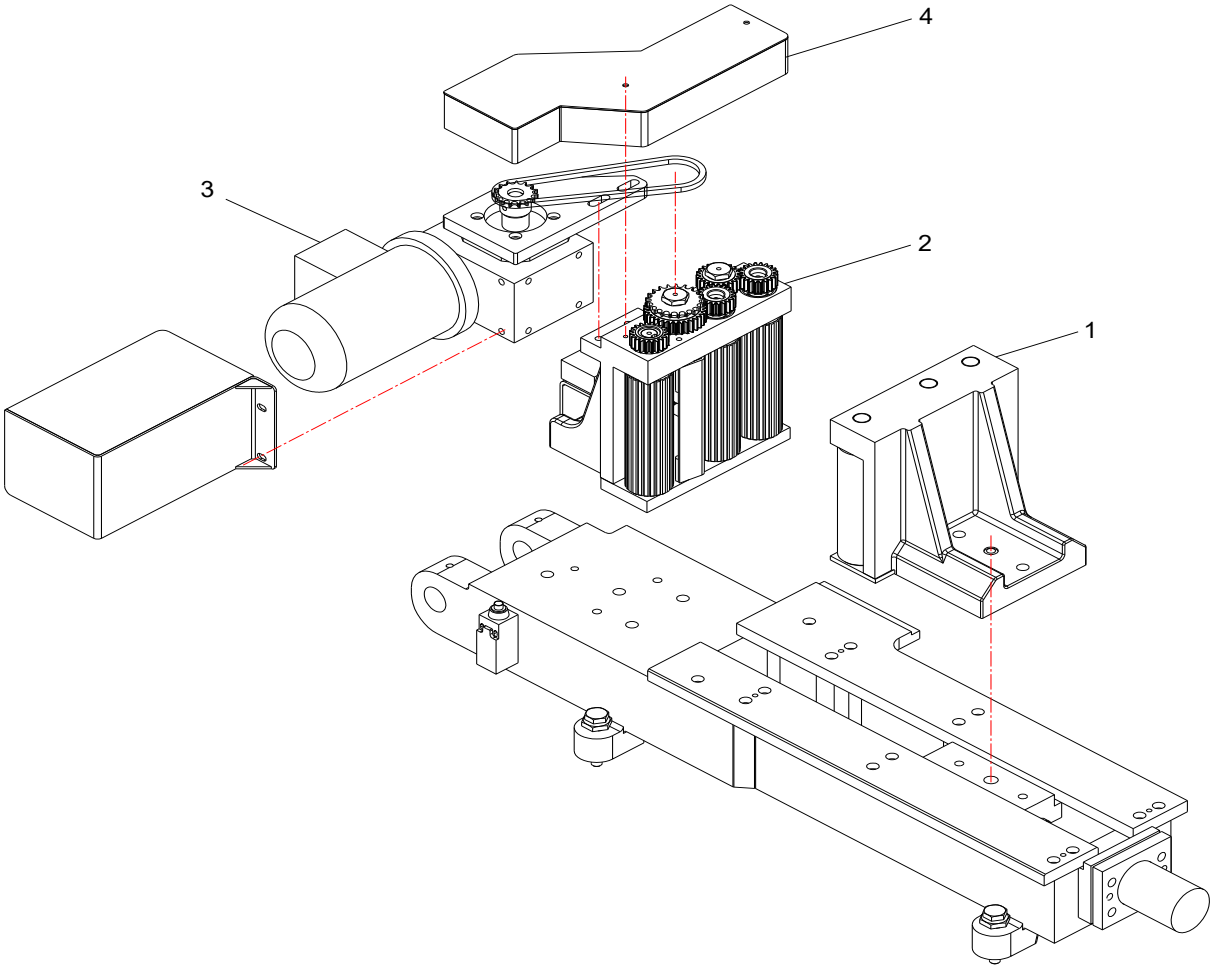
DIN 7168: Thin ☐ Middle ☒ Rough ☐

Name of the Part: Motion With Hydraulic Vise

Drawing No: 09 22 000

Changes	Date	Name

9.5. VISE GROUP



Part No	Description	Q.ty	Diemension		Part Code
4	Cover	1			09 06 400
3	Feeder Gearbox Group	1			09 06 030
2	Fixed Jaw Group	1			09 06 020
1	Motion Jaw Group	1			09 06 010

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

	Name	Signature
Designed by	H.BURUCU	
Drawing by	H.URGAN	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	01.01.2006	Scale : 1/1

Excision
Dependable Precision

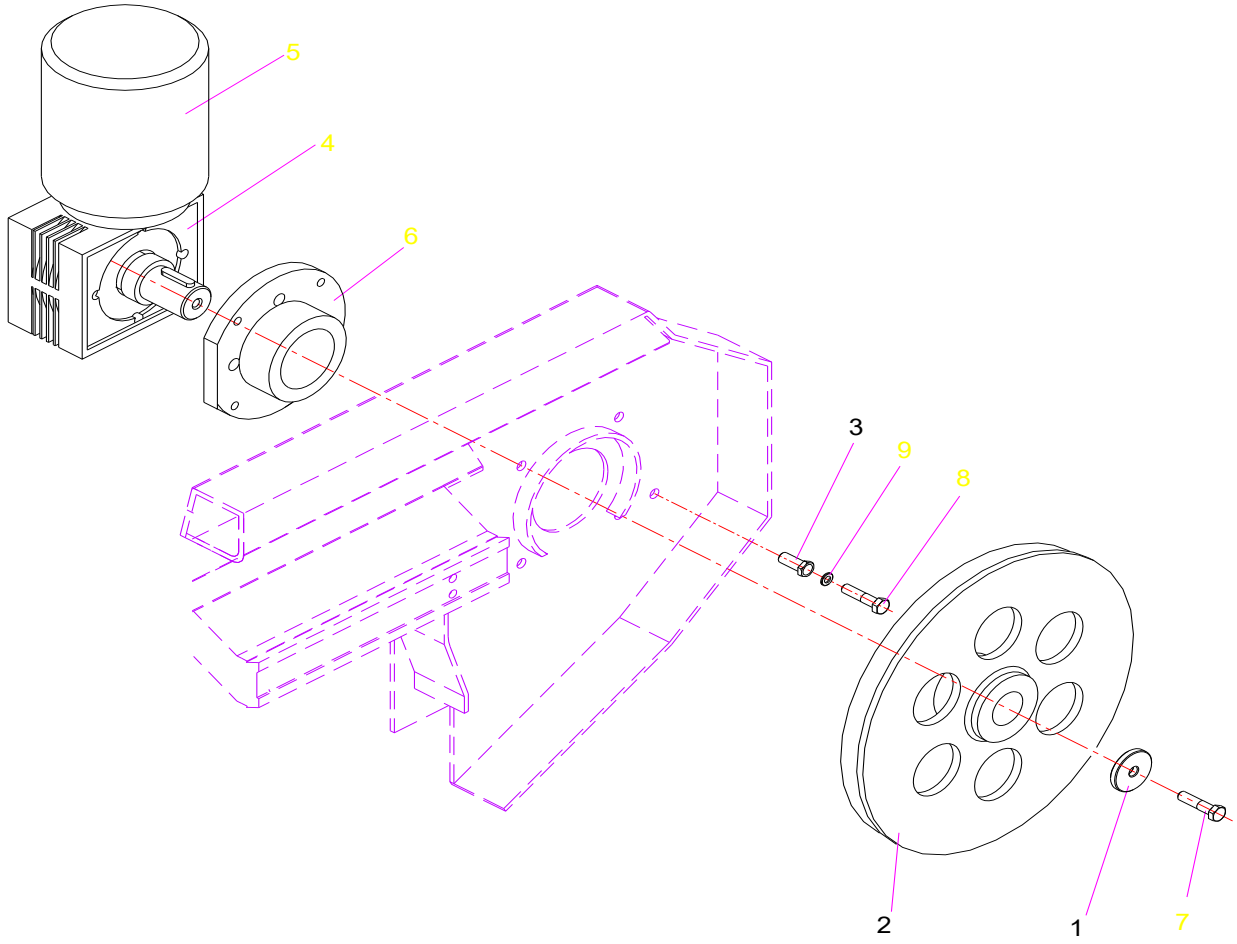
Used in	280 KSA ☒

DIN 7168	Thin ☐	Middle ☒	Rough

Changes	Date	Name

Name of the Part	Drawing No
Vise Group	10 06 000

9.6. GEARBOX GROUP



No. of Part	Description	Q.ty	Dimensions		Part Code
9	Washer	4	M12		02 247
8	Bolt	4	M 12x60		02 159
7	Bolt	1	M 16x40		02 023
6	Flange	1			02 014
5	Motor	1			02 009
4	Gearbox	1			02 001
3	Setting Nut	4	29		09 08 300
2	Pulley	1			09 08 200
1	Pulley Washer	1	Ø60x10		09 08 100

