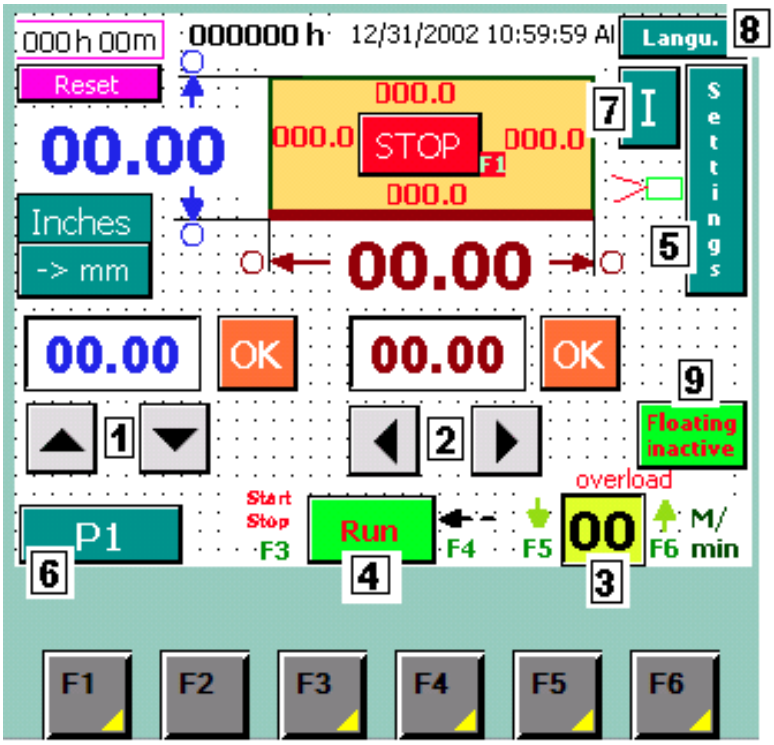
KÄLIN Hobeltechnik

TIMBERWORK PLANER

TOUCH-Panel - OPERATION

Note: This is a work in progress version of this manual. If changes are needed please make note And contact River Valley Machinery so that we can make the required changes.

Date : Friday, 05 November 2015



To start machine.
MCC door handle Switch ON
Both E-Stops out.
Both Planer door locks closed.
Key switch to on.
Door lock key switch lock position.(Left)
Press green start button.
Release start button
(You will hear the saftey relay close)

To open doors press the E-Stop button.
And turn the open door switch on.
You will receive a message
(The cutter heads are breaking wait)
After 30 seconds you will be able to
Open the doors.

Note: Red Bars above or to the left of
The yellow box indicates wood in the
machine.

1 **Preset thickness:** Press Digital display above #1 / Enter thickness wanted /Press OK
→ *"Machine will go to the thickness set in the window".*
Jogging Press the up or down arrows

2 **Preset width:** Press Digital display above #2, then same as for thickness

3 **Change the Feed Speed:** F5 Slower F6 Faster

4 **Actuation of the Feed:** → (the top cutter head must be activated, otherwise
The advance does not work!) F3 Start F4 Stop, or touch screen #4
F4 also serves as a feed Jog button. **(Top cutter interlock is temporarily inactive)**

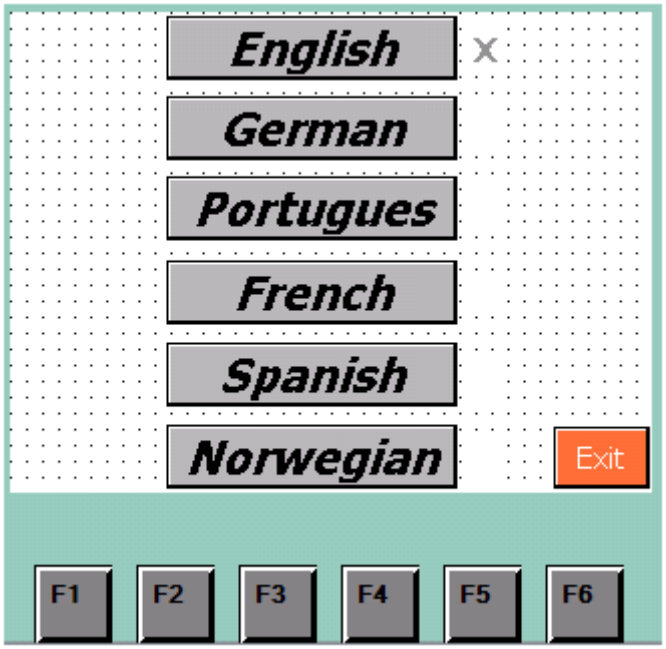
5 **Correction of Thickness or Width:** →**Page 3**.

6 **Preset for thickness and width:** (by pressing the window appears → **Page 4**

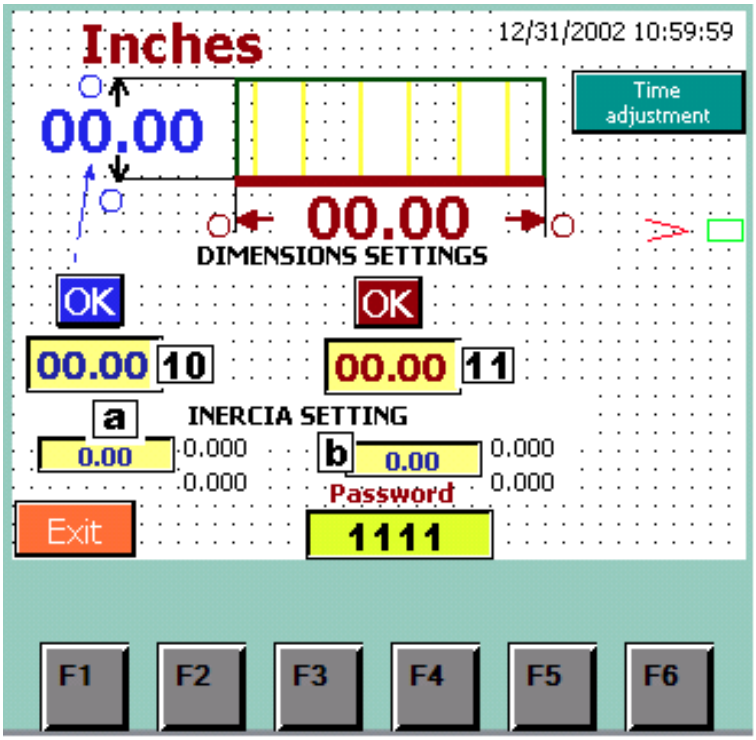
WARNING! If the Hold down or the RH.Fence or the RH. Depth of cut has been changed
Check the hold down for interference before changing the thickness. It is possible to
Crash the hold down rolls if they are over the right side head.

7 **INFO:** By pressing this button you may at any time the check the status of all sensors.
Sensor List
SO5 = Thickness setting is to thick (over travel)
SO6 = Thickness setting to thin. (over travel)
SO7 = Thickness of wood being feed is too great
SO12 = Side Head Hold down interference.
SO13 = Side Heads are to close together
SO14 = Left Side head Over Travel
SO15 = Wood still in machine Front
SO16 = Wood still in machine Back
SO17 = Wood over width LH fence.
SOPE = Planer access door Left hand side.
SOPD = Planer access door Right hand side.

8 **Choice of language**: By pressing the corresponding window you can change the language of communication.
This machine is set to English by default.



9 **Floating heads: →Page 5**



Before you can change anything you need to enter the code "1111" in the password window.

If the actual wood dimension does not correspond to the wanted dimension:

10 Adjust width: → "Password", → "1111", → button 11 (keyboard opens), mark the correct value,
→ "Enter" (the new value into the window), → "OK" (the width indication is updated),
→ "Exit" (return to page 1).

11 Adjust thickness: See Adjusting Width, the instructions are similar.

If the positioning is not accurate: = INERCIA Setting
(Call River Valley for help on this setting or see notes in Troublshooting Power up procidure)
(207)897-5211

a Correcting the stopping distance for thickness:
b Correcting the stopping distance for width:
→ score a larger value to brake earlier or smaller value to brake later
→ "Enter" (the new value into the window **a** or **b**),
→ "OK" (indication of the width, thickness and so on. actualized),
→"Exit" (return to the page 1)

INFO #7 Or #4 If RED

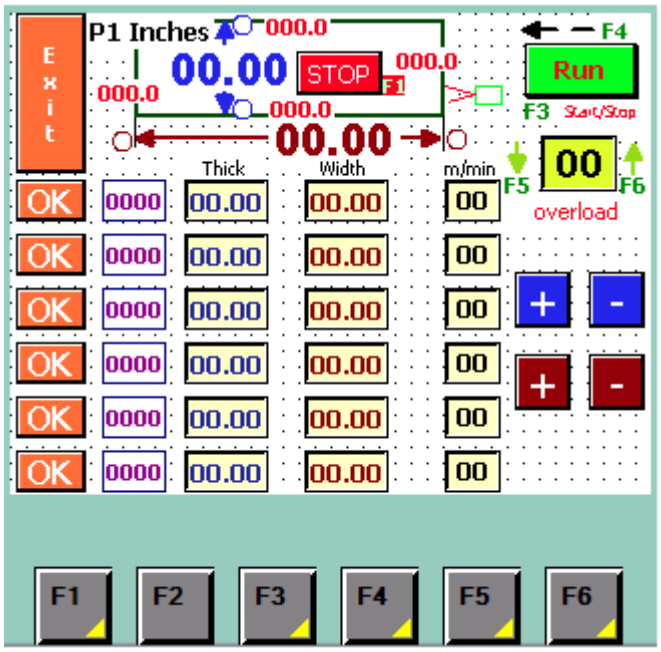
When the feed does not work, this display will show the reason.

Normally, in the working mode doors are fixed with a magnetic lock. In failure or when the machine is stopped, you can open the doors . → "unlock doors ".

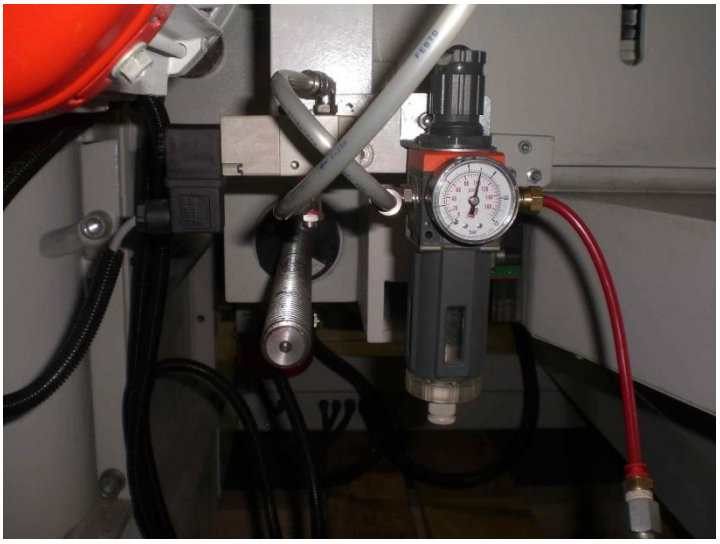
To run the doors must be locked
→ "lock doors = on".

Memory thickness and width:
By pressing the OK in the corresponding field machine goes straight to the value.

For inputing new values or to change the values: → Press The value you wish to change. A new screen will appear. After changing the value. → Press Enter
Then to actuate the motors
→ Press **OK**
If there is wood in the planer the machine will not move.



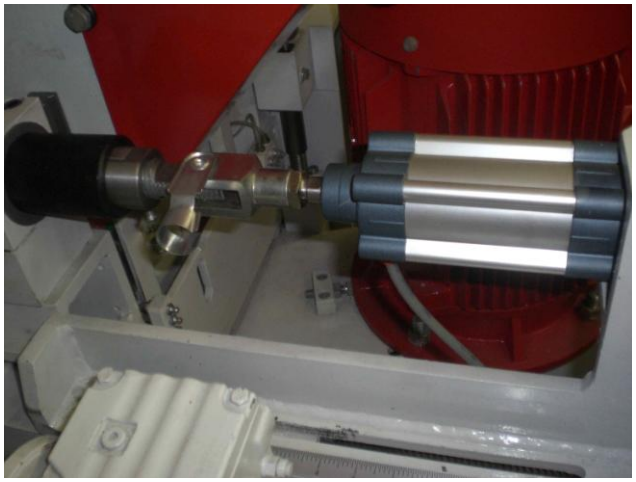
Floating Side Heads



Pressing touch screen button #9 activates the floating side heads. Inorder to activate the floating cylinder the folowing items have to be true.

1 Feed rolls have to be running
2 Wood has to be in the machine
3 Air pressure is available to the machine.

When floating is active and a timber is feed into the machine after several seconds the air valve will turn off the air to the cylender. When the timber leaves the machine the air cylender turns back on.
The Air valve (EV1) is turned off to disable floating. Their is a manual test switch located under the valve to actuate it manualy.



Air pressure should allways be available at the machine. If their is no air pressure the side heads will be floating by default.

In floating mode their is no air supplyed to this cylinder.

Troubleshooting Power up procedure:
(*Needs to be followed in this sequence*)

Action = MCC switch ON Pic.1
Result = SