

THICKNESSING MACHINE RFT 630~RFT 520~RFT 410



original translation of Service instructions handbook

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Introduction

This manual was conceived at the manufacturer and is an indivisible part of the delivery enclosed with the machine. It contains basic information for qualified operating staff and discribes the surroundings and using ways of the machine for those it is intended. It contains also all necessary information for a correct and safe operating.

The machine is equipped with various safety equipment protecting the operator and machine as well at usual technological using. These regulations, however, cannot sheet all other safety aspects. That is why the operator must peruse and make sense of this manual before starting of using the machine. Installation and operation mistakes will be foreclosed herewith.

Do not try to start the machine before having read all instructions manual delivered with the machine and understood every function and technique.

Some information or drawings need not be intended especially for by yours bought type, for this manual contains all information of other this type variants we produce.By comparing of competent manual part with your machine – you will learn whether they correspond.

The producer reserves himself the right for particular variants in frames of a fluent technical development of the machine.

To stress the importance of some basic passages better, they are printed in **heavy letters** and marked by some preceding symbols - Appeal recommending to follow entirely following regulation :



Breach of these regulations may cause the death or a grave health exposure of operating personnel.

Warning against improper techniques or using of machine that may cause an exposure of human health, machine functioning and environment or cause economic losses.

The caution is an appeal to a due care for practising of following operations. Non-performing this caution may cause a human injury or damage of the machine.

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Notice

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1 Machine using

The machine is designed as a single-side thicknesser for using in carpentry operations during longitudinal (against fibres) working of wood and wood based materials up to a width of 630 mm.

The machine is designed for operation by one or two employees (inserting and taking away). Any manipulation with the machine is forbidden for children and youth.

1.1 Qualification of workers

Only a man or woman trained in woodworking branche or instructed and schooled by such a specialist can operate the machine. Machine operator is obliged to learn this manual and abide with all safety regulations, rules and appointments, valid in country in question.

1.2 Working surroundings

Machine must operate in workshop surroundings within temperature range $+5^{\circ}C - +40^{\circ}C$, relative air humidity 30% - 90% non condensing and altitude 1000 m above the sea in, surrounding classified : fire danger of combusitve dusts.

2 Machine signification

Machine type can be identified at the production shield on machine frame.

RFT 630 - single-side thicknesser, drawn width 630 mm. **RFT 520** - single-side thicknesser, drawn width 520 mm **RFT 410** - single-side thicknesser, drawn width 410 mm

DŘEVOOE 517 50 ČESK	ROJEK BRÁBĚCÍ STROJE O ČASTOLOVICE Á REPUBLIKA
TYP STROJE VÝROE PRODUCT TYPE SERIA MASCHINENTYP ERZEUGY DOVOZCE INPORTER EINEUHRER	BNÍ ČÍSLO ROK VÝROBY L NUMBER YEAR OF MANUFACTURE NISNUMMER BAUJAHR
NAPËTÍ POWER SUPPLY SPANNUNG KMITOCET FREQUENCY FREQUENZ	VYKON POWER OUTPUT MOTORLEISTUNG PROUD CURRENT STROM

Information labels and labels warning about danger are located on the machine.



- 1. Table roller control
- 3. Main switch
- 5. Attention, warning
- 7. Radial overlap of cutters of the cutter block

9. Switch for unbraking the working block.

- 10. tightening
- 12. descent of thicknessing table

- 2. Rotation direction
- 4. Attention, injury danger
- 6. Attention, electrical equipment
- 8. Binding points for crane ropes
- 9a) Operating condition of the motor brake 9b) Unbraked.
- 11. lifting up of thicknessing table

3 Technical Data

3.1 Technical Data

		RFT 630	RFT 520	RFT 410		
Length	mm	1020				
Width	mm	1240	1140	1040		
Height	mm	1	290 (1900 - open lid)		
Dimensions of the thicknesser table	mm	1000 x 650	966 x 552	940 x 410		
Motor kW	output	5.5 (4; 7.5) 4 (5.5; 7.5)		4 (5.5; 7.5)		
Motor speed	/min	2	2850 (3420 at 60 Hz)		
Cutterblock speed	/min		4550			
Cutterblock diameter	mm		120			
Cutter number	pcs.	4				
Max. thicknessing width	mm	630 520 410				
Max. thicknessing height	mm		300			
Max. thicknessing splinter	mm		8			
Feedroller diameter	mm		85			
Thicknessing feed speed	m/ min		8/12 (5 ÷ 21)			
Extraction diameter	mm		150			
Voltage / frequency		3f + PE -	+ N ; 400 (230) V / 50	0 (60) Hz		
Line securing	А	25				
Dimensions with packaging	mm	n 1200x1600x 1600 1200x1400x1600 1200x1400>				
Gross weight	kg	g 850 800 740				
Net weight	kg	(g 830 780		720		

3.2 Machine Dimensions



3.3 Possible Machine Variants

Electromotor output of the cutter block:	4 kW 5.5 kW 7.5 kW				
Operating voltage: Grid frequency:	3 x 400V or 3 x 230 V 50 or 60 Hz				
Table position setting:	manual (RFT 520, RFT 410) electromotive - with programmer - without programmer				
Table setting position admeasuring:	wheel with a scale measure scale electronically - display - touch panel - display				
Cutter block with cutting diameter 120 mm	four-cutter structure ROJEK four-cutter monoblock TERSA				
Pull-in roller	solid with gearing in a spiral divided with sprung segments and gearing in a spiral				
Pulling out roller	one				
Pulling roller surface	steel sanded rubberized (rubber or polyurethane)				
Feed drive	5 to 21 m/min - with frequency converter 8 and 12 m/min - two-speed motor *				
Table rollers	yes no. *				

3.4 Removal, Feed, and Performance Values *to lower diagram : splinter = TŘÍSKA: Mach.width = OBRÁBĚNÁ ŠÍŘKA (machined width)

Output (kW)	feed (m/min)	machined	splinter	removed volume
	· · · · ·	width (mm)	thickness	(mm²)
			(mm)	· · · ·
		133	8	1064
		200	5.33	1066
	5	300	3.55	1065
	5	400	2.66	1064
		500	2.13	1065
		630	1.7	1071
		66.5	8	532
		100	5.33	533
		200	2.66	532
	10	300	1.77	531
		400	1.33	532
		500	1.1	550
		630	0.85	536
4		44	8	352
		100	3.55	355
		200	1.78	356
	15	300	1.2	360
		400	0.9	360
		500	0.7	350
		630	0.56	353
		33	8	264
		100	2.66	266
		200	1.33	266
	20	300	0.88	264
		400	0.66	264
		500	0.53	265
		630	0.42	265

TRISKA AD IN INITIAL <u>5 m/min;4kW</u> 15 m/min; 4kW <u>10 m/min;4kW</u> OBRÁBĚNÁ ŠÍŘKA

Output (kW)	Feed (m/min)	Mach. width (mm)	Splinter (mm)	Removed volume (mm ²)
		180	8	1440
		200	7.3	1460
	F	300	4.9	1470
	Э	400	3.7	1480
		500	2.9	1450
		630	2.3	1450
		90	8	720
		100	7.3	730
		200	3.7	740
	10	300	2.4	720
		400	1.8	720
		500	1.5	750
		630	1.2	756
5.5	15	60	8	480
		100	4.9	490
		200	2.4	480
		300	1.6	480
		400	1.2	480
		500	1	500
		630	0.75	472
		45	8	360
		100	3.7	370
		200	1.8	360
	20	300	1.2	360
		400	0.9	360
		500	0.7	350
		630	0.55	347



Output $(k)M$	Food (m/min)	Mach width (mm)	Splintor (mm)	Romoved volume (mm ²)
		250	8	2000
		300	6.7	2010
	5	400	5	2000
		500	4	2000
		630	3.17	1997
		125	8	1000
		200	5	1000
	10	300	3.33	1000
	10	400	2.5	1000
		500	2	1000
		630	1.6	1008
	15	83	8	664
7.5		100	6.66	666
		200	3.33	666
		300	2.2	660
		400	1.66	664
		500	1.33	665
		630	1	630
		62.5	8	500
		100	5	500
		200	2.5	500
	20	300	1.66	498
		400	1.25	500
		500	1	500
		630	0.8	504



Above mentioned values are valid for spruce wood at relative air humidity of 12 - 15 % and sharp knives in cutterblock. These values can be regarded as starting ones at taking the machine to operation. At longer machine use these values can be partly changed. E. g. at planing of harder woods and at knives getting blunt it is necessary to count with adequate reduction of stated values.

Shavings removal thickness related to planed width and hardness of wood can be chosen only within the values at those driving motor does not get overloaded. On the contrary the protection of motor will act and the machine will get stopped.

With feed speed over 12.5 m/min, the torque of the electromotor is decreased due to the over-excitation and thus the feed speed is decreased.

It is necessary to count with worsened quality of processing at planing of materials of small thickness considering the springing of planed material piece.

With the increasing feed speed, the quality of the machined surface is lowered.

		RFT 630	RFT 520		RFT 410	
Nois level A in ope- rator's place (L _p A _{eq})	no tool	$L_pA_{eq} = 88.3 \text{ dB}(A)$	$L_pA_{eq} =$	dB(A)	$L_pA_{eq} =$	dB(A)
	with tool	$L_pA_{eq} = 95.5 \text{ dB}(A)$	$L_pA_{eq} =$	dB(A)	$L_pA_{eq} =$	dB(A)
Acoustic power A	no tool	$L_{WA} = 87.8 \text{ dB}(A)$	$L_pA_{eq} =$	dB(A)	$L_pA_{eq} =$	dB(A)
EN ISO 3746:1995 K = 4 dB	with tool	Lwa = 93.1 dB(A)	L _p A _{eq} =	dB(A)	L _p A _{eq} =	dB(A)

3.4 Machine nois data (EN 861:1998; ISO 7960:1995)

Above stated values are those of emissions and need not represent the safe working values. Although there is a correlation between emissions values and levels of exposition, these values cannot be used for a reliable statement whether other precautions are necessary or not. Agents, influencing real exposure of workers, include other working space attributes, other sources of nois, etc., e.g. the number of machines and other from neighbourhood influencing processes. The most permissible exposition levels can differ according to country in question, too. This information will serve for machine user to a better astimation of risks.

3.6 List of used documents :

Directive 2006/42/EU of European Parliament and Council in valid wording, stating technical demand on machinery equipment

Directive 2014/35/EU of European Parliament and Council in valid wording, about conformity assessment of electrical appliances, intended to be used at certain limit voltages, when delivered onto market

Directive **2014/30/EU** of European Parliament and Council in valid wording, about conformity assessment of products from aspect of electromagnetic compatibility, when delivered onto market

norms

EN ISO 12100 : 2011 (EN ISO 12100 : 2010) Machinery safety - General principles for designing - Assessment of risk and of risk reducing EN 860 + A2 : 2012 (EN 860 + A2 : 2012) Woodworking machinery safety. One-sided thicknessing machines. EN ISO 13857 : 2008 (EN ISO 13857 : 2008) Machinery safety. Safe distances to avoid reaching of dangerous places by hands. EN 349+A1 : 2008 (EN 349 : 1993 + A1 : 2008) Machinery safety. Least gaps to avoid pressing of human body parts. EN ISO 13850 : 2017 (EN ISO 13850 : 2015) Machinery safety - Function of emergency stopping - Principles for designing **ISO 447: 1992** (ISO 447 : 1984) Machine tools - Moving direction and sense of controlers **EN 614-1+A1** : **2009** (EN 614-1 : 2006 + A1 : 2009) Machinery safety - Ergonomic principles of designing - Part 1: Terminology and general principles EN ISO 14120 : 2017 (ISO 14120 : 2015) Machinery safety. Protective housings. General requirements for designing and production of unmoved-fixed and movable protective casings. EN ISO 13849-1 : 2017 (EN ISO 13849-1 : 2015) Machinery safety - Safety parts of controling systems - Part 1: General principles for designing

EN 1037 + A1 : **2008** (EN 1037: 1995 + A1 : 2008) Machinery safety - Avoiding of unexpected starting

EN ISO 14119 : **2014** (EN ISO 14119 : 2013)

Machinery safety - Blocking devices connected with protective housings - Principles for designing and choice.

EN 55011 ed.3 : 2010 (EN 55011:2009) Industrial, scientific and medical eqipments - Characteristics of high frequency interference -Measurement limits and methods

EN 60204-1 ed. 2 : 2007 (EN 60204-1 : 2006) Machinery safety - Electric equipment of machines - Part 1: General requirements

EN 60073 ed.2 : 2003 (EN 60073: 2002) Basic and safety principles for man-machine interface, markung and identification - Coding principles for communicators and drivers **EN 80416-1 ed.2 : 2009** (EN 80416-1 : 2009)

Basic rules for graphical symbols for use on objects - Part 1: Making of graphical symbols for registration

EN 80416-2 : **2002** (EN 80416-2 : 2001)

Basic rules for grafical symbols for use on objects - Part 2: Shape and using of arrows.

4 Safety instructions

4.1 General

This machine is provided with various safety equipment proecting the operator and the machine as well. This, however, cannot involve all safety aspects. Therefore the operator must read through and understand this chapter. He must moreover respect also other aspects of danger, refering to surroundings conditions and processed materials.

This manual takes in 3 categories of instructive safety symbols :



Appeal recommending to proceed entirely according to following instruction(s). A dispatch or operator's heavy injury impends in case of non-performing this regulation.

Warning against improper techniques or machine using ways, those can endanger human health, machine function-ing, environment or cause economic worses.

Caution is an appeal to appropriate care during practising of following activities. Non-performance of this caution can cause a small sized injury or machine damage.

Follow instructions stated on shields, fixed on the machine. Do not remove nor damage the shields. In any case of a shield damaging - always contact the producer !

4.2 Basic safety requirements



Under any conditions do not touch the low voltage system on the electric control pannel, transformers, motors, terminal boards. Every of mentioned unit is indicated with a shield.

Make sure that all safety elements are in active position and

check up its function **before connecting** the machine to the mains. In case of a necessity to remove doors or protecting shields : switch off the main switch and lock it or disconnect the machine from the mains by towing off the plug.

- The backlash-catchers must be kept in good operation condition.

- The backlash-catchers must be tested once during a workshift at least.

The catchers' contacting plates must not be damaged by bumps.

A spontaneous tilting-by-own-weight of backlash-catchers must be assured.

Do not connect the machine to the mains with removed door or protecting covering.



- Learn the location of switches before starting of machine to avoid improper operating.

- Remember the position (location) of the emmergency switch, so as to use it promptly whenever needed.

- Pay attention so as not to touch any switch by chance during machine run.

- Never touch rotating cutterblock by hands or with whatever else.

- In case that you are finishing operating at the planer : switch off the machine at the control pannel and disconnect it from the mains
- Before cleaning : Switch off the machine and always lock the main switch or disconnect the machine from mains by towing off the plug.
- Before practising maintenance : Switch off the machine and always lock the main switch or disconnect the machine by towing off the plug.
- When more operators work at the machine : never begin another oparation without having instructed your cooperator how you intend to run on.
- Never adapt the machine in a way that could endanger its safe run .
- If you doubt about accuracy of by yours intended technique: discuss it with a specialist !



- Do not fail practising of regular surways in accordance with this instructions manual.
- Check up and make sure that nothing spurious occurs at the machine from user's side.
- After end of working adjust the machine so as to be ready for other serial of operations.
- If the mains supply is interrupted switch off the main switch at once or disconnect the machine by towing off the plug from the socket.

- Do not paint over, smear, damage, adapt nor replace safety shields. If they get unreadable or lost – contact the producer and renew them !

4.3 Dress and personal safety



 Experience shows that various personally worn objects e.g. finger rings, watches, wristbands and the like used to cause injuries. Hence put them away before beginning of work, fasten sleeves, remove tie – those could be caught by various parts of working machines. Brace your hair so as not to

fly free and wear suitable shoes recommended or rated by working safety rules of a country in question.

- Wear safety outfit (glasses, apron, safety footwear and the like).
- In case of obstacles above your head in working space wear a helmet.
- Wear always a protecting mask during planing material source of dust (when planed).
- Never wear free working dress.
- Never work on the machine under influence of drugs or spirit drinks.
- If you suffer from stuggers, fade or swoon do not work on the machine.

4.4 Safety regulations for operator



Get up content of this manual before starting up of the machine.

- Check up whether electric cabels are not damaged so as an electric current fading would not cause an injury (electric shock).
- Check up regularly whether safety coverings are properly mounted and if they are undamaged. Damaged coverings repair immediately or replace with other ones.
- Do not start the machine with removed protecting covering.
- Never use deformed or cracked tools.
- Replace blunt tools as soon as possible, for blunt tools often cause injuries or damages .
- Never use tools at higher speed than recommended by its producer.
- Stop all machine functions before replacing of tools.

- Do not remove or in any else interfer to safety elements like coverings, limit switches, nor practise its mutual blockage.
- Require an assistance for manipulation with parts exceeding your abilities.
- At a storm we recommend : Do not operate at the machine !

4.5 Safety rules for maintenance

Get up this manual instructions for machine maintenance men at all points before starting any maintenance work.



- Before beginning with maintenance works: Switch off always the main switch and lock it or disconnect the machine by towing off the plug from socket. Hererwith you avoid an occassional starting of machine by chance by another else person.
- A qualified person must practise maintenance works on electric parts.
- The machine is not disconnected from voltage when it gets stopped. Switch off always the main switch and lock it or disconnect machine by towing off the plug from socket.
- Do not clean the machine or its peripheral system if machine is completely out of run as long as the main switch is not switched off or the plug towed out from the net socket.
- Keep your fingers distant from belts and belts pulleys and from chains and chain wheels.
- Before exchange of machine electric parts switch off the main switch, lock it or disconnect the machine by towing off the plug from the socket. For replacing of defected products use those consistent with specification of originals
- Do not remove or do up blocking of limit switches or other safety components.
- Keep always tidy the space for maintenance including your working place.



- Maintenance works must be practised by qualified personnel in tune with producer's instructions.
- Read through all the instructions manual for maintenance men patiently.
- For an exchange of parts and needy subjects ensure in advance equal ones with the original type or corresponding with the norms.
- Use only specified brands of lubricant (oil or grease) or with these equal ones.
- When one belt of used set of belts gets drained more than rated exchange the whole set.
- Do not use compressed air for machine cleaning or removing of wood chips.
- Control results of maintenance in presence of a responsible person.

4.6 Safety rules for working place



- Ensure always sufficient working space and free access to the machine and its peripheral device.
- Place the tools and other obstacles at a place for this inten ded remote from the machine.

- Ensure sufficient lighting in working space that will not throw shadows or cause a stroboscopic effect. Hygienic norms indicate 500 lx for minimal lighting

shadows or cause a stroboscopic effect. Hygienic norms indicate 500 lx for minimal lighting for a safe and quality work.

- Never lay tools or other subjects onto working tables or coverings.

5 Transport and storage

5.1 Transport, stocking

Be especially careful during transport and manipulation and commit it to gualified personnel for it especially trained.



You must secure that no person nor subject could be folded by the machine during loading and unloading it ! Never enter the space under machine lifted up by crane or high-lift !

The machine must be protected against excessive vibrations and moisture during transport. It must be stored indoor in temperature range (minus) - 25°C to + 55°C.

The machine is modularly wrapped in shrinkable folio when transported. On customer's wish the machine can be packed in a resistant wooden box.

5.2 Machine lifting

The machine or its separate parts can be lifted only with an approved lifting appliance of certified carrying capacity. We recommend to use :

D – high-lift

E – crane or other lifting appliance

F – manual lifting carriage



Prepare a high-lift (D) or manual lifting carriage (F) of sufficient forks carrying capacity.

- Insert the forks under the machine in one of

- If you use a crane or similar lifting equipment, use the binding points (holes with plugs marked with a label) that are at points marked (B),

- With slight lifting, check the machine suspen-

- Lift the machine carefully and slowly and then relocate it without sudden changes of movement

The weight of the machine RFT 630 is 830 kg RFT 520 - 780 kg RFT 410 - 720 kg.

6 Positioning of machine

Remove protecting coat from table and other machine parts with a solvent. Do not use petrol or kindred solvents for this action. They can cut down resistance against corrosion of some machine parts.

The working space extent depends on machine dimensions, intended working operations and dimensions of processed material.

Do not forget to let free a big enough space for installment of a sufficiently effective exhausting unit or hoses connecting with the central exhausting system.

6.1 Working space



It is important to keep a free space of at least 0,8 m, requested as working space surrounding the machine.

If a long peace is planed, it is necessary to have a sufficient space in front of and behind the machine in places of material in- and output.

6.2 Machine levelling and fixing



In the lower part of frame, the machine is fitted with legs with levelling screws and with openings for anchoring screws.

Under the leveling screws, use steel washers (they are a part of the supply) and do level the machine in a flat plain field with a tolerance 0.5 mm / 1000 mm and do screw them to the bottom (anchor them).

Attached drawing shows a lay-out of anchoring openings on the machine.

7 Connecting of exhaustion



An exhausting unit of minimal volumetric capacity 1270 m³ h⁻¹ and minimal air stream speed in the hose 20 ms⁻¹ for dry particals, and 1780 m³h⁻¹ at minimal air stream speed in hose of 28 ms⁻¹ for wet particals, is necessary for a proper functioning of the machine.

Always operate machine only with running exhausting ! Start the machine and the exhausting unit all at once !

For connecting, use a flexible extraction hose with a diameter of 150 mm. Connect the extraction hose to the extraction nozzle, location of which is at the machine outlet, with outfall to the right, to the left or directly backwards.



Wooden waste must be liquidated eco-friendly - not to worsen the environment.

8 Connecting to the mains



Only a qualified person is allowed to realize the first connection of the machine to the mains.

8.1 Connecting to the mains



Make sure that no voltage is at the supply lead before connecting. Open the door of the electrical cabinet, push the connecting cable inside using a bushing and connect individual phase conductors to the corresponding terminals located at the bottom of the electrical switchboard. Connect the protective conductor (yellow-green) to the clamp PE and the central conductor (pale blue) to the clamp N, if it is required. Cross- sections of phase conductors and of the protective conductor must be conformable with legal standard norms. Check up the accuracy of connecting and fasten the terminal door again.

8.2 Operation safety



A damaged supplying lead must be replaced immediately by a competent specialist. The operation of a machine with a damaged supply cables is dangerous to life and it is forbidden !

Before commissioning the machine, make sure that the voltage and frequency stated at the type label of the machine corresponds with the values of the grid, to which it is connected. The grid supply, from which the machine is powered, must be performed according to the regulations and secured at least by 25A safety fuses or a circuit breaker of the L type. According to CSN 33 2000-4-482 (epv. HD 384.4.482 S1, according to Art. 482.1.7) in a distributing system other than cables with mineral insulation and busbar distributing system, must be protected against insulation failures in TN grids using current protectors with rated equipping difference current $I_{\Delta N} \leq \Box 300$ mA (see IEC 364-5-53, Art. 531.2.4; of the corresponding standard for the product).



Always switch off the machine main switch and lock it before the tools adjusting and replace and all adjusting, treatment and maintenance works. Herewith you avoid eventual machine starting by chance by an else person.

8.3 Rotating direction



An injury danger menaces at an improper rotating direction of the cutter block !

If you stand on the left side of the machine near the stand cover (see Chap. 9.1 pos. 11), the cutter block must rotate counter clockwise, i.e. to the left. In order to ascertain the rotation direction, remove the stand cover and turn on the machine for a short moment.



8.4 Rotating direction change

It is possible to change rotating direction of 3-phases motors by exchanging (switch-over) of conductors one instead of another (between 2 black ones or a brown and a black one) on supplying plug. Attention ! Avoid of mistaken changing of yellow-green wire with the phase ! Entirely a specialist qualified in electrotechnics is allowed to make this change and to realize the connecting !



Start the machine without tools for a flash to learn its rotating direction.

8.5 Protection of electric parts

The electric motor of the draw is equipped with an electric brake, able to stop the cutter block in a required term (within 10 s).

If the electric brake does not work well (spindle run out is more than 10 s) it is forbidden to work on the machine !

The protection against dangerous contact of inanimate parts is assured with a self acting disconnecting from the mains according to the norm EN 60 204-1 and IEC 60 364-4-41.

8.6 Machine control





The connecting and disconnecting of machine is done by switching ON and OFF of the lockable main switch (A).

Till the machine is disconnected, it cannot be started.The main switch can be secured with a pad lock against an ineligible machine starting.

The machine connection to the electrical grid is indicated by lighting the white signal light on the control panel see Chap. 8.6.2 (E).

8.6.2 Control panel



The cutter block drive motor gets started by pushing the green button (A) and turned off by pushing the red button (B). Engine running is indicated by lighting the button (A).

In case of a mains failure the machine is switched off by a tapped coil, it means that after the voltage restoring the machine must be switched on again.

The inbuilt breaker will switch off the machine in case of motor overloading. Check up the machine (motor function, blunt tools and the like) if the braker switches it off several times in a sequence.

Controler of emergency stopping (C) will stay in switched off position. It is necessary to release it by turning the mushroom head. Without this releasing the machine cannot be started !

The other emergency stopping controler is situated at the outlet side of machined material from the machine.

The unbraking controller (**D**) is switched into the left position during normal working position, electromotor braking is functional when turning off the drive. In the right position, unbraking is turned on and the cutter block can be rotated freely.

If the controller (**D**) is shifted into the unbraked position during draw motor operation, the motor is shut down, it is braked, and after about 10 s unbraked.

Failure light indication (**F**) (e.g. open the tipping lid, failure at the circuit breakers etc.), the failure cause is displayed in an error message on the display.

The control board viewport (G) is filled according to machine making in following chapters.

8.6.2.1 Thicknessing table adjusting by hand wheel - position admeasuring by gauge



(only RFT 520, RFT 410)

In normal working position the **feed drive controler (H)** is overswitched into left position. On a machine with a 2-speed feeding motor it is possible to choose a higher feding speed by overswitching into the right position.

In position 0 - feeding is off (switched off). The feeding can be started only at cutter block running - in operation.

8.6.2.2 Control panel RFT (ELGO) without programmer (see enclosure E)



Feed drive controler (H)

In a normal working position the **feed dri**ve controler (H) is overswitched into left position. On a machine with a 2-speed feeding motor it is possible to choose a higher feding speed by overswitching into the right position. In position **0** - feeding is off (switched off). The feeding can be started only at cutter block running - in operation. **Table adjusting pusher (I)** During holding the pusher - the table is lifting up or sinking down (according to arrows).

Indikace polohy ELGO (**J**) slouží k odečítání polohy tloušťkovacího stolu. **ELGO position indication (J)** serves to reading the thicknessing table position.



Position indication - battery exchange The lid (**A**)[for battery (**B**) exchange] is situated at control box (**C**) lower side. The lid is accessible after removing or opening of the side cover of machine stand. Battery instalation is desribed in Enclosure **E** chapter **3**. 8.6.2.3 ELGO control panel with programmer (K)- see enclosure C.



8.6.2.4 Touchable control panel (L) - see enclosure D.



9 Machine operation and adjustment

9.1 Machine description 9.1.1 RFT 630



- 1 stand
- 2 tipping lid
- 3 fixed lid
- 4 table
- 5 table rollers
- 6 table roller control
- 7 table setting scale
- 8 auxiliary scale for determina tion of the inserted semifin ished product thickness
- 9 splinter limiter at the rack
- 10 control panel (according to the design)
- 11 stand covers
- 12 tool box or hand wheel of ta-
- ble setting (according to design)
- 13 extraction nozzle
- 14 plugged binding points
- 15 cutter block
- 16 pushers in front of the cutter block
- 17 pulling in roller
- 18 return throw catchers
- 19 splinter limiter at housings
- 20 pusher behind the cutter
- block 21 pulling out rollers
- 22 cutter block drive
- 23 feed drive
- 24 table lifting drive (according to the design).

9.1.2 RFT 520, RFT 410



- 1 stand
- 2 tipping lid
- 3 fixed lid
- 4 table
- 5 table rollers
- 6 table roller control
- 7 table setting scale
- 8 auxiliary scale for determina tion of the inserted semifin ished product thickness
- 9 splinter limiter at the rack
- 10 control panel (according to the design)
- 11 machine stand cover
- 12 table adjusting hand wheel
- 13 tightening of table adjusting
- 14 exhaustion nozzle
- 15 stoppered fixing points 16 cutter block
- 17 pushers in front of cutter block
- 18 pulling in roller
- 18 return throw catchers
- 19 splinter limiter at housings
- 20 pusher behind the cutter block
- 21 pulling out rollers
- 22 cutter block drive
- 23 feed drive
- 24 table lifting drive (according to the design).
- 25 table pole
- 26 table pole body
- 27 table adjusting chain
- 28 chain wheels holder
- 29 table lifting drive
 - (according to making)

9.2 machine adjusting 9.2.1 Table Adjustment



Table position changing (by setting height) sets a parameter (thickness) of machined part. Unevenly thick pieces should always be inserted with the thicker end first. Unevenly wide pieces should always be inserted with the wider end first.

9.2.1.1 by a hand wheel (only RFT 520, RFT 410)



table position change (A) [height setting]:

Unblock tightening lever (**B**) by hand wheel (**C**).

Wheel (C)+chain wheels are carried by holder (D). Wheel (C) is (by chain) connected with chain wheel of motion screw. The screw is in body (F) with adjustable pole.

9.2.1.2 Electromotive RFT 630



 Table position change (height setting) by electric gearbox (control described - chapter 8.6.2.)

The electric gearbox (A) is rotary suspended on an arm (B) and, by using wheels (C), chain (D) drives the chain wheels of motion screws.

By turning the nut (E), the chain wheels can be adjusted into one plane.

Chain gets tightened by tensioner (F).

RFT 520, RFT 410

Electric gear box (\mathbf{A}) is fitted at the end of table motion screw. Screw is in a body (\mathbf{B}) with adjustable pole. The pole carries the thicknessing table (\mathbf{C})

9.2.1.3 Table Roller Adjustment

Table rollers are located in a specially modified table and allow for better passage of machined material through the table. They are free-running with the possibility of height setting. Adjustment is performed using a hand grooved nut. By turning to the right, the rollers can be set upwards and vice versa. The roller exposure size above the table plane can be chosen in the range of 0 to 1 mm according to the nature of accuracy requirements of the machined area and the machined material. The larger the roller exposure, the larger the breach of the table planarity and thus the possibility of worsening the quality of the machined area.



9.2.1.4 Table Scale Adjustment



If the value read at the scale (1) does not correspond with the actual thickness of the workpiece, it is possible to perform a repair by moving the indicator (2) in the fixing grooves.

9.2.1.5 Adjusting the Table Parallelism with the Cutter Block



Always turn off the main switch and lock it or disconnect the machine by pulling out the fork. This will exclude the possibility of random starting of the machine by someone else.



If the machined part shows uneven thickness across its width and if the effect of cutter setting accuracy in the cutter block is excluded, it is possible to adjust the block and table parallelism in the following manner:

- Unscrew fixing screws (A), push cover ing case (B) down from lower part of motion screw (C)
- release holder (D) gripping connection by releasing the screw (E)
- Release screw (F), connecrting motion screw (C) with table boss (G). Herewith the whole assembly gets loose.
- Index the motion screw (C) by hexagon wrench (hexagon gap in lower part).
 Herewith the parallelity of table with cutter block gets adjusted (changed).

WARNING: Do adjust always both screws at the same side of the table from the standpoint of material passing, the screws have a right thread and pitch 6 mm, which means that turning the screw by 6° results in a change of 0,1 mm.

We recommend leaving this to an expert service.

RFT 520, RFT 410



If the machined workpiece gets out unevenly thick (across its width) from machine, not caused by cutters adjusting accuracy in cutter block, the cutter block with table parallelity can be adjusted as follows:

- Thicknessing table is fast connected with pole (A). Pole moves in body (B). Cube (E) is fixed to body (B). Cube (E) is connected with cube (D) by body (B). Cube (D) is fast connected with the stand by screws (C).

Release screws (F). Mutual position od cubes (D) and (E) can be changed by pushing off screws (G). Hereby the parallelity of machine table with cutter block can be adjusted.

WARNING: Do adjust always both screws at the same side of the table from the standpoint of material passing. Tighten all wel.

We recommend to let the (table cutter block) parallelity adjusted in a special service.

9.2.1.6 Adjustment of Fixed Stoppers of Table End Positions

The upper end position is implemented using a couple of screws (A and B) at both sides of the table width that are secured against each other in the connecting bar (C) of the right (D) and left housing and limit the table movement (E) upwards between the value of 3 mm - minimal machining thickness - and the value of <math>2 mm - return throw catcher overlap under the cutter block.

The lower end position is implemented using a couple of screws (F) with positioning nuts (G) at both sides of the table width that are located in the stand (H).



9.2.1.7 Adjustment of End Switches of End Positions of the Table and the Table Position Admeasuring Sensor

The end switches of the upper position (A) and the lower position (B) are located under the right stand cover and are fastened using holders (C) to the stand with the possibility of horizontal adjustment. The upper position stopper (D) and lower position stopper (E) are born by a holder (G) fastened to the machine table. After releasing the locking screws, both stoppers (D and E) can be adjusted in height and thus the upper and lower turning off position can be adjusted. The bar of the stoppers (D and E) also bears the impulse sensor (F) that must be adjusted to a gap of 1 to 2 mm from the magnetic tape (H).



9.2.2 Cutter Block Drive



Always turn off the main switch and lock it or disconnect the machine by pulling out the fork. This will exclude the possibility of random start of the machine by someone else.

The drive of the cutter block (A) is using V-belts (B) from the main machine electromotor (C).



Pulley adjustment into one vertical plane can be performed by sliding the motor pulley after releasing the securing screw (\mathbf{E}) or by sliding the electromotor holder (\mathbf{F}) in the stand grooves, after releasing of tensioner (\mathbf{D}).

9.2.3 Feed Rollers 9.2.3.1 Feed Roller Drive

The torque from the motor is transferred from the motor using a chain to feed rollers and those convert it by friction into the feed force of the machined part. The drive allows for continuous or step change of the feed speed.

9.2.3.1.1 Frequency Controlled Motor



Always turn off the main switch and lock it or disconnect the machine by pulling out the fork. This will exclude the possibility of random start of the machine by someone else.