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in	280 OSA ☒	300 KDG ☒

DIN 7168	Thin ☐	Middle ☒	Rough ☐

Name		Signature
Designed by		
Drawn by	R.ÖZDEMİR	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	15.01.2007	Scale : 1/1

Excision
Dependable Precision

Changes	Date	Name

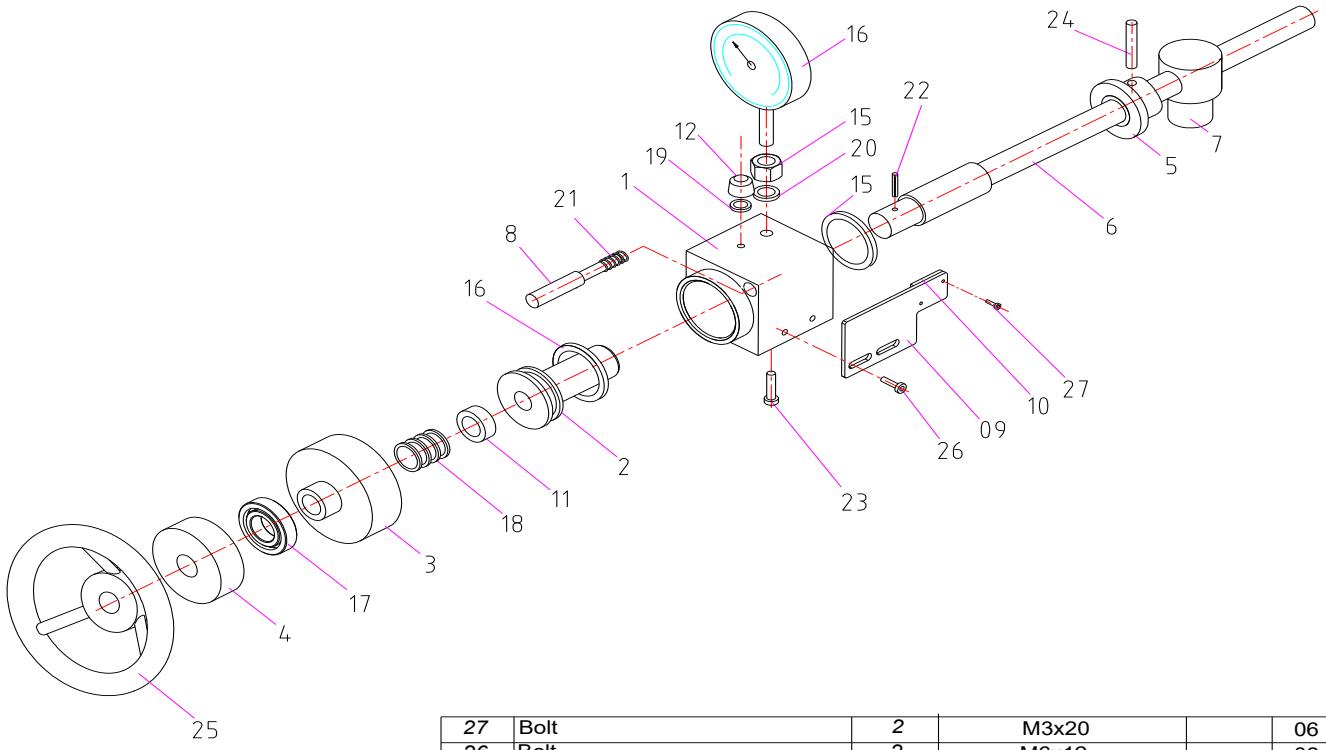
Name of the Part

Gearbox Group

Drawing No:

09 08 000

9.7. BAND SAW GUIDE GROUP



No. of Part	Description	Q.ty	Dimensions		Part Code
27	Bolt	2	M3x20		06 533
26	Bolt	2	M6x12		06 134
25	Wheel	1	Ø175		06 480
24	Pin	1	Ø6x24		06 439
23	Bolt	4	M8x60		06 376
22	Pin	1	Ø 6x50		06 103
21	Spring	1	1x9,5x30		06 078
20	Washer	1	1/4		06 056
19	Washer	1	5/16		06 038
18	Washer	4	M 16		06 028
17	Murmel	1	51205 URB		06 024
16	Manometer	1	Ø 63--160 bar		04 082
15	Nut	1	1/4		04 077
14	Felt	1	28x38x8		04 070
13	Felt	1	50x40x8		04 063
12	Plug	1	1/8"Tooth		04 013
11	Pressing Part	1	Ø30x18		09 10 111
10	Connection Plate	1	3x18x30		09 10 110
09	Connection Plate	1	3x55x100		09 10 108
08	Pin	1	Ø12x97		09 10 107
07	Nut	1	Ø35x53		09 10 106
06	Hyd. Stretching Mile	1	Ø22x278		09 10 105
05	Hyd. Stretching Mile Part	1	Ø35x22		09 10 104
04	Protector	1	Ø55x20		09 10 103
03	Hyd. Stretching Part	1	Ø70x40		09 10 102
02	Piston	1	Ø50x82		09 10 101
01	Hyd. Band Stretching Skeleton	1	70x70x90		09 10 100

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in	280 OSA ☒

DIN 7168	Thin	Middle	Rough
	☐	☒	☐

	Name	Signature
Designed by		
Drawn by	R.ÖZDEMİR	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	20.01.2007	Scale: 1/1

Excision
Dependable Precision

Changes	Date	Name

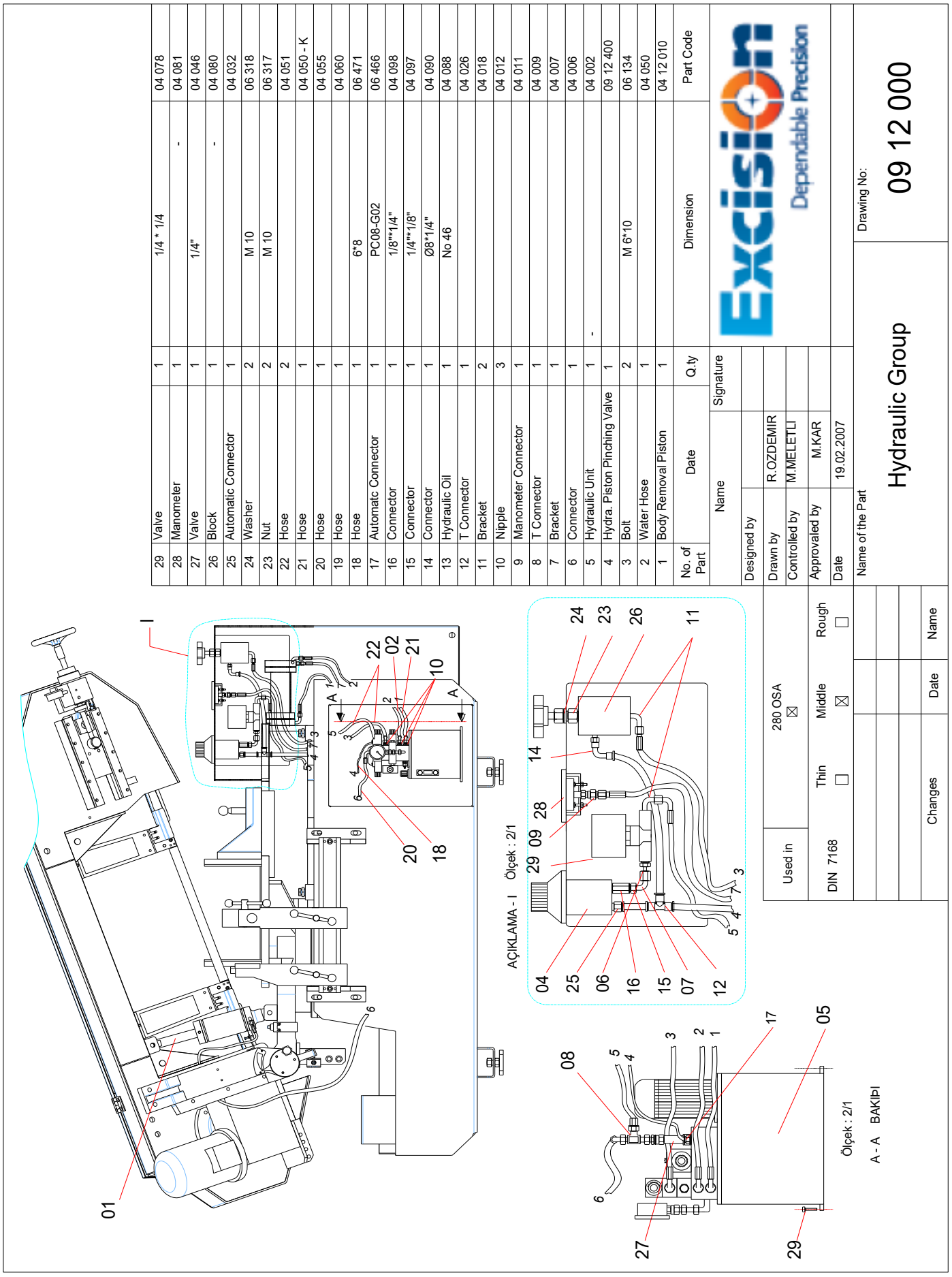
Name of the Part

Hydromechanic Band Stretching Group

Drawing No:

09 10 000

9.8. HYDRAULIC GROUP



9.8.1. BODY LIFT UP PISTON

No. of Part	Description	Q.ty	Dimensions	Part Code
19	Bolt	1	M12*30	06 295
18	Felt	1	63*47*20,5	04 067
17	Connection Part	1		09 12 200
16	Nut	2	M16	06 018
15	O-Ring	1	70*54*3,53	06 478
14	Bolt	1	M8*15	06 390
13	Washer	1	M8	06 173
12	Joint Frame	2		06 085
11	Spring	1	25*76	06 074
10	Segment	2	471/15	06 065
9	Felt	1	28*36*4/7	04 074
8	Felt	1	28*38*10	04 069
7	Connector	1	1/4 * 8	04 010
6	Piston Skeleton	1		09 12 110
5	Mile	1	Ø28x184	09 12 107
4	Connection Pin	1	Ø16x67	09 12 106
3	Bedding Part	1	Ø45x25,5	09 12 104
2	Top Cover	1	Ø75x50	09 12 103
1	Piston Felt Part	1	Ø65x31,7	09 12 101

Excision — Dependable Precision

	Name	Signature
Designed by		
Drawn by	H.URGAN	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	20.01.2007	Scale: 1/1

Name of the Part: Body Removal Piston

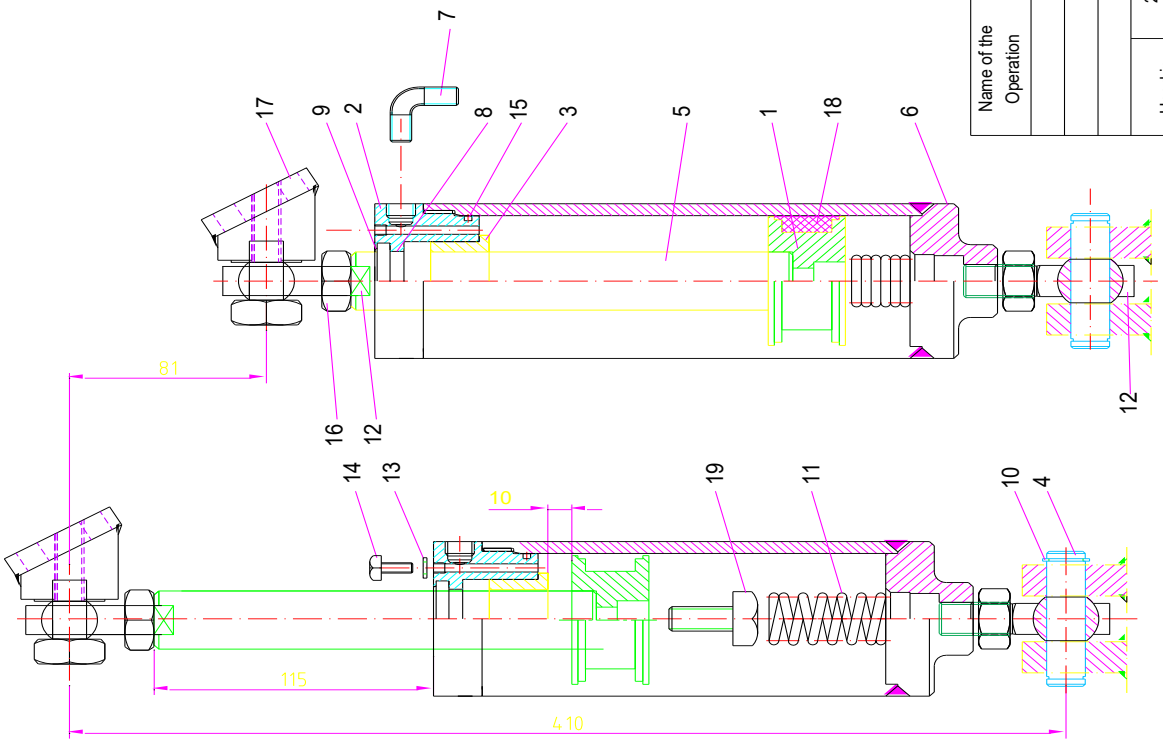
Drawing No: 09 12 100

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

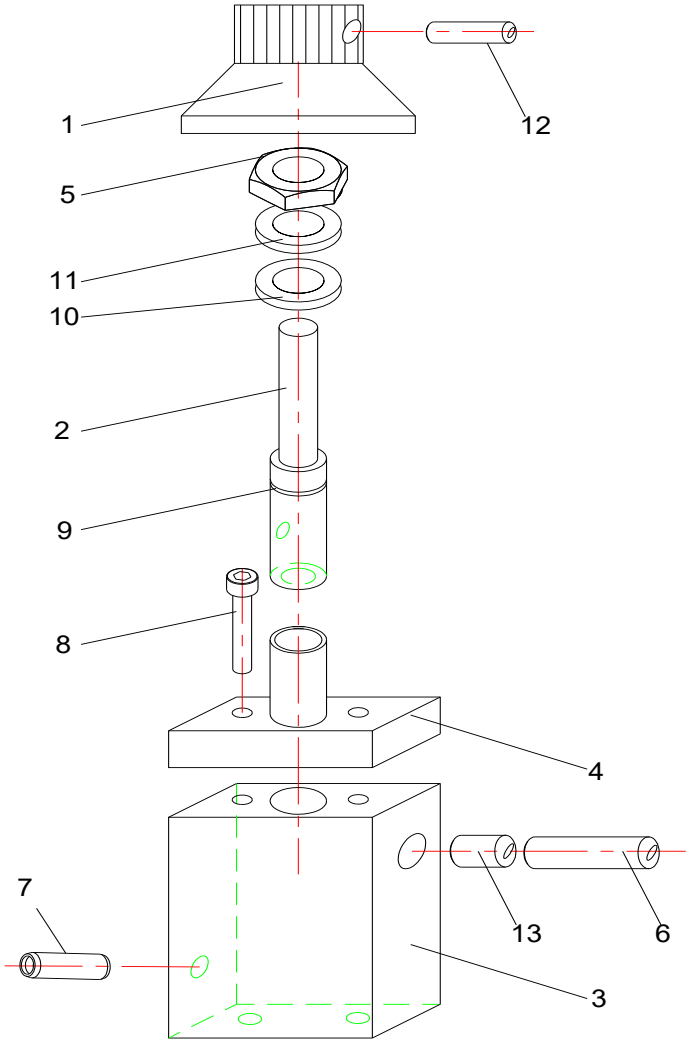
Used in: 280 OSA ☒ 350 OSA ☒

DIN 7168: İnce ☐ Orta ☒ Kaba ☐

Changes	Date	Name



9.8.2. HYDRAULIC PISTON TIGHTING VALVE



No of Part	Description	Q.ty	Dimension		Part Code
13	Bolt	1	M4*6		09 12 405
12	Bolt	1	M4*6		06 455
11	Scale	1	M20		06 541
10	M18 Pul	1	M18		06 542
9	O-Ring	1	12*2		06 264
8	Bolt	2	M5*8		06 236
7	Bolt	1	M6*12		04 128
6	Bolt	1	1/8*6		04 085
5	Nut	1	M18*1,5		04 043
4	Valve Cover	1			03 12 404
3	Hid. Pist.Kisma Valf Govdesi	1			03 12 403
2	Valve Mile	1			03 12 402
1	Piston Tighting Valve Drum	1			03 12 401

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in	280 OSA	300 KDG	220 KDG	220 MDG
	☒	☒	☒	☒

DIN 7168	Thin	Middle	Rough
	☐	☒	☐

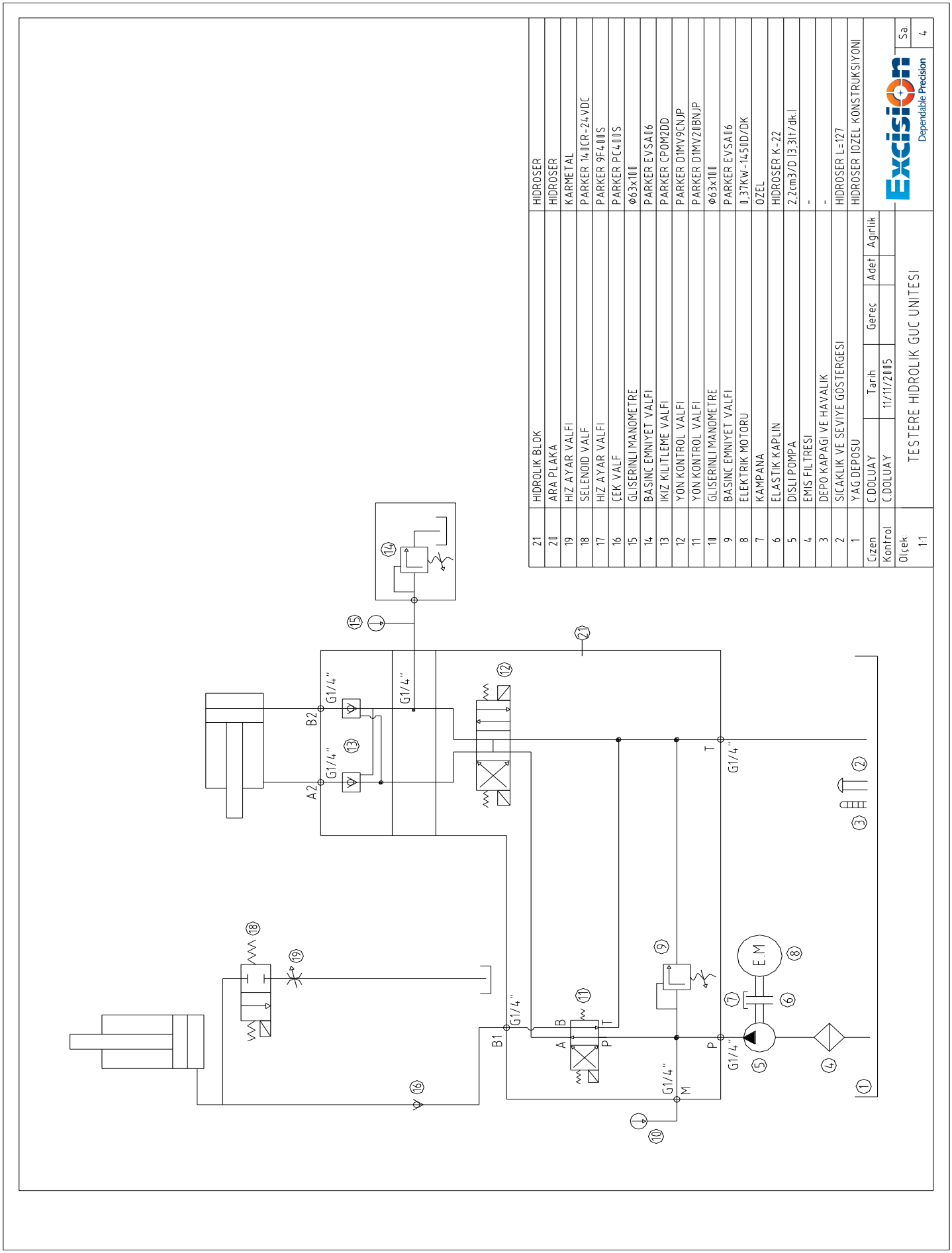
	Name	Signature
Designed by	H.BURUCU	
Drawn by	R.ÖZDEMİR	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	06.10.2006	

Excision
Dependable Precision

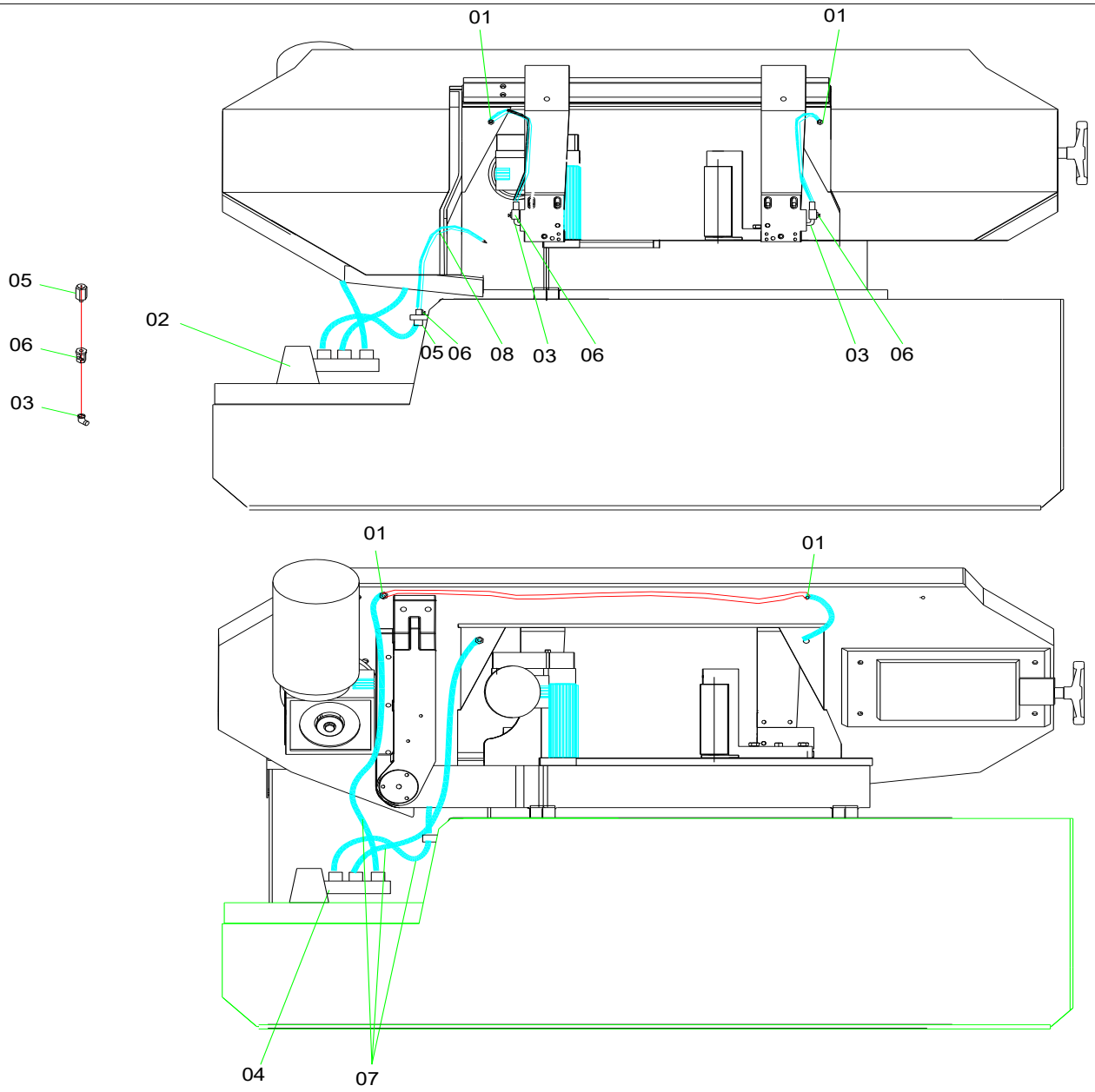
Changes	Date	Name
Measure 30,8 has been 31.9	06.10.06	R:Özdemir

