Index

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Decalaration of Conformity CE

Geachte Klant - Sehr Geehrter Kunde - Dear Customer - Cher Client,
Gelieve hieronder onze CE-homologatienummer te willen vinden voor onze machines
Bitte finden Sie anbei unsere CE-Homologationsnummern für unsere Maschinen
Please find herewith our CE-homologation numbers for our machines
Nous prions de trouver ci-après nos numéros d'homologation CE pour nos machines

EG Conformiteitsverklaring - EG Konformitätserklärung
EC Declaration of Conformity - Déclaration de Conformité CE

NV WERKHUIZEN LANDUYT
Kolvestraat 44
8000 BRUGGE - BELGIE

verklaren hierbij dat de bouwwijze van de machines - erklären dass die Bauart der Maschines - herewith declare that the construction of the machines - certifions par la présente que la fabrication des machines
ROBLAND
voldoen aan de volgende richtlijnen / folgende Bestimmungen entsprichen / comply with the following relevant regulations / sont conformes aux Normes suivantes:

Machine Directive CE 98/37/EEC amended by 98/79/EEC Directive
2006/95/EC Low Tension CE Directive
EMC89/336/EEC Directive amended by Directive 93/68/EEC
In production and manufactering the machines, the following standards are observed:
EN 12100- Part 1 and Part 2 / EN 294 / EN349 /EN 418 /EN 60204 Part 1 / EN 861

Type examination was carried out by the following approved body
Die Baumusterprüfung wurde von folgender Stelle durchgeführt
Le modèle a été examniné par l'organisme suivant:
Het typeonderzoek werd door volgende instelling uitgevoerd:

Vinçotte International Holding
Bollebergen 2/B
B-9052 Zwijnaarde
België

NZ3200
Z10-171-142-A

Brugge 05/01/2010

Yves Damman

Important instructions when ordering spare parts

Always mention the following items on your order:

- Type of machine
- Serial number from manual
- Part number and quantity
- Your reference and correct phone and fax number

Attention

Working with woodworking machines can be extremely dangerous if the safety instructions are not followed.
It is recommended you systematically use the safety equipment installed on the machine.

Safety and maintenance instructions

Woodworking with machinery is a pleasant job that will give you a lot of satisfaction. Nevertheless, working with a machine requires constant attention and care. Therefore, for your own safety, pay attention to the instructions summarised in this chapter.

- The machine can only be used safely if the operator strictly follows the operating and safety instructions.
- It is absolutely essential to read this manual before using the machine so you know how the machine works and what its limitations are.
- Always make sure that all safety devices are fitted to the machine and that the machine is connected to a dust extraction system.
- Provide sufficient space around the machine and good lighting in the workshop.
- When changing the tools or when doing a maintenance job, the machine must always be disconnected from its power supply.
- Knives and tools which are not correctly sharpened or are in bad condition not only diminish the quality of the work, but also increase the risk of accidents.
- Always wear suitable clothing. Loose or torn clothes are very dangerous.
- Keep children away from the machine and the workshop.
- To avoid damaging your hearing we recommend you wear ear protection when working with the machine.

Danger list

This list was based on parts 1 and 2 of EN 292 and annexe A of part 2.

Operating instructions

The following recommendations for safe working procedures are given as an example, on top of all information characteristic of this machine.
- When working with the machine, safety equipment must be used.
- Nevertheless, the user must also follow the operating instructions to avoid accidents.

1 Training of machine users

It is absolutely essential that the panelsaw user receives thourough training regarding operating and adjusting the machine.
In particular:
a) the risks involved in working with the machine;
b) the operating principles, the correct usage and adjustment of the machine;
c) the correct choice of the tools for each operation;
d) the safe handling of parts to be processed;
e) the position of the hands in relation to the sawblade;
f) storing the workpieces safely before and after sawing them.

2 Stability

In order to be able to use the machine safely, it is essential to place it stably on the ground or other stable surface.

3 Adjustment and installation

a) Disconnect the machine from the power supply before every adjustment.
b) The recommendations of the manufacturer must be followed when adjusting and installing the tools.
c) The tools must be suited to the material being cut to assure safe and efficient sawing. The tools must be correctly sharpened and installed.

4 Handling of tools

In order to avoid severe cuts, safety measures must be taken when handling the sawblades.

Normal and prohibited use

The panelsaw is designed for the following work and is equipped with protective devices for these processes only. It is not designed to work materials such as ferrous or non-ferrous metals, work different from that stated below is prohibited.

- Ripping with the parallel saw fence with/without the sawblade tilted and the fence upright or in the low position.
- Right-angled or mitre cuts with the 90° fence mounted to the sliding table with tilted or vertical sawblade.
- Cross-cutting workpieces using the adjustable stop on the 90° fence.
- Cutting panels or solid wood on the sliding table.

PROHIBITED USE

Following tasks are prohibited on the panelsaw :
- submerged cuts by removing the riving knife and/or guard;
- all types of cuts without using the table saw fence, the 90° fence or sliding table;
- Cutting large workpieces that exceed the machine capacity without using aids such as roller supports.

REMAINING RISKS

Main risks on the panelsaw are :
- unintentional contact of the hand with the running sawblade;
- workpiece kickback
- tipping of the workpiece due to insufficient support.

NOISE REDUCTION

Main risks on the panelsaw are :
- The type and condition of the sawblade is important in keeping the noise level as low as possible.
- The material and the position of the safety devices are important in reducing the noise level.
- Using the correct speed of the sawblade for the type of material will reduce the noise level as well.
- The above does not negate the fact that extra safety equipment such as ear protection must be used.

Explanation of accoustic levels

The values given are the emission levels; these are not necessarily the levels at which the operator can work safely.
Although there is a link between the emission values and the exposition level, it cannot be used in a reliable way to determine if supplementary measures should be taken.

NOISE INFORMATION

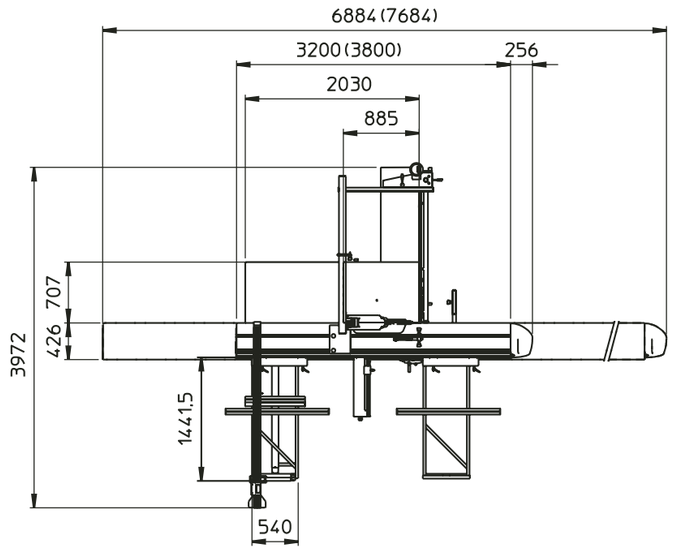
- measurements : as per ISO norm 7960
- as per annexe D

Workpost under load	Level continuous accoustic pressure as per index A dB (A)	Level accoustic power dB (A) (MW)	Max. value accoust. pressure as per index C (instantaneous) dB
Saw	91	105 (26,3)	< 130

The dust emission examination was carried out by the following approved body :
Prüfinstitut für Holzstaubmessungen
Institut für Werkzeugmaschinen
Universität Stuttgart - Germany

Measurements as per DIN 33 893 (GS-HO-05)
Measurement values show that the TRK-value of 2 mg/m3 has not been exceeded.
Notification number and date : 08.03.1996/FPH-AZ : 029/95

General dimensions



Technical Data

Voltage	V	230 - 400 - 230 mono
Motors three phase	KW	5,5; (Option 7,5)
	pk	7,5; (Option 10)
Saw diameter min.-max.	mm	300-400
Max. depth of cut (dia. 400 min)	mm	125
Max depth of cut at 45°	mm	100
Tilting of main saw		90° - 45°
Max. cut capacity on right side	mm	1525
Saw stroke	mm	3200, Option 3800
Saw arbor diameter	mm	30
RPM main sawblade		3000-4000-5000
Motor power scorer	KW	0,94
RPM sawblade scorer		8200
Scorer diameter	mm	120
Max depth of cut incisor	mm	3,5
Tilting of scorer		90° - 45°
Sliding table dimensions	mm	3200-2500-1700x400
Saw table dimensions	mm	885x700 + 650x700
Diameter outlet	mm	120 - 80
Net weight	Kg	1050 (NZ3800: 1100 kg)

Transportation of the machine (Fig.1-2)

You will receive the machine in a crate made of heavy duty particle board panels, which can be easily recycled.
After removing the sides and top panels of the crate, steel bars or rods can be placed in the 3 holes in the machine frame (1).
By using hoist equipment the machine can now be lifted with a small crane of forklift truck, but severe jolts must be avoided.
When the machine is placed on the ground, it is still possible to move it by removing the front cover plate and placing a hand pallet truck in the two openings in the front of the frame (2).
The machine must be leveled in both directions to assure good sliding motion of the sliding table.
Two leveling bolts must be put in before the machine is placed on the floor : one bolt under the pivot of the telescopic arm and the second under the electrical switch panel.
These bolts have to be set with the bolt head upside down. The two big leveling bolts (2) can be reached by opening the machine access door. If possible, the machine must be placed on rubber plates which act as shock absorbers and reduce the noise level.

Fig.1

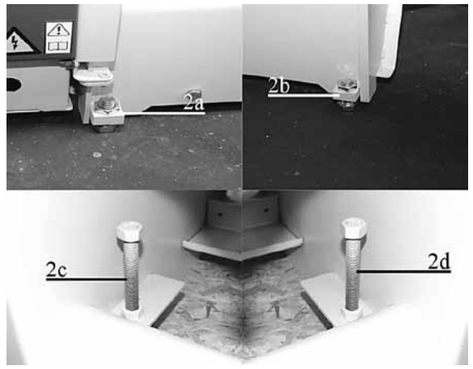


Fig.2

Electrical connection (Fig.3)

The electrical connection must be carried out by a qualified electrician who is able to calculate exactly the required wire cross-section and capacity of the workshop fuses.
Check that the main voltage of the machine corresponds with the voltage supply to your workshop.
Now open the electrical switch panel and introduce the cable. Connect the 3 phases to the terminals on the connection block marked L1, L2, L3. If there is a neutral conductor (blue) it must be connected to the terminal N.
Connect the earth wire (green-yellow) to the terminal marked with the earth symbol PE.

ATTENTION :

- Check first if the saw spindle runs freely and if all safety devices are fitted before starting the machine.
- If the direction of rotation of the sawblade is not correct, the wires L1 and L2 must be exchanged (clockwise direction of the spindle is correct).
- For safety reasons this must only be done without the sawblade on the spindle !

THERMAL OVERLOADS

The machine has overload protections on both saw and scoring motors. Should the motor be shut-off by one of these protectors, it is necessary to wait a few minutes untill the overload has cooled down.

Mounting on the sliding table (Fig.4)

To obtain a good arrangement and function of the sliding table; it is vital that the machine is put on a right level in both directions, with the help of a level, before putting the sliding table on the machine.
All the adjustments and arrangements are done in the factory. Simply put the table onto the frame with the two lateral adjustment bolts (1) into the two lugs of the frame. Be sure that the girder rests well in the height adjustment bolts. Now place the 4 big Allen bolts (3) and tighten well. In order to obtain a good movement of the wood or the sliding table, the sliding table is set near to 2 mm above the sawing table. The parallelism between the principal blade and the sliding table, can be corrected by using 2 bolts. After the adjustment, the 4 bolts need to be tightened well with a Torque wrench with a value of 7 kg. The adjustment in height of the sliding table can be done by using 8 bolts (2) but always with the big bolts closed.

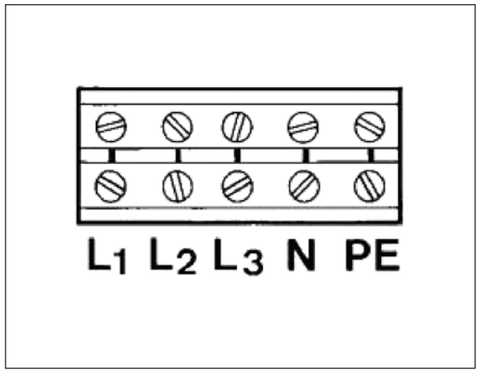


Fig.3

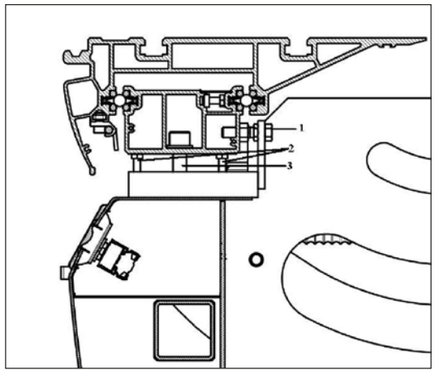


Fig.4

Starting up the machine (Fig.5-6)

Turn the main switch (6.1) to “1” and ensure that the star-delta switch (4) is put in position “star”.

- To start the main saw motor push the start button (3).
- After about 8 seconds put the star-delta switch (4) in position “delta”. This time delay is needed to let the motor gain its full speed before switching over to “delta”. When you forget to switch over from “star” to “delta”, the motor will reach its full speed but will have no power and will be damaged.
- The scorer motor is started by pushing the start button (6); this is only possible with the main saw motor running.
- By pushing the stop button (5) the scorer motor is stopped, when the emergency stop button (1) is pushed both motors are stopped.
- The main saw motor is equipped with an automatic brake which slows down the motor within 10 seconds as soon as the machine is shut off.

WARNING:

When the machine access door is open, it is impossible to start up the machine.
The RPM indicator lights at the front of the main switch panel show the speed of the saw spindle as soon as the machine is switched on with the main switch (1).
All fuses can be found inside the electrical switch panel and each time this panel is opened the machine has to be disconnected from its power supply.

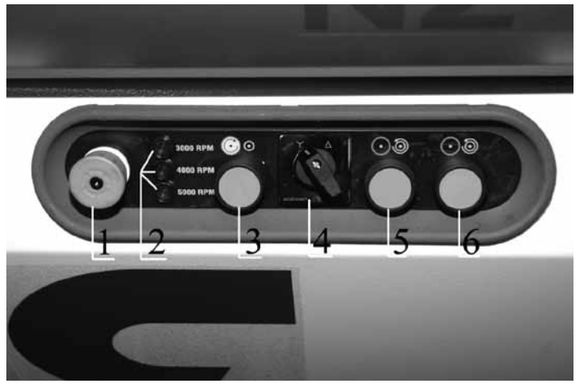


Fig.5

Fig.6

Changing main sawblade and scorer sawblade (Fig.8-9)

Warning: Before changing sawblades always turn off the main switch.
Handle sawblades with care, to avoid serious cuts and injuries.

Push the sliding table to the rear and open the saw cover. Raise the main sawblade to its highest position and put the key(2) into the saw arbor nut.
Put the locking pin in the opening of the sawtable and turn the arbor with the key (3) until the locking pin (2) engages in the hole in the saw arbor pulley.
Now unlock the nut (1). Before fitting the new sawblade ensure the blade and flanges are clean. This prevents wobbling of the sawblade.
Never forget, after the saw arbor nut has been tightened, to remove the locking pin from the pulley before starting up the motor.

ATTENTION:

Only sawblade diameters from 250 to 400 mm are allowed on the machine.
The use of HSS sawblades is strictly forbidden on all panelsaws; only use carbide-tipped sawblades.

The scorer sawblade is changed as follows: turn the scorer blade to the left and put the key (1) onto the flatened arbor. Loosen the bolt with the Allen key (2) and put the scorer blade on. After changing the blade tighten the bolt.

WARNING:

All main sawblades which are used on the panelsaw must have two additional holes in the sawblade body, to prevent the sawblade from loosening when the rotation of the saw arbor is stopped by the brake on the motor.
The two little bolts in the fixed saw arbor flange prevent the saw from coming off and may under no circumstance be removed.
The dimensions of these holes can be seen in fig. 11.

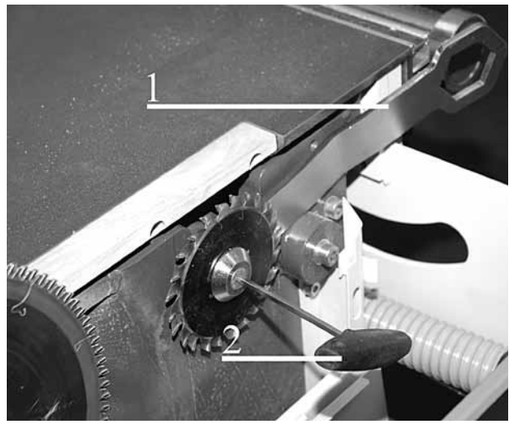


Fig.8

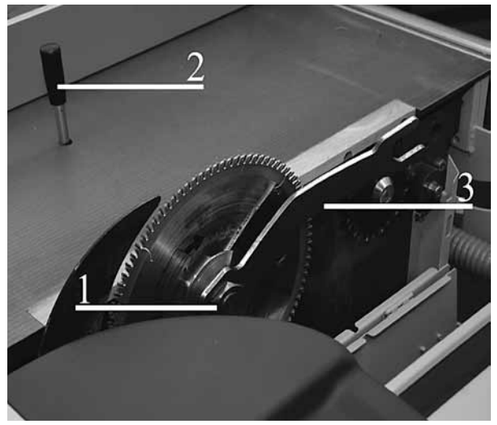


Fig.9

Use and adjustment of the riving knife (Fig.10)

The machine is equipped with two riving knives for the use of sawblades from 250 to 300 mm and 350 to 400 mm.
The riving knife has to be adjusted in such a way that over its entire length the gap between sawblade and riving knife does not exceed min.3 mm and max.8 mm.
The riving knife can be adjusted in both vertical and horizontal direction.
The height setting has to be adjusted in such a way that the highest point of the riving knife never exceeds more than 3 mm above the highest placed sawblade tooth.
After height adjustment always lock the central bolt (3) at a torque of 60 Nm. The 3 little adjustment screws (2) are used for the exact setting of the riving knife in line with the sawblade.
For slotting or grooving the riving knife has to be adjusted in such a way that the upper part of the riving knife is never set lower than the highest sawtooth in use.

Never remove this riving knife. Kickbacks are severe and very dangerous.

PROTECTION DURING THE CHANGING OF THE SAWBLADE

The access shutters of the blades are provided with a security system for the protection of the operator changing the blades. The system has got a stop-switch that prevents unauthorised starting of the engine with an opened shutter. For closure of the tray and to restart the machine, assure the lock on the side is closed.

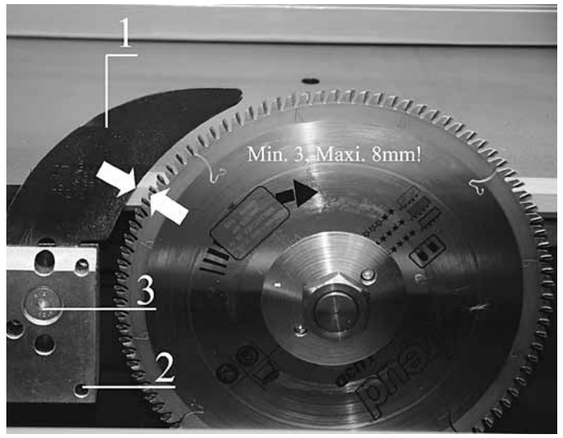


Fig.10

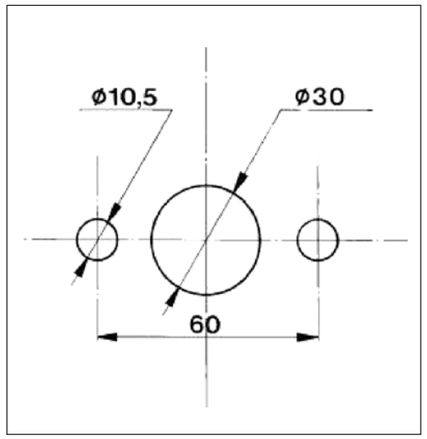


Fig.11

Lower sawblade cover

The lower sawblade cover has an extra safety device which will protect the user during sawblade changing.
To open the lower cover, the upper part of the sliding table has to be slid to the back.
Now the two locks can be opened at both sides of the cover and the safety lever can be pulled up.
Only now can the sawblade cover be opened.

Adjusting the main sawblade and scorer sawblade

Adjusting height (Fig.7)
- Changing the height of the main sawblade can be done with the help of push buttons.(4 and 5) To recover the backlash of the transmission; always adjust the height of the blade in <<up>> mode.
- Changing the height of the scorer sawblade (fig. 12) can be done with the handle (4) and the lock nut (3). Release the lock nut and turn the handle (4) to the right to go up and to the left to go down. After completing the height adjustment, close the lock nut (3). Turning the handle once corresponds to a height adjustment of the scorer blade of 3 mm.

Adjusting the inclination of the saw unit (Fig.7)
The inclination of the main sawblade can be done with help of push buttons.(fig. 7 - 7 and 8)
The inclination of the saw unit is visualized on the indicator or on the digital screen (fig.7 - 6) for the machines equipped with this part. The scorer blades automatically incline according to the main blade.
The saw unit can be inclined in angles of 45 and 90° and at those two points, there are mechanical stops provided by the factory.
A lock handle allows to incline the blade in case the buttons do not react. This handle is located at the back of the machine.

Fig.7

Alignment of scorer blade according to the main sawblade (Fig. 12, 15, 16)
To achieve a nice cut, without chipping in the interior part, it is necessary that the scorer blade is perfectly aligned to the main sawblade. For adjustment in the cross-direction , turn the handle (5) in the direction of the switch for left and the other way for adjustments to the right. After achieving this, close the locking handle (6). The scorer blade is a blade in two parts, in addition with supplementary discs, allows a variety of thickness, in order to adjust depending each working case.
Adapting in preference a scorer blade thickness to 0,05 mm more than the main blade. After achieving this, test the adjustments; till obtaining a perfect result. (fig. 15 en 16).

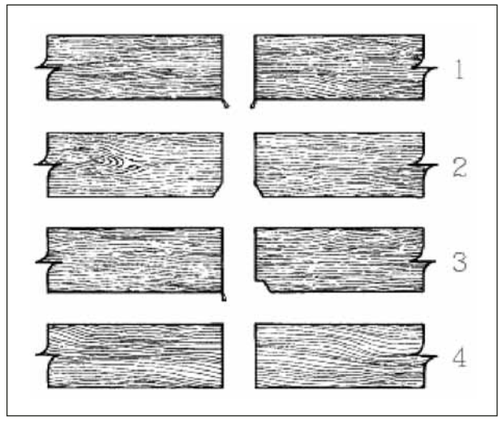


Fig.15

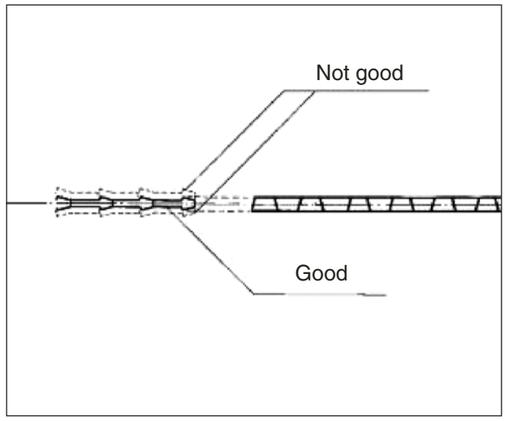


Fig.16

1. The scorer sawblade is below level and does not work properly. There will be chipping on the interior side.
2. The scorer sawblade is to far up, there will not be chipping but 2 excessive grooves.
3. The scorer sawblade is not aligned properly to the main sawblade. There will be a border on one side and a waste on the other.
4. Correct setting of the scorer saw

It would be good to fit the height of the blade only at a height necessary for an incision that would cross exactly the laminated layer or overlay.
In case of extended softwood processing without use of the scorer sawblade, it is recommended to remove the blade to avoid damage and dust projected by the main sawblade.

Blocking the sliding table (Fig.14)

- The sliding table can be blocked in two positions and with one block-system. This is vital for example by loading of the boards or cutting along the parallel guide. The system is located on the front-side of the sliding table. Pull the button (1) in your direction and turn to the right to liberate the table. Pull the sliding table till end, the table will be blocked automatically when arriving in the exact position. Continue this way to start working.

- When several movements are repeated consecutively, it is possible that the bearing cage between the two profiles moves a little bit. We can note this as well by a reducing travelling distance of the sliding table. To proceed and achieve the normal travelling distance of the sliding table, you can adapt the position of the bearing cage: simply push the table with a few short, light pushes against the buffer stop at the end of the sliding table until the position of the ball carrier is adjusted and the table can be moved again along its full stroke.

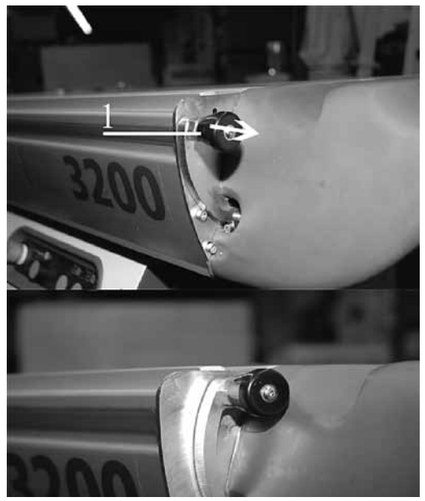


Fig.14

Attention: cleaning and maintenance of the sliding table

It is vital to regularly blow away the saw- and other dust, collected between the sliding table and the bearing cage. Push the sliding table to the end, to get a better reach towards the rails, the bearing cage and gliding tracks. Oil serves to lubricate the sliding rails and is an extra guarantee of good use and function.

Mounting of the cross-cut table (Fig.17)

The cross-cut table can be installed onto the sliding table, putting it in the notch at the back of the sliding table. The fixation of the cross-cut table can be done with the handles (2) and the telescopic arm. The machine serves only to put the cross-cut table at the back of the sliding table. To place this cross-cut table at the front of this sliding table, with a maximum at the centre, a longer tube for the telescopic arm is needed. (option: tube of 2.5 m: Z482)

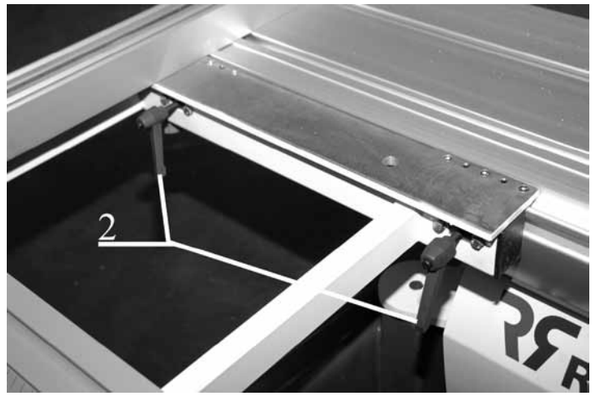


Fig.17

Mounting of the cross-cut fence (Fig.18)

The cross-cut fence has got a cone and the cross-cut table has got an attachment hole. To position the supported guide onto the cross-cut table, place the fence with the pin into the attachment hole on the front of the table.
Place the serrated knob (1) in order to attach it to the table.
Turn the adjustment bolts to the left or right in order to move the guide backwards or forwards to obtain a good alignment to the main blade.
After these adjustments, tighten well the both bolts. The cross-cut fence can be used in different positions at the front, back or inclined.

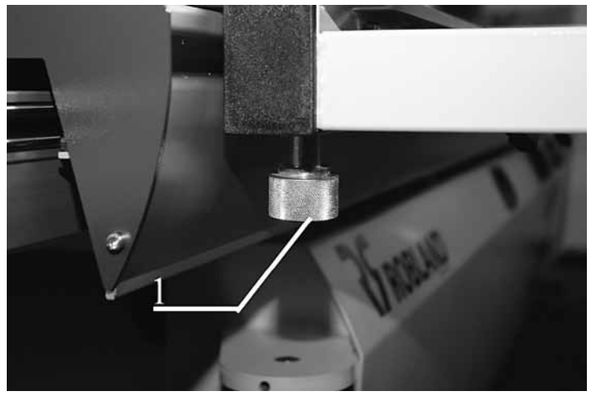


Fig.18

Adjusting the cross-cut fence (Fig.19-20-21)

Each and every time changing a blade with different specifications it is vital to calibrate the scale of the length supported guide according the following application. Block the knob (1) with the 300 mm piece and adapt the graduated scale till obtaining 300 mm in the lens.(fig. 19,2) Continue the same way with the digital stop option, pressing << SET >> and the stop will be automatically adjusted. Test the setting, making a little cut just to verify. For the work with the telescopic extension of the guide (permitting to cut at approximately 3000 mm), place the knob (fig. 20-21,3) on the exact measurement of 2050 mm, so that the scales corresponds on the two different parts. The reading can be done on the index (fig. 20,4), on the fixed part of the length supported guide. To verify if the effective measurements correspond to the regular dimensions mentioned in the index; continue with a test, placing the two knobs at a certain dimension and check if the maintained measurements correspond with the ones of the index.
When, after some time, the wooden splitter protection cap at the front on the cross-cut fence is cut away, a new one has to be made according diagram fig. 22

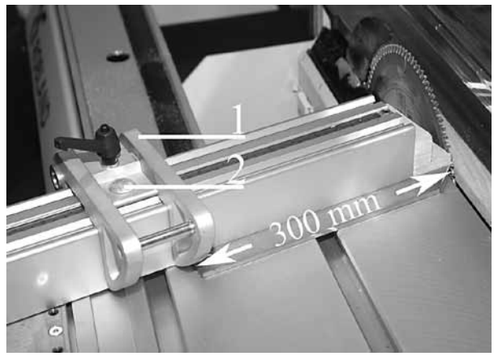


Fig.19

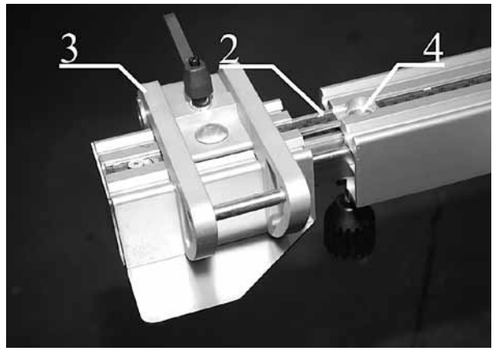


Fig.20

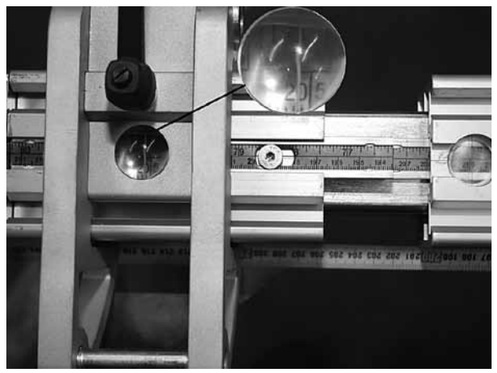


Fig.21

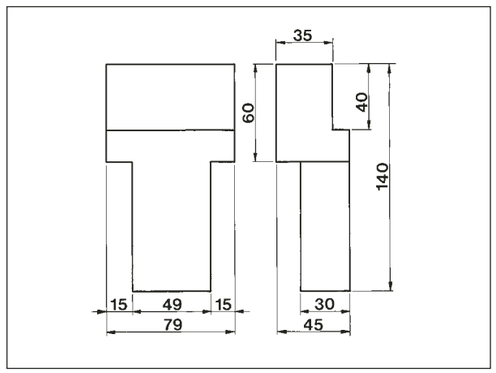


Fig.22

Mitre fence (Fig.23)

The flat T-nut which holds the vertical rod of the wood clamp is factory set and has to stay in its position to make the angle scale correspond.
To set the required angle : unlock the rod (1) and the auto-release handle (2). To slide the fence (5) towards the sawblade, unlock the two handles (3). Reading the angle set is done at the back of the aluminum bracket (4).

Use of the parallel fence (Fig.24)

When the serrated knob (3) is unlocked and the handle (1) is lifted up, the complete parallel fence can be moved.
To lock the fence in position push the handle (1) down.
The micrometric adjustment is achieved by locking the knob (3), by holding the handle (1) in the upright position and by turning the serrated knob (2).
After the adjustment, push handle (1) down to lock the fence in place. When cutting small workpieces with the sawunit inclined at 45°, the fence should be used in the low position.
Simply unlock the eccentric clamping handle (4), slide off the fence and slide it back on in the low position.
Lock the fence with the eccentric clamping handle (4).
When cutting solid wood using the parallel fence, to avoid the wood getting stuck between the fence and the riving knife (resulting in a hightly dangerous kickback) it is recommended to reposition the fence so that its end protrudes just past the end of the riving knife.

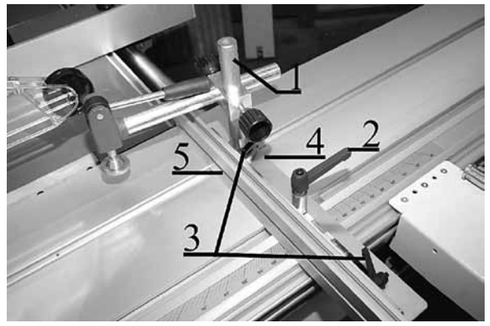


Fig.23

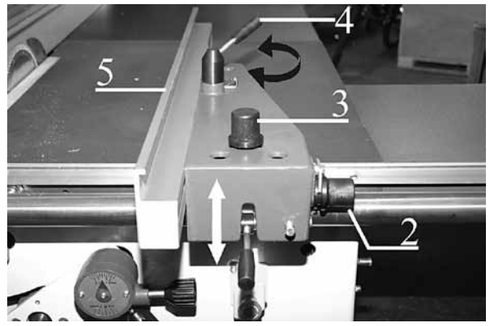


Fig.24

Calibration of the scale on the parallel fence (Fig.25)

Each time a new sawblade is fitted the parallel fence scale has to be calibrated to the new sawblade.
By cutting a sample and measuring its exact length, the scale can be adjusted so that the exact measure corresponds with the front side of the fence.
After the screw (1) has been loosened the scale can be adjusted. To avoid the fence contacting the sawblade while it is revolving, the stop ring (2) has to be adjusted.
Slide the fence to about 10 mm from the sawblade.
Now slide the stopring (2) across the round guide bar (3) until it comes up against the casting of the fence. Tighten the lock screw on the stop ring.

Mounting of the roller support (Fig.31)

Put the hinge plate (1) of the roller support onto the frame using the bolts (2). The roller has to be adjusted to the height of the saw table using the lower stopring.
The whole support can be lowered and can be swung aside after opening the knob (4). If the roller support has to be taken off, simply lift it off its hinges.

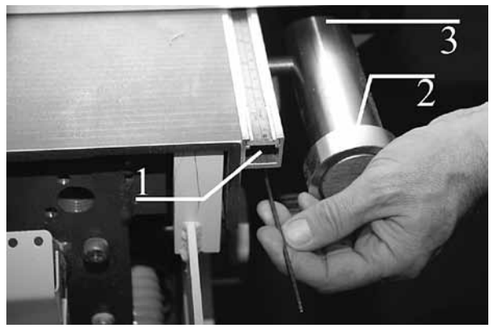


Fig.25

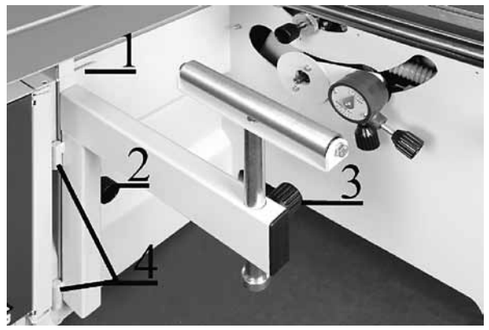


Fig.31

Using the sawguard (Fig.26-27)

According norms and applicable prescriptions, the sawguard always should be positioned, just allowing the passing of the wood or work pieces.
The adjustment of height can be done with the handle (1 and 2), using the previously adapted graduated scale (3). The guard can not go under the definite measurement. Allowing to block the protection to avoid it goes up on its own. The handle (2) as well serves as a height stop to avoid that the protection goes up to high according to the handled work piece.
The guard has got a shifting skirt, remove the screw (1) then the little skirt and place the larger one, closing again with the screw.

Attention: it is evident that for special tasks, it is necessary to make or build specific protection.

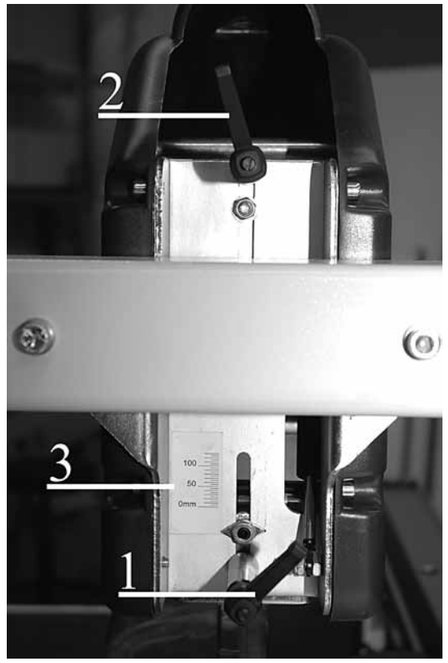


Fig.26

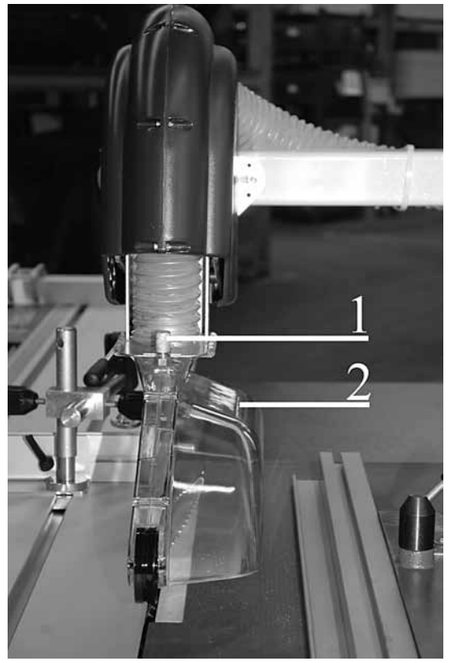


Fig.27

RPM indicator lights (Fig.29)

After the machine has been switched on by the main switch, the indicator lights at the front electrical panel show the speed of the saw arbor. When changing speed always take care that the indicator detector (1) is placed in the correct position, to avoid the belt rubbing against the detector, leading to a premature wear of the belt.
This can be felt and seen.
The machine has 3 RPMs : 3000 - 4000 - 5000.

Belt tension and speed changing (Fig.28)

1 Main sawbelt:

Always choose the speed according to the sawblade diameter and never exceed the maximum allowed cutting speed for carbide tipped sawblades of 100 m/sec.
This is a very important safety rule.
To loosen the belt, pull and turn handle (1) to the left. When the belt has been changed or put in another groove of the pulleys and the indicator detector (2) has been checked for its correct position, the belt has to be tensioned. Pull and turn the handle (1) to the right and engage it into the serrated span sector. (3)
Make sure the belt is not overtensioned, because this leads to damage of the saw arbor and belt.
Check regularly the condition of the belt and, if necessary, replace it (partnr. N8207 : XPA 800 Quadpower).

2 Scoring sawbelt:

To tension the scoring sawbelt loosen the two nuts (1-2) which hold the motor, push the motor down, tighten the two nuts while holding the motor down.
To change the belt remove the motor completely. When the belt is replaced, but before tensioning it, ensure that it is correctly seated into the grooves of both pulleys.

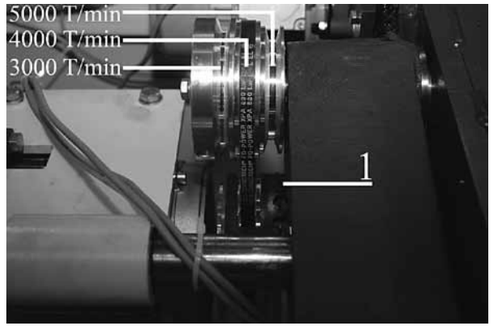


Fig.28

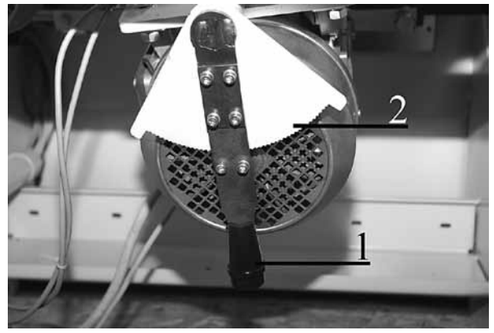


Fig.29

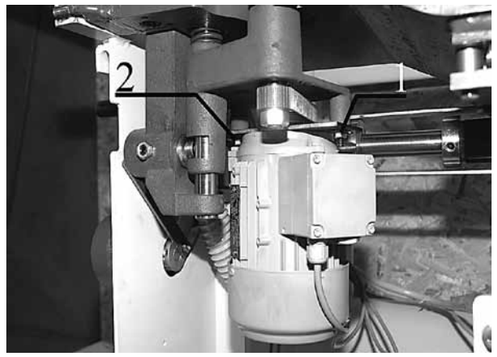


Fig.30

Maintenance of the machine

The interior and exterior of the machine have to be cleaned regularly to avoid an accumulation of dust and woodchips.
Any deposition of resin on the sliding table and other surfaces has to be removed.
Never smoke while cleaning the machine, and especially when using petrol, kerosene or other inflammable products. This could lead to an explosion and serious burns for the operator.
All moving parts have to be kept clean and have to be lubricated with a little very thin oil, diesel or penetrating oil.
All bearings in the machine are double sealed and need no lubrication. The use of a dust extraction system will most certainly extend the life of your machine.
The lifetime of the motors can be extended by blowing out sawdust from the cooling fan and motor itself.
In particular the sliding table needs care and attention : see chapter “operating the sliding table”.