C B D A E

The feed electromotor with a gearbox (A) is located at the rear side of the machine stand and using a chain (B) (with idler pulley) it drives the slide rollers (C).

Adjustment of the chain wheel (**D**) of the gearbox (**A**) into one vertical plane with the chain wheels of the rollers is performed after releasing the securing screw by sliding along the outlet block of the gearbox. The belting chain wheel (**E**) is floating on its block and self-adjusting.

9.2.3.1.2 Two-Speed Motor

not documented yet

The structural arrangement is the same as when using a frequency controlled motor (Chap. 9.2.3.2), only a two-speed electromotor is used. Adjustment of chain wheels into one vertical plane is also the same.

9.2.3.1.3 Mechanical Gearbox

not documented yet.

9.2.3.2 Adjustment of Feed Rollers



Feed rollers - pulling in (A) and pulling out (B) are suspended rotary on pivots and their height position can be adjusted against the cutter block (D) and the size of the pushing force.

The rollers are adjusted 1 mm under the cutter block (cutting cylinder = cylinder circumscribed around cutter edges), that is 2 mm under the "body" of the cutter block.



It is designed as solid with gearing in a spiral or as divided with sprung segments and gearing in a spiral.

a) Height Position Adjustment

Performed by turning the housing body (**A**) around the pivot using the screw (**B**) with the locking nut (3)

b) Pushing Force Adjustment

Performed by changing the spring rigidity (**D**) by its pressing using screw (**E**) and nuts (6 and 7).

9.2.3.2.1 Pulling in Roller

9.2.3.2.2 Pulling Out Roller

There is one or two with a steel surface sanded or rubberized.



a) Adjustment of the Height Position

Performed by turning the housing body (A) around the pivot using the nut (B) and the screw (D) that is locked in the body using the nut (C).

B) Pushing Force Adjustment

Performed by changing the leaf spring rigidity (E) by its compression using the screw (F) and the nut (G), the set position is locked using the nut (H).

C) Setting of thrust

The thrust gets adjusted by stiffness change of leaf spring (E) by pressing it with screw (F) and nut (G). The set up position gets locked by nut (H).

9.2.4 Pushing Edges

Before and after the cutter block (C), there is a pushing edge (A and B).



The front pushing edge is divided and individual segments are put rotary on the pivot and it is possible to adjust their height position against the cutting cylinder and they are sprung.

The front edge is adjusted by 1 mm under the cutting cylinder (cutting cylinder = the cylinder circumscribed over the cutter edge), that is 2 mm under the "body" of the cutter block.

The rear edge is solid of hardened sheet metal and it is adjusted to 0.1 through 0.5 mm under the cutting cylinder.

9.2.4.1 Front Pushing Edge



It is located between the pulling-in roller and the cutter block. It allows the pushing of machined piece, splinter removal, and it is height adjusted according to splinter thickness.



a) Height Position Adjustment

The front pushing edge (\mathbf{A}) is pushed into the basic position by a spring (\mathbf{C}) and to a value of 1 mm under the cutting cylinder (\mathbf{B}) it is adjusted using the screw (\mathbf{E}) with the locking nut (\mathbf{D}).

- Due to the max. splinter of 8 mm, the upper position of the front pushing edge (**A**) is limited by a screw (**G**) with a locking nut (**F**) to a max. value of 10 mm.

b) Pushing Force Adjustment The pushing force of the front pushing edge (**A**) is not adjusted and it is given by the rigidity of the sprig (**C**).

9.2.4.2 Rear Pushing Edge



Always during adjusting the height setting of the rear pushing edge, it is necessary to verify that the edge cannot collide in the upper position with the cutter block and whether in the lower position, the edge ramp is above the plane of the cutting cylinder (The front edge of the machined part must not damage the edge, but only lift it using the edge ramp).

The rear pushing edge is situated beyond the cutter block. The rear pushing edge enables thrust of workpiece, the edge shuts the exhausted space. The rear pushing edge is made from springy hardened metal sheet (A), that is fastened to holder (D). Holder (D) is pivoted in blocks (G).



a) Adjustment of Parallelism with the Cutter Block

On the right side, the pivot is fitted with an eccentric, (F) by turning which after releasing the locking screw (G) it is possible to adjust the parallelism of the edge with the cutter block.

b) Adjustment of the Height Setting

After releasing the locking screw (**B**), it is possible using the arm (**C**) to turn the transom (**D**) with the pushing edge (**A**) around the pivots of the housing (**G**). Set the edge (**A**) so that its lower area is in the range of 0.1 to 0.5 mm below the cutting cylinder.

9.3 Working places



The machine is designed for operation by one or two employees (inserting and taking away).

Picture shows the position of working place, surrounding the machine .

9.4 Protective tools

A short stiff aipron and protection of eyes are rated for the work on the thicknesser. It is proper to use adequate protection of hearing and recommended working shoes. Wearing of working coats is forbidden.

9.5 Forbidden manipulations



There is forbidden on the machine:

to make any treatments of machine safety elements not approved by the producer, to make any manipulations in contrary with this manual safety instructions (chp. 3.0)

- touch or interfere with the cutter block or its near surroundings and other moving parts
- plane other material than wood or those on its base
- process workpieces in cross-direction. Machine is intended only for planing in lengthwise direction of wood fibres
- overload the machine at processing of big semiproducts workpieces
- remove shavings in cutterblock surroundings by hand or anything on running machine
- use other cutters in cutter block than recommended by machine producer
- use cutters of width under 20 mm.

10.0 Tools 10.1 Recommended tools

The machine cutter block is fitted with four cutters.



Do not use other cutterblock knives than supplied or recommended by machine producer. Do not use knives of width under 20 mm.

The cutterblock must be marked with name or logo (signification) of producer and maximal allowed rotating speed (RPM) and it must be produced in accordance with the norm EN 847 - 1: 1997.

RFT 630 - Suitable cutters for use in this machine in the cutter block are planing cutters 635x30x3 mm (length x height x thickness) from the HSS or HSS18 material (HLS 1.2379). **RFT 520** - Suitable cutters for use in this machine in the cutter block are planing cutters 525x30x3 mm (length x height x thickness) from the HSS or HSS18 material (HLS 1.2379). **RFT 410** - Suitable cutters for use in this machine in the cutter block are planing cutters 415x30x3 mm (length x height x thickness) from the HSS or HSS18 material (HLS 1.2379).

10.2 Planing Cutter Replacement



Danger of injury

After releasing the screws of the wedge, the cutter is pulled out from the cutting cylinder body. Do not have hands or other body parts in the cutter space.

The planing cutters (A) are in the wedge groove of the cutter block (B) fastened with a wedge (C). After releasing the screws (D), the cutter is pushed out by the pivot (E) with the spring (F) and it can be removed.

After inserting a new cutter (A), its compressino to the level of the cutter block body surface (B), and light tightening of the screws (D), the cutter is ready for adjustment.

If the cutters are changed for reason of wear, always replace all four!!!