Name of the Part	Drawing No:	Parça No
Hydraulic Piston Tighting Valve	09 12 400	04

9.8.3. HYDRAULIC UNIT



9.9. COOLANT GROUP



No. of Part	Description	Q.ty	Description		Part Code
8	Hose	1	500		06 214
7	Hose	1	4.65		06 387
6	Valve	3	1/4		06 105
5	Connector	3	1/4 *12		04 084
4	Connector	1	PHT 1204		04 044
3	Connector	2	1/4		04 005
2	Coolant Pump	1	PA 70/180		02 018
1	Connector	4			01 107

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

	Name	Signature
Designed by		
Drawn by	H.URGAN	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	20.01.2007	Scale . 1/1

Used in: 220 OSA ☐ 220 ODG ☐ 220 MDG ☐ 220 KDG ☐ 280 OSA ☐ 330 OSA ☐ 330 KDG ☐

DIN 7168: Thin ☐ Middle ☒ Rough ☐

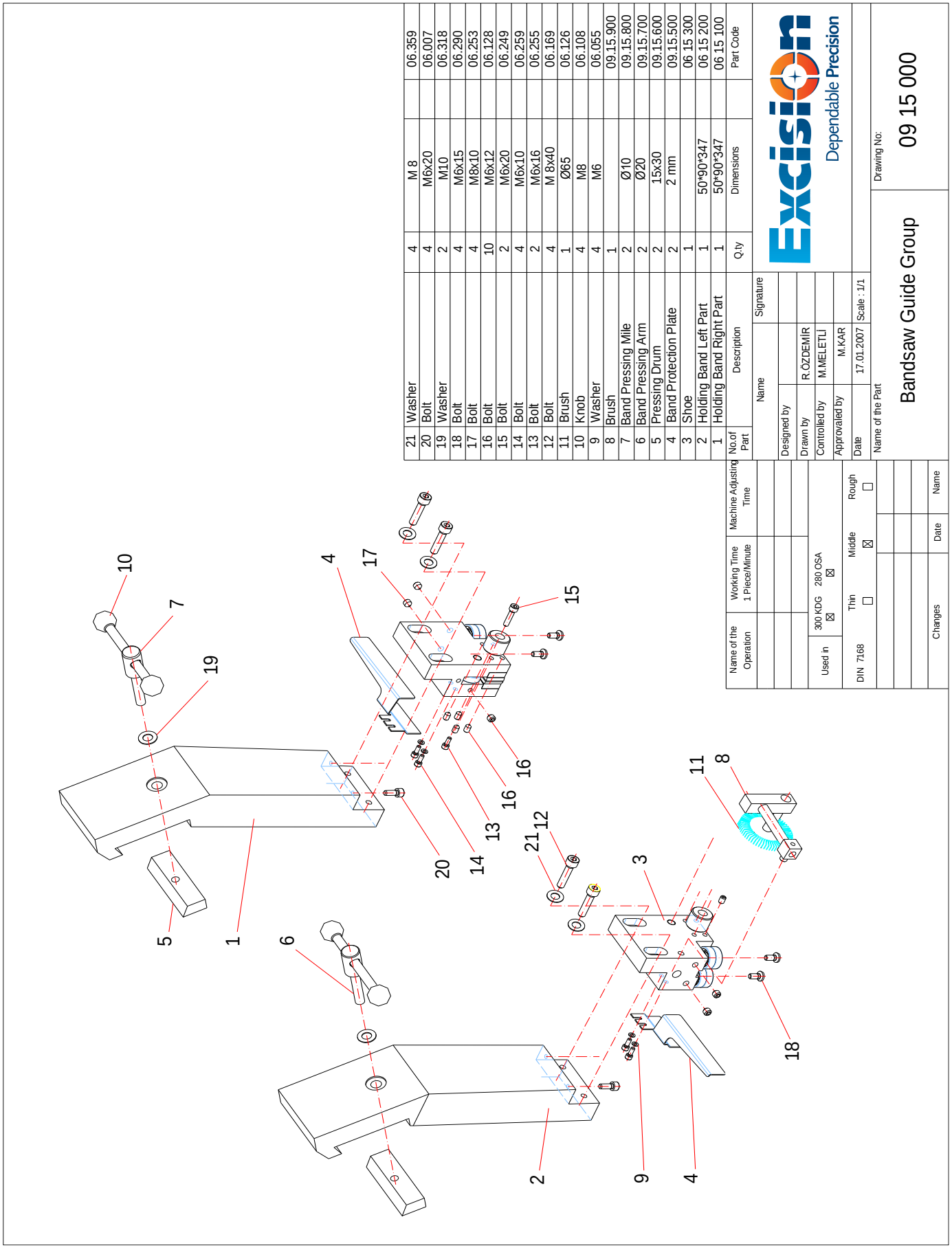
Excision Dependable Precision

Changes	Date	Name

Name of the Part: Coolant Group

Drawing No: 09 05 000

9.10. BANDSAW GUIDE GROUP



No.of Part	Description	Q.ty	Dimensions	Part Code
21	Washer	4	M 8	06.359
20	Bolt	4	M6x20	06.007
19	Washer	2	M10	06.318
18	Bolt	4	M6x15	06.290
17	Bolt	4	M8x10	06.253
16	Bolt	10	M6x12	06.128
15	Bolt	2	M6x20	06.249
14	Bolt	4	M6x10	06.259
13	Bolt	2	M6x16	06.255
12	Bolt	4	M 8x40	06.169
11	Brush	1	Ø65	06.126
10	Knob	4	M8	06.108
9	Washer	4	M6	06.055
8	Brush	1		09.15.900
7	Band Pressing Mile	2	Ø10	09.15.800
6	Band Pressing Arm	2	Ø20	09.15.700
5	Pressing Drum	2	15x30	09.15.600
4	Band Protection Plate	2	2 mm	09.15.500
3	Shoe	1		06 15 300
2	Holding Band Left Part	1	50*90*347	06 15 200
1	Holding Band Right Part	1	50*90*347	06 15 100

	Name	Signature
Designed by		
Drawn by	R.ÖZDEMİR	
Controlled by	M.MELETLİ	
Approvaled by	M.KAR	
Date	17.01.2007	Scale : 1/1