Problems: causes and solutions

1 The machine does not start when the start button is activated :

- access door is still open : close the door correctly
- main fuse is switched off : power cut, power shortage or motor overload
- star-delta switch in wrong position : put switch on “star”
- main switch off : put switch on “1”

2 Reduction of speed when working :

- belt tension not correct : tension the belt
- motor overload due to incorrect feed rate : reduce the feed rate
- blunt tools : sharpen tools

3 Vibration of the sawblade or arbor :

- unbalanced tool : replace or have the tool balanced
- worn or damaged belt : replace the belt

4 Thermal overload does not re-arm automatically after shut-off and cooling down period :

- overload is not set on automatic reset or the overload is faulty

If you cannot solve the problem yourself or you do not find your problem in this list, please contact your Robland dealer.

Electrical components spares list

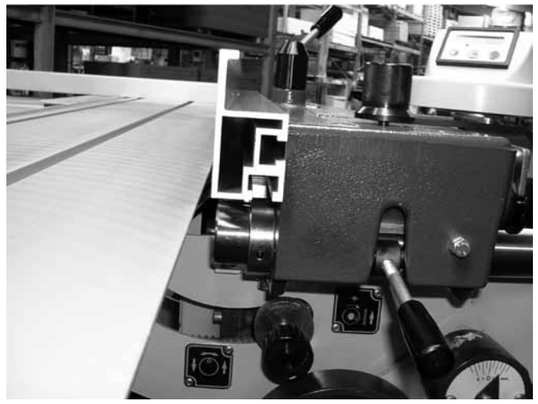
Symbole	Description			Ref. Robland	
Q1	Main switch			N 8443	
F1-2-3	Fuse 10x38 mm	4-5,5KW 380V = 16A		N 8537	
		4KW 220 3ph = 16A		N 8537	
		7,5KW 380V = 25A		N 8542	
		5,5KW 220 3ph = 25A		N 8542	
		7,5KW 220 3ph = 40A		-	
F4	Fuse primary	10x38 mm 1A		N 8454	
F5	Fuse secundary	10x38 mm 2A		N 8553	
F	Fuse holder Legrand			N 8534	
T1	Transformator	220-380-24V 30VA	manual start	N 8470	
		63VA	auto star-delta	N 8563	
eb1	Thermal overload	7-11A 380V 4KW	manual start	N 8491	
	Sawing motor	4-6A 380V 4KW	auto star-delta	N 8474	
		9-13A 380V 5,5KW	manual start	N 8476	
		5-8A 380V 5,5KW	auto star-delta	N 8475	
		12-18A 380V 7,5KW	manual start	N 8477	
		7-11A 380V 7,5KW	auto star-delta	N 8491	
		12-18A 220V 3ph 4KW	manual start	N 8477	
		7-11A 220V 3ph 4KW	auto star-delta	N 8491	
		17-34A 220V 3ph 5,5KW	manual start	N 8487	
		9-13A 220V 3ph 5,5KW	auto star-delta	N 8476	
		24-34A 220V 3ph 7,5KW	manual start	N 8435	
		12-18A 220V 3ph 7,5KW	auto star-delta	N 8477	
eb2	Thermal overload	1,4-2A 380V 0,55KW		N 8469	
	Scoring motor	2,8-4,4A 220V 3ph 0,55KW		N 8489	
SE1	Micro Switch			N 8506	
AU1	Emergency stop			N 8502	
AU2	Emergency stop			N 8502	
S1	<<START>> Button			N 8500	

				CE 24V	Normal
K1	Magnetic relay	4KW 380V SK11	manual start	N 8457	N 8467
	Main sawmotor	4KW 380V SK-R11CX	auto star-delta	N 8557	N 8555
		5,5KW 380V SK11	manual start	N 8457	N 8467
		5,5KW 380V SK-R11CX	auto star-delta	N 8557	N 8555
		7,5KW 380V SK21	manual start	N 8461	N 8580
		7,5KW 380V SK21	auto star-delta	3 x N 8461	3 x N 8580
		4KW 220V 3ph SK21	manual start	N 8461	N 8465
		4KW 220V 3ph SK21	auto star-delta	3 x N 8461	3 x N 8465
		5,5KW 220V 3ph SK21	manual start	N 8461	N 8465
		5,5KW 220V 3ph SK21	auto star-delta	3 x N 8461	3 x N 8465
		7,5KW 220V 3ph SK25	manual start	N 8566	-
		7,5KW 220V 3ph SK25	auto star-delta	3 x N 8461	-
K2	Magnetic relay	0,55KW 380V SK10		N 8459	N 8462
	scoring motor	0,55KW 220V 3ph SK10		N 8459	N 8460
S3	Switch <<Star-Delta >>			N8447	N 8447
S4	Button <<stop>>			N 8480	N 8480
S2	Start button main motor			N 8500	N 8500
SE3-4	Micro switch RPM indication			N 8506	N 8506
L1-L2-L3	RPM indication lights 24V			N 8439	N 8439
S6	Button up			N 8500	N8500
S7	Button down			N 8500	N8500
S8	Button incline 90°			N 8500	N8500
S9	Button incline 45°			N 8500	N8500
Elgo	0-45°			N Z20/NZ	
KT	Transmission star triangle			N 8572	
M1	Main sawmotor	4KW 380/660V		M 353	M 352
	with brake	5,5KW 380/660V		M 358	M 356
		7,5KW 380/660V		M 386	M 393
		4KW 220/380V		M 359	M 354
		7,5KW 220/380V		M 384	M 394
M2	Scoring motor	0,55KW 220/380V			M 1472
M3	Motor up/down	3,5 Newtons 230/400V			M 1475
M4	Motor incline	3,5 Newtons 230/400V			M 1475

Option A5216: Retro-fit digital read-out for parallel fence

Adjusting the sensor is easy and simple: flip the parallel fence block over and loosen the bolts for the different brackets.
After adjustment is done, make sure all bolts are well tightened.

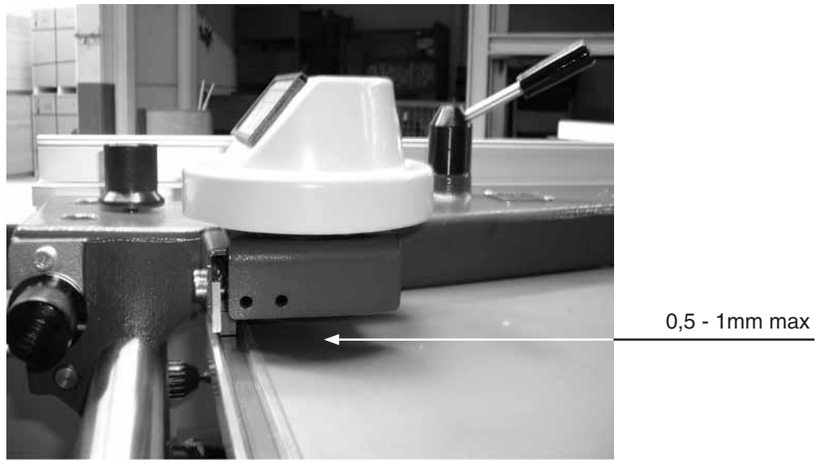
The calibration of the read-out is easy and simple: slide the alu saw fence up against the saw blade so that the teeth just touch the fence, and now push simultaneous both buttons F and SET, now the read-out is set at 0.
Now slide the fence a couple of mm's to the right, thus preventing the fence making contact with the saw blade, and slide the stop ring up against the parallel fence support and lock the bolt. It is recommended that each time a new saw blade is put onto the machine to calibrate again.