10.3 Adjustment of Planing Cutters

The quality of the machined surface depends on the accuracy of cutter adjustment!!! **10.3.1 Adjustment using a Setting Jig (Setter)**



After releasing the screws (**D**) of the wedge (**C**), the spring (**F**) with the pivot (**E**) will push out the cutter (**A**) of the cutter block (**B**) against the stirrup (**G**) of the setting jig.

The stirrup serves as a stopper and the cutter ejection size (**A**) above the surface of the cutter body (**B**) corresponds to a value of 0,9 mm.

Hold the setter pushed above the cutter (**A**) and gradually tighten the wedge screws (**D**), best gradually from the centre of the cutter towards the edges. Repeat the procedure gradually with all cutters.

10.3.2 Adjustment using a Dial Indicator



After releasing the screws (**D**) of the wedge (**C**), let the cutter (A) by pushed out with the spring (**F**) with a pivot (**E**) above the body of the cutter block (**B**) to a value of over 1 mm.

Using hard wood, a silon chock or similar material knock the cutter (\mathbf{A}) into the cutter body (\mathbf{B}) and check the value of ejection above the cutter block body with a dial indicator (\mathbf{G}) as shown in the picture. The check must be performed always at both ends and in the middle of the cutter with all cutters in the cutter block.

After aligning, gradually tighten the cutters with wedge screws (D), best from the cutter centre to the edges. Repeat the procedure with all cutters

and try to adjust them to the same value that must range within 0.8 to 1 mm.

and adjusting of planing knives TERSA

(This type of cutterblock is delivered especially on customer's order.)



10.4.1 first step

Discharge the knife in the cutter block with knocking with the hammer of the accessories onto the gasset.



10.4.2 second step

Take the blunt knife out from cutter block and replace it with a new one.



10.4.3 third step

Eccentric power fixes the position of knives in the cutter block after starting the machine.

The knife is reversible. As soon as both cutting edges of a knife are blunt - do not sharpen them, but replace them with new ones !

Aways do replace the three knives all at once !

11 Maintenance and repairs



Always disconnect the machine from the mains before any maintenance or repair ! Switch off and lock the main switch or disconnect the machine by towing off the plug. Herewith you avoid a possibility of an occasional starting the machine by somebody else.

The backlash-catchers must be kept in good operation condition. The backlash-catchers must be tested once a workshift at least. The catchers contacting plates must not be damaged by bumps. A spontaneous tilting-by-own-weight of backlashcatchers must be assured.

11.1 Table Setting Drive Chain Tensioning 11.1.1 Table setting by hand wheel (RFT 520, RFT 410)



When tightening the chain (**A**) for table adjusting it is necessary to change the axe distance of motion screw and chain wheel axe (**C**) of hand wheel. After releasing the fixing nut (**E**), it is possible to shift with the chain wheel axe holder (**C**) and herewith to tighten the chain (**A**). When the chain is tightened, it is necessary to shift the digital position indicator to machine base and to arrest it.

11.1.2 Electromotoric adjusting of table (RFT 630)

The table adjusting drive chain (**A**) gets tightened by help of tensioner (**B**). The tensioner is anchored to machine base.



11.2 Cutter Block Drive V-Belt Tensioning



Using the nut (C) at the tensioning screw, change the position of electromotor holder tilt so that the belts (B) of the cutter block drive (A) are sufficiently tensioned. Secure the position again by tightening the nuts.

If you press with your hand on a correctly tensioned belt with a force of about 20 N (about 2 kg), it should bend by about 10 mm.

11.3 Tensioning of feeding drive chain 11.3.1 Tensioning of feeding drive chain RFT 630



Tensioning of feeding drive chain (A) is automatic by help of idler (B) controled by spring (C). The spring (C) drawing strength

is adjusted by changing the length of anchoring chain (D). Due to chain (A) length and idler mulfunction, it is possible to adapt the length of chain (A) girting by changing the axis distance of driving chain wheel: release screws (E), electric gearbox shifts down/ or upward. Fix the new position - tighten screws (E) again.

11.3.2 Tensioning of feeding drive chain RFT 520, RFT 410

Tensioning of feeding drive chain (A) is automatic by help of idler (B) controled by spring (C). The spring (C) drawing strength

is adjusted by changing the length of anchoring chain(D). If, due to chain (A) length is the idler dud, it can be necessary to shorten the chain (A) with a binding member.

11.4 Setting the mechanic digital indication of thicknessing table position



(At the display (B) depicted) mechanical digital course indicator (A) value, [after releasing screw (C),] can be changed by turning the ring (D). When the new value is set, it is necessary to tighten the screw (C), and to take care so as the reaction catching pin [in place (E)] (course indicator fixing against turning) would be pushed into machine stand positioning opening.

11.5 Setting thrust of pulling in and pulling out rolls

Adjusting is described in chapter 9.2.3.2 Adjusting of feeding rolls.

11.6 Cleaning and lubricating

Clean the machine regularly. Oil bars, gudgeons, screw bars and other parts amenable fret. The oiling frequency depends on the way of working, but apply it minimally once a month. Bearings of electric motors and shafts have a permanent grease filling and are sealed (closed). For this reason - do not grease them.

Clean the tables from resin by suitable solvent - for example by turpentine or petroleum, or by other suitable solvent according to your needs.

Take care so as the belts are not fouled (dirty) with oil or grease. In case it happens, clean the belts only with paper.

Clean the machine from dust with a vacuum cleaner. It should be done 1 x a week at least. Survey of lubrication points and periods

	Bearings of cut- ter block, chain wheels, feed rollers	thicknessing table motion screws	chain, motion parts of other mechanisms	table plates, cutter block	thicknessing table leading (pivot in body)
Lubrication point	1	2	3	4	5
necessary action	(hours)	(h)	(h)	(h)	(h)
Permanent grea-	upon repla-				
se fill	cement				
Lubricate ba spreading		1000			
Grease gun					100
Lubricate by oiler			500	8	8
Plastic lubricant or oil	LV-2-3	LV-2-3	OL-B5	OL-B5	OL-B5OL-B5
equivalent	ISO-L-X	CBEA 3		ISO-LAN 68	



11.7 Faults remedy

No defects should arise at a correct use and proper maintenance of the machine. If the shavings exhausting gets jammed - it is necessary to switch off the machine before carrying out the remedy. Stop the machine immediately if it gets jammed with the workpiece ! Blunt tool - cutter block knife/-ves is often a cause of electric motor overheating. If the machine excessively vibrates - check up its levelling and attachment, respectively fixing and ballancing of knives used in cutter block.

Machine does not work:

It is necessary to check up electric installation and connecting to the mains.

Thicknessing table moves hard:

It is necessary to lubricate the movement screws of the table height setting.

Machine output is insufficient:

Tools are not sharp.

A too thick splinter is chosen – it is necessary to consider the width and hardness of the wood. Polluted table. The V-belts of the cutter cylinder are not sufficeintly tensioned. Electric motor does not perform full output. - A specialist should solve it.

Machine vibrates :

Poorly sharpened or adjusted cutters. The cutters have an uneven width, height. The machine is not level, it is not levelled well.

Thicknessing is not possible on the machine:

Too large splinter. The thicknessing table is not clean.

Fitting on the front or rear part of the machined piece:

Poorly pushed or led material. Necessary to adjust the pushing forces of the pulling in and pulling out roller.

12 Delivery scope

Complete machine, accessories according to list, machine service instructions handbook, special accessories (if ordered).

12.1 Accessories

Title	Dimensions	Pcs.	Note
wrench 8 x 10		1	set C
wrench 13 x 16		2	set C + 1
wrench 14 x 17		1	
wrench 18 x 24		1	set C
wrench 60		1	
wrench 3		1	set C
wrench 4		1	set C
wrench 5		1	set C
wrench 6		1	set C
wrench 10		1	set C
screw M 10x40		4	for machine levelling
nut M10		4	for machine levelling
levelling washer		4	for machine levelling
		4	for cutters' adjustment
cutter setter		I	in cutter block
PE bag with a	250 x 250 mm	0	for enclosed
zipper	200 X 300 MM	2	+ manual

13 Special Accessories

Cutter setter with a dial indicator.

14 Spare parts

When ordering spare parts : Mention always the machine production number, type and year (from machine rating plate) and the part position number in spars drawing. If an enclosure with listed spare parts is a part of this manual – it is available to state numbers and names of spares according to this enclosure.

15 Guarantee

Works and operations, not mentioned here, involve a written agreement of the ROJEK Co., Masarykova 16, 5170 50 Castolovice, the Czech Republic, Europe. Every machine and equipment is provided with a guarantee certificate. It is important to fill the warranty certificate just during purchasing it with a respect of possibility to set up an eventual guarantee claim and for sake of product's safety. If the machine is not installed in a proper way, it may cause a damage on it own or an injury to the operator. In this case we do not bear any responsibility. Possible guarantee claims have to be asserted at machine seller.

When the guarantee period expires – you can get the machine repaired at any specialized repair shop.

16 Dealing with packing and machine service life expiry

16.1 Dealing with packing

Our products are transported in packing fron cartoon or PE folio. Producers of these packings issued a legal declaration about their product. They concluded a contract about filling duties of taking back and usage of the vaste from packings with an authorized company. One of duties of these companies is also to inform the clients how taking it back is assured.

16.2 Dealing with machine

Service life of this machine depends particularly on usage way, working engagement intensity, frequency and kind of applied maintenance. The producer is responsible to the machine user for evident losses caused by the machine for ten years.

Machine user is obliged to guarantee an environmentally safe liquidation of the machine according to country's in question laws about leavings - not to endanger the environment.

We recommend to run on as follows :

- 1) Demount all plastic parts and consign it to relevant accumulating containers.
- 2) Separate resting iron from non-iron parts and commit it to a specialized company for a separate liquidation.

Enclosure A Electric connection diagram



5,5 / 7,5 kW, 3 x 400 V, motoric table lifting, feed frequency drive







diagram (5,5 / 7,5 kW, 3 x 400 V, motoric lifting, 2-speed feeding)



enclosure B

List of electrotechnical parts

marking	function	type, technical data	4 kW pcs.	5,5 kW pcs.	7,5 kW pcs.	supplier	substitution	note
	CEG M112Ma-2/FPC 4 kW 3x400/230V 8,83/15,3A 50,60Hz 2900 /min IM B3	1	-	-				
		CEG M112MB-2/FPC 5,5kW 3x400/690V 12,2/7,1A 50,60Hz 2900 /min IM B3	-	1	-	CEG Italy		for voltage
M1	Motor driv- ing cutter block	CEG M112MC-2/FPC 7,5kW 3x400/690V 16,9/9,8A 50,60Hz 2880 /min IM B3	-	-	1			3 x 400 V
	CEG M112MB-2/FPC 5,5kW 3x230/400V 21,2/12,3A 50,60Hz 2900 /min IM B3	-	1	-			for voltage	
	CEG M112MC-2/FPC 7,5kW 3x230/400V 28,9/16,8A 50,60Hz 2900 /min IM B3	-	-	1			3 x 230 V	
М3	Motor of table lift- ing	1LA 7063-4AB12 0.18kW 3x400/230V 0,56/0,97 A 50/60Hz 1350 min ⁻¹	-(1)	-(1)	-(1)	Siemens		
M2	Motor of feeding	ELM1LA7096-4AA12 1,5 kW 3x400/ 230 V 3,45/ 5,9A 50/ 60Hz 1420 min ⁻¹	1	1	1	Siemens		
	distributor	according to ma- chine variant	1	1	1	BaK Sy- stémy		
W1-10	Control cir- cuits	H05VV-K1X1					CYSY 2A x 1mm ²	
W11-20 W31-40	Power cir- cuits	H05VV-K3G2,5 H05VV-K4G2,5 H05VV-K4G1,5 H05VV-K5G1,5 H05VV-K7G1,5					CYSY 3Bx2,5mm ² CYSY 4Bx2,5mm ² CYSY 4Bx1,5mm ² CYSY 4Bx1,5mm ² CYSY 5Bx1,5mm ²	
W21-30	Protection circuits	H05V-K1G1,5					CYA 1,5 mm ²	

Note :

The producer reserves himself the right for changing component(s) and its supplier.



EU Conformity Declaration

Producer : Rojek woodworking machinery, joint stock company ID nr. CZ25266411

Place of business: Masarykova 16, 517 50 Častolovice, the CZECH RERUBLIC

Product term: Thicknessing machine

Type designation: RFT 630, RFT 520, RFT 410

Product specification : Woodworking machine with horizontal spindle for thicknessing wood and semiproducts on wood base

We, at own exclusive responsibility, declare that the explicit product was produced in accordance with following regulations and norms:

EU Directive 2006/42/ES stating technical requirements on machinery EU Directive 2014/35/EU stating technical requirements on electrical appliances of low voltage EU Directive 2014/30/EU stating technical requirements on electromagnetic kompatibility

Applied norms:

EN ISO 12100 : 2010, EN 860 + A2 : 2012, EN ISO 13857 : 2008, EN 349 : 1993 + A1: 2008, EN ISO 13850 : 2015, ISO 447 : 1984, EN 614-1 : 2006 + A1 : 2009, ISO 14120 : 2015, EN ISO 13849-1: 2015, EN 80416-2 : 2001, EN ISO 14119 : 2013, epv HD 60364-1 : 2008, epv HD384.4.482 S1, epv HD 60364-5-51 : 2009, EN 55011:2009, EN 60204-1 : 2006, EN 60073: 2002, EN 80416-1 : 2009, EN 1037: 1995 + A1 : 2008.

The conformity was reviewed in cooperation with the Czech state test facility: Státní zkušební ústav SZÚ Brno, NB 1015.

EU Certificate type: E-30-20166-18, E-30-20167-18, E-30-00353-18

The last 2 figures of the calendary year nr., the electric device was granted the mark CE in: 08

Častolovice

Evžen Rojek

signature

21.5.2018

executive director



RFT 530 RFT 630

thicknessing machine

list of parts updated 12 / 2012



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