Excision — Dependable Precision

Name of the Part: Bandsaw Guide Group

Drawing No: 09 15 000

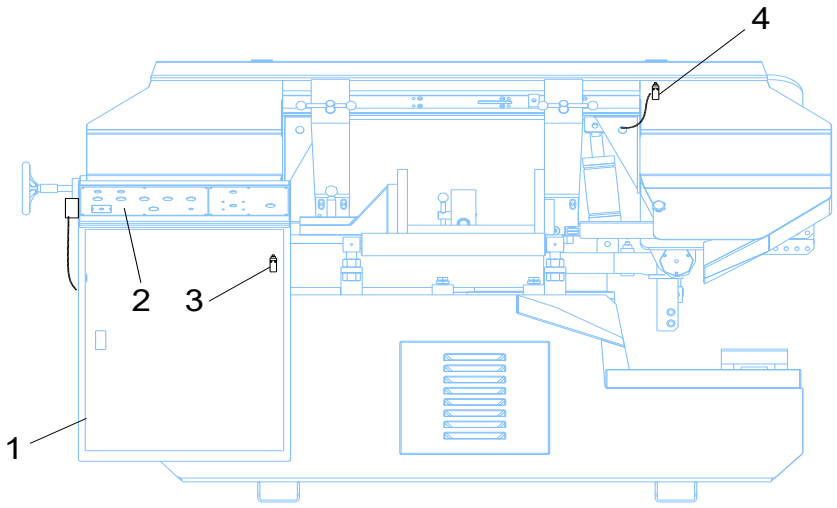
Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

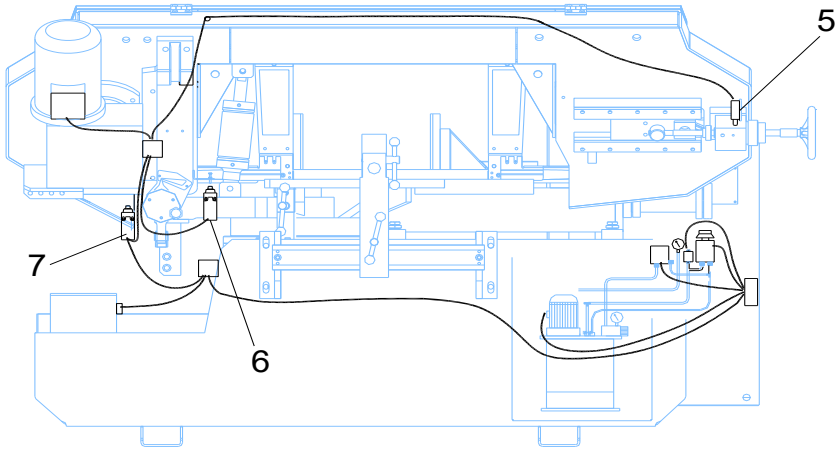
Used in: 300 KDG ☒ 280 OSA ☒

DIN 7168: Thin ☐ Middle ☒ Rough ☐

Changes	Date	Name

9.11. ELECTRICITY GROUP





No. of Part	Description	Q.ty	Dimension	Part Code & Drawing No
7	Top Limit Switch	1		150 01 170
6	Bottom Limit Switch	1		150 01 020
5	Break-off Switch	1		150 01 050
4	Cover Switch	1		150 01 020
3	Cupboard Switch	1		150 01 020
2	Control Panel	1		
1	Cupboard	1		

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in	300 KDG ☒

DIN 7168	Thin	Middle	Rough
	☐	☒	☐

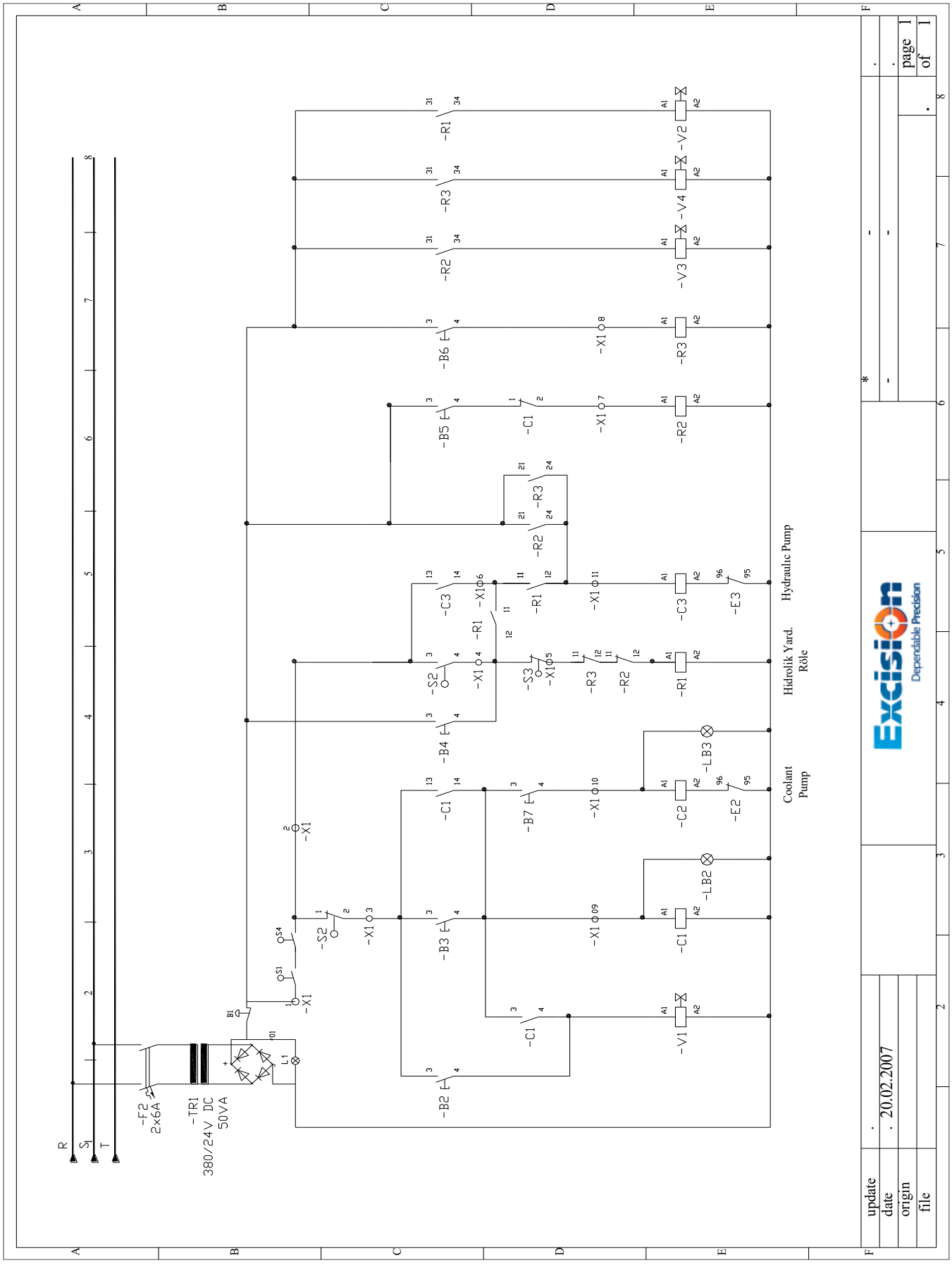
Name		Signature
Designed by	H.BURUCU	
Drawn by	R.OZDEMIR	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	19.02.2007	