MOUNTING INSTRUCTIONS FOR PANELSAW Z SERIE

Put the digital read-out onto the parallel fence support block using the 2 holes already drilled. On older machines these 2 holes need to be drilled. Now put the alu profile holding the magnetic strip onto the saw table at 1 mm below the table's front edge.

Make sure the sensor is put in the middle of the magnetic strip and the distance between strip and sensor is set at 0,5 to 1 mm maximum.
Make sure the sensor stays at 0,5 to 1 mm over the entire length of the magnetic strip.



Option A5218: Digital Flip stop on the cross-cut fence

For all the machines of the series Z and NZ, the digital flip stop, an absolute measurement system for the cross cut fence, is optional. For more information about the settings of the 90° inclination according to the main saw blade, see "Adapting the cross cut fence"

Placing the magnetic strip

ATTENTION:

The magnetic strips of the Z-series are shorter than the magnetic strips of the NZ-series.
When placing the magnetic strip, we recommend to remove the difference, after placing the magnetic strip correctly.

The digital read-out system is placed into the guiding rail on the cross cut fence. It is very important to check, before changing the setting of the system, that the active mode of the system is Abs and not Incr. To change the mode of the system press the button Incr/Abs.

Calibrating the system: Place the 300 mm long piece Z1253 against the cross cut fence reaching exactly one saw-tooth of the main saw blade. Push the flip over stop against the former mentioned 300 mm long element Z1253. Press, at the same time, the buttons <<F>>+<<Set>>. Doing this you will see that 300.0 appears at the display. The system is calibrated. Using the button Incr/Abs you can create a new zero point.

When lifting up the flipper so it looses contact with the magnetic strip, the settings are saved, so it will be unnecessary to calibrate the system each and every time again after lifting of the flipper and loss of contact with the magnetic strip.

When not using the system, it will automatically shut down after a time period of 20 minutes. To activate the system again, just press one of the buttons.

Manual Axis-Ergo

REFERENCES AND POSITIONING

Start Screen: here you can find the software data.

Screen for Initializing : by pressing start you can continue in this programm. The guide is going to search and establish its reference. Be sure the table is free of all objects.

Main screen: while searching the reference, you can see 'searching for reference'. When this text is gone, you will be able to move the guide between 3 and 1527 mm. These measurements are as wel the limits of this software.

Numerical screen: by pressing the field under 'desired position', this screen will appear. Here you can enter the desired position till 1/10 of a mm. Confirm the desired position with enter (see arrow).

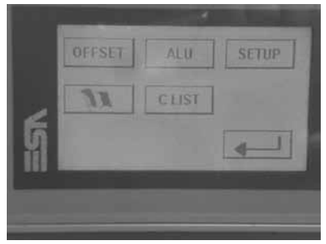
After the confirmation in the numerical screen, you should confirm once more with the START button, to be sure of the position you've entered.

When the entered value <150mm you're entering the safety zone where a warning triangle will be displayed and the movement will stop.

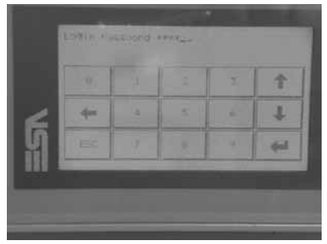
To reach the desired position in the safety zone, you'll have to press continuously the warning triangle to move the guide in the safety zone and arrive at the desired position.

There is as well a park position configured in the software, with the value of 1527. You can reach this position by pressing the ROBLAND LOGO. Same remark: when you reach the safety zone, you'll have to press the warning triangle continuously till the guide has left this zone.

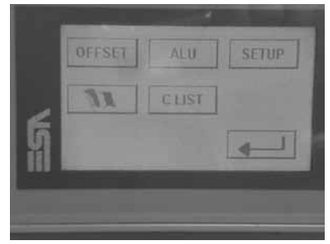
CALIBRATION OF THE GUIDE



After pressing MENU, press OFFSET.



Login password 9876. Confirm with enter.

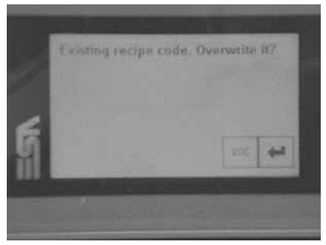


Press once more OFFSET.

In the field 0,0000 you can now enter the measurements of your saw-sample. Confirm with enter.

Afterwards press 1x CAL and wait until the actual position is the same as the desired position.

When the values are the same, press SAVE.



Would you like to overwrite the values? Confirm with enter.

Leave this screen with enter.

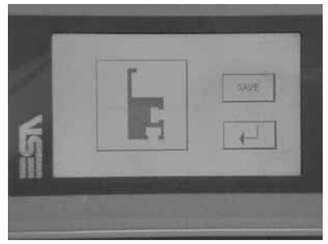
Password logout, confirm with enter.

The actual position is now correctly calibrated.

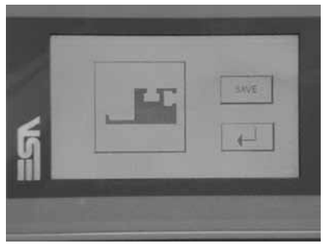
CHANGING THE DIRECTION OF THE ALUMINIUM PROFILE

Press menu to change the direction of the aluminium profile.

Press ALU.

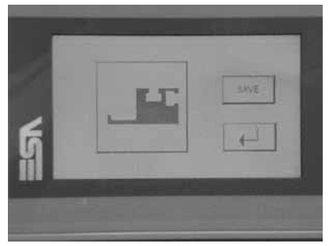


Press the symbol of the profile.



Press save to confirm.

Press enter.

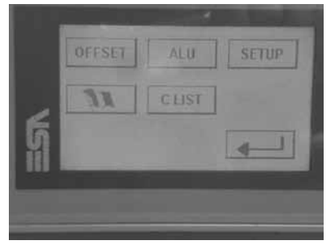


Press enter to leave this screen.

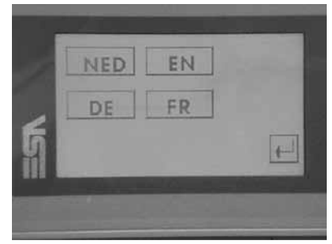
The measurement and the profiel have been adapted. To change the direction of the profile once more, follow the same procedure.

PROCEDURE TO CHANGE THE LANGUAGE

Press MENU to change the language.



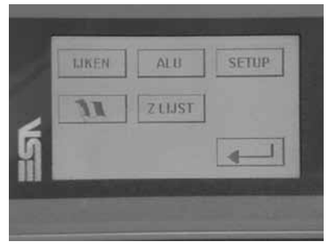
Press the flag to change the language.



Press the language you need and confirm with enter.

USING THE SAW LIST

Press MENU.



Press Z LIJST (saw list).

Press the numerical field and enter the desired measurements.

Press the number of the desired position (1). This value will appear on the screen (2). After this appearance, you can press start and the guide will move to its position.

Remark: when the measurement is less than 150mm, you are entering the safety zone. You'll have to press the warning triangle continuously till reaching the position. To leave this screen press enter.