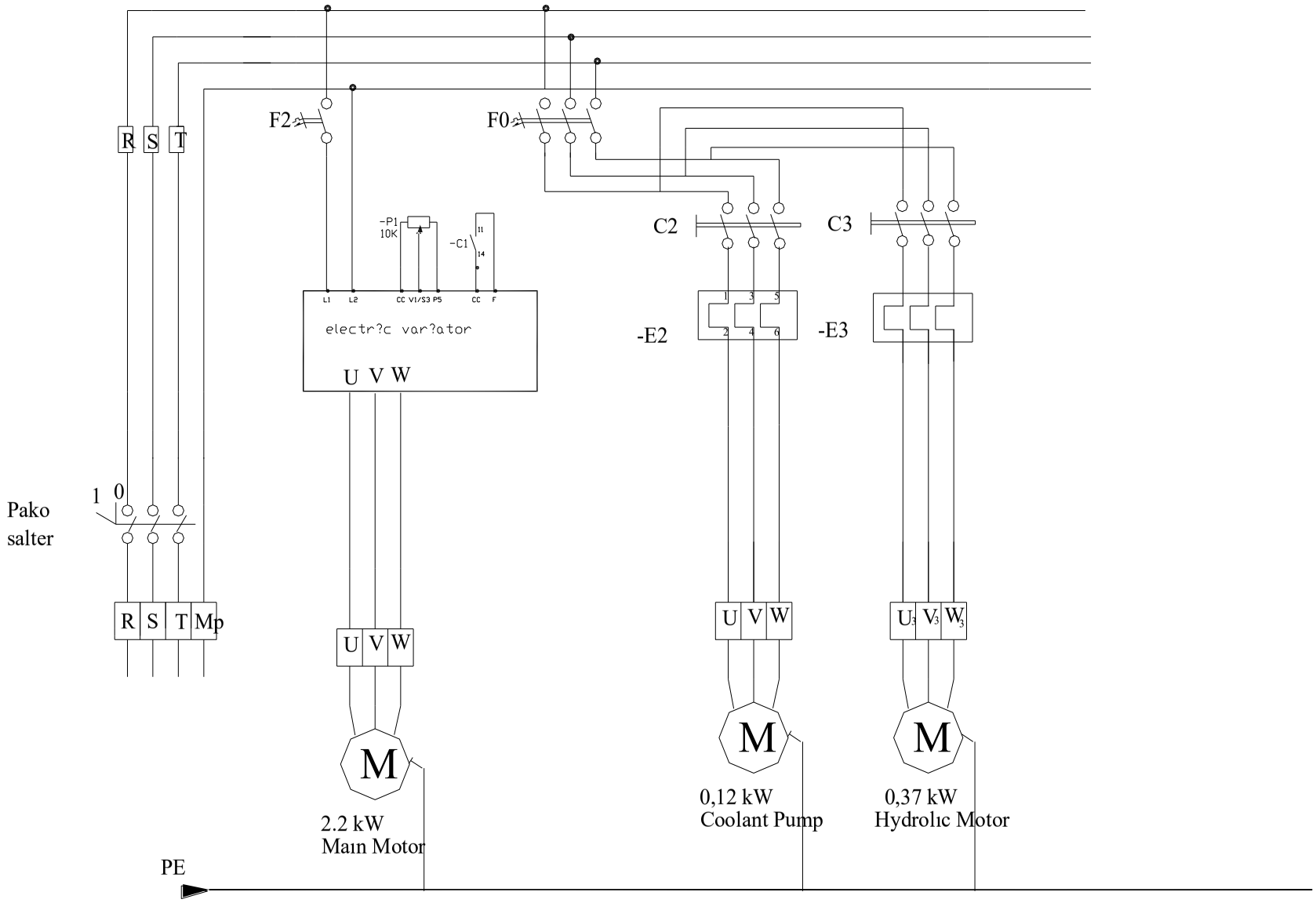
Excision
Dependable Precision

Changes	Date	Name

Name of the Part	Drawing No:
Electricity Group	04.09.000

9.11.1. ELECTRICITY DRAWING





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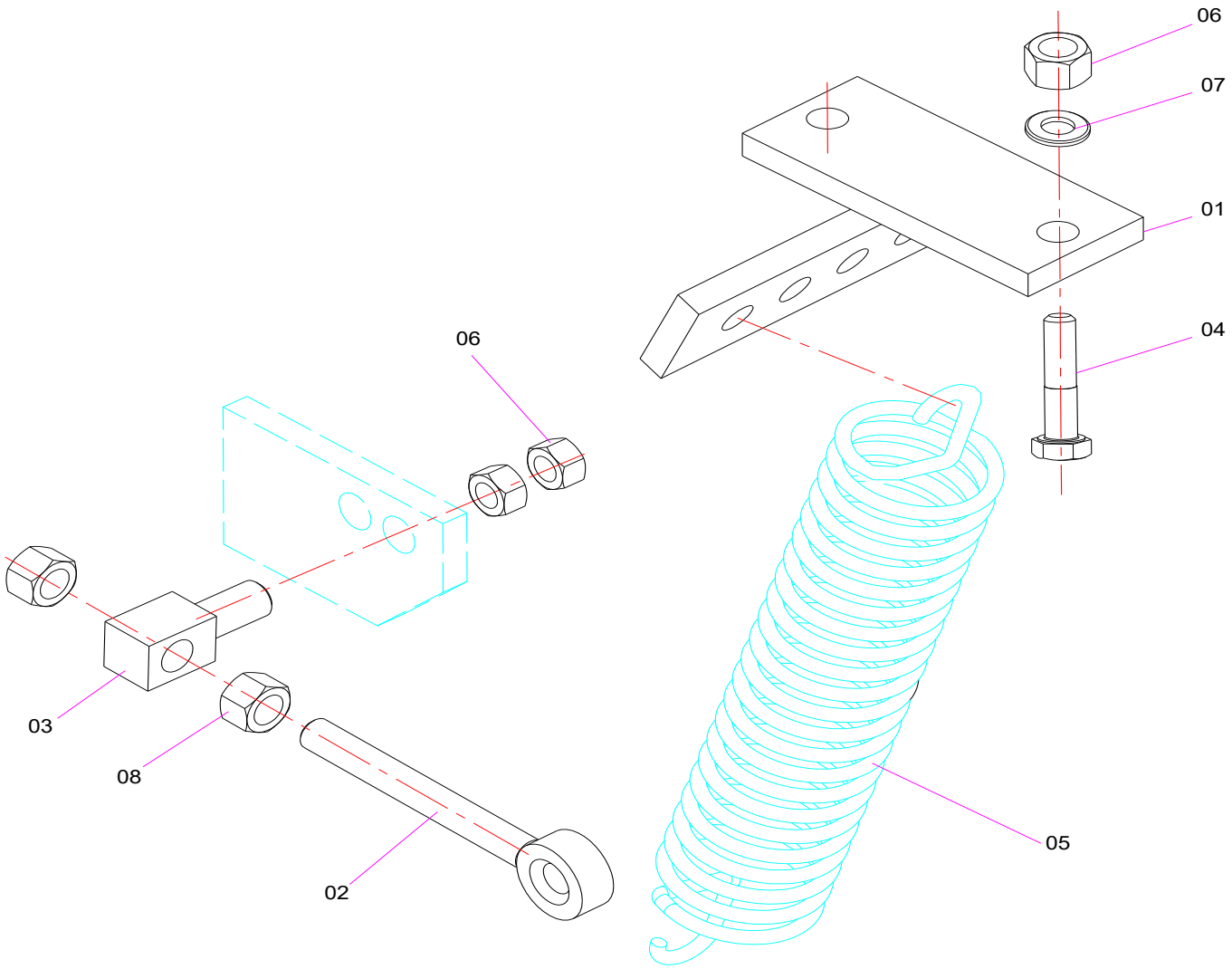
file	. 3					of 3

Excision
Dependable Precision

9.12. SPRING GROUP



No. of Part	Description	Q.ty	Dimensions		Part Code
8	Nut	2	M 12		06 375
7	Washer	2	M 10		06 318
6	Nut	4	M 10		06 317
5	Spring	1	Ø10x60x250		06 077
4	Bolt	2	M 10x40		06 059
3	Bolt	1	20x20x57		09 16 300
2	Spring Connection Bolt	1			09 16 200
1	Spring Connection Console	1			09 16 100

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in	280 OSA ☒

DIN 7168	Thin ☐	Middle ☒	Rough ☐

Changes	Date	Name

Name		Signature
Designed by		
Drawn by	H.URGAN	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	20.01.2007	Scale: 1/1

Excision
Dependable Precision

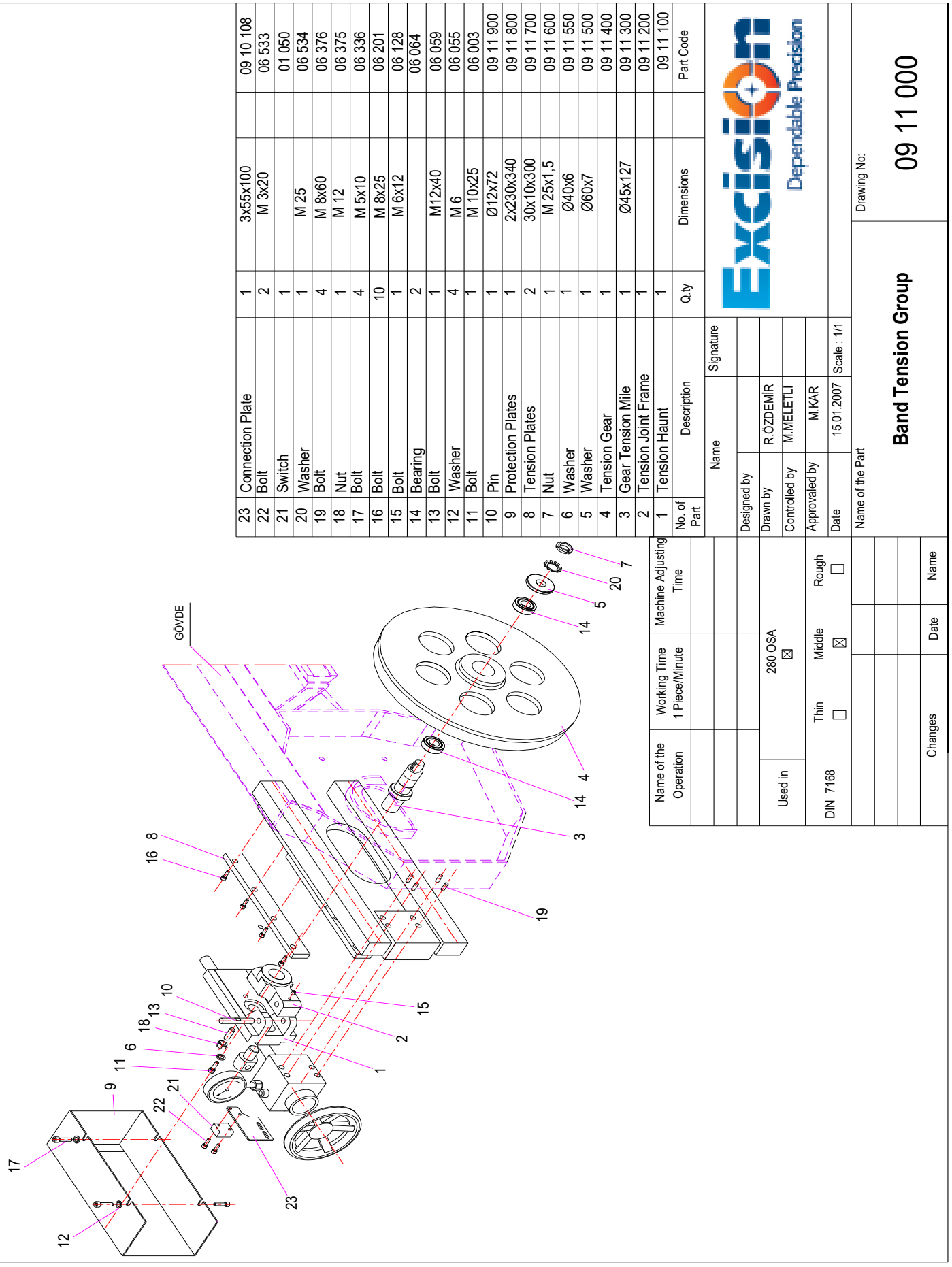
Name of the Part

Spring Group

Drawing No:

09 16 000

9.13. BAND TENSION GROUP



No. of Part	Description	Q.ty	Dimensions	Part Code
23	Connection Plate	1	3x55x100	09 10 108
22	Bolt	2	M 3x20	06 533
21	Switch	1		01 050
20	Washer	1	M 25	06 534
19	Bolt	4	M 8x60	06 376
18	Nut	1	M 12	06 375
17	Bolt	4	M 5x10	06 336
16	Bolt	10	M 8x25	06 201
15	Bolt	1	M 6x12	06 128
14	Bearing	2		06 064
13	Bolt	1	M12x40	06 059
12	Washer	4	M 6	06 055
11	Bolt	1	M 10x25	06 003
10	Pin	1	Ø12x72	09 11 900
9	Protection Plates	1	2x230x340	09 11 800
8	Tension Plates	2	30x10x300	09 11 700
7	Nut	1	M 25x1,5	09 11 600
6	Washer	1	Ø40x6	09 11 550
5	Washer	1	Ø60x7	09 11 500
4	Tension Gear	1		09 11 400
3	Gear Tension Mile	1	Ø45x127	09 11 300
2	Tension Joint Frame	1		09 11 200
1	Tension Haunt	1		09 11 100

	Name	Signature
Designed by		
Drawn by	R.ÖZDEMİR	
Controlled by	M.MELETLİ	
Approvaled by	M.KAR	
Date	15.01.2007	Scale : 1/1

Excision — Dependable Precision

Drawing No: 09 11 000

Name of the Part: **Band Tension Group**

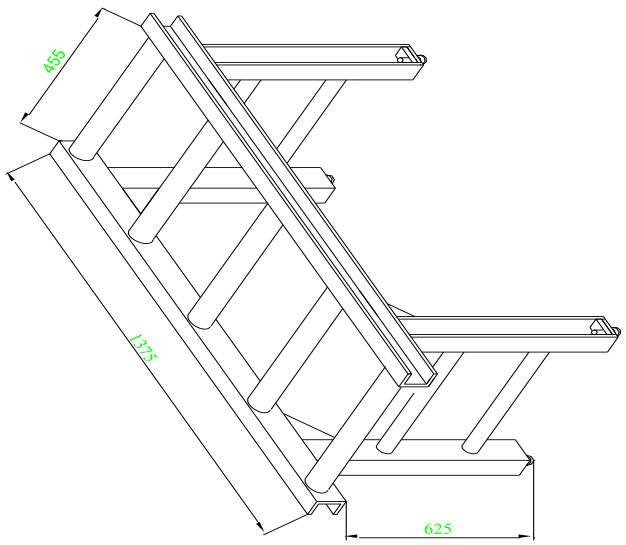
Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in: 280 OSA ☒

DIN 7168: Thin ☐ Middle ☒ Rough ☐

Changes	Date	Name

ASSEMBLY OF INFEED TABLE



No. of Part	Description	Q.ty	Dimension	Part Code
9	Bearing	12		06 366
8	Nut	18		06 319
7	Bolt	4		06 060
6	Washer	18		06 014
5	Pulley	5		05 20 190
4	Plate	4		09 20 160
3	Mile	2		05 20 120
2	Mile	7		05 20 110
1	Tripod Skeleton	1		07 20 102

	Name	Signature
Designed by	H.BURUCU	
Drawn by	R.OZDEMIR	
Controlled by	M.MELETLI	
Approvaled by	M.KAR	
Date	20.02.2007	Ölçek . 1/1

Excision — Dependable Precision

KMT-Tezgahlar 2/280 OSA(V1)Sehpa Grb.09 20 Sehpa

Drawing No: 09 20 100

Name of the Part: Tripod Group

Name of the Operation	Working Time 1 Piece/Minute	Machine Adjusting Time

Used in: 280 OSA ☒

DIN 7168 — Thin ☐ Middle ☒ Rough ☐

Changes	Date	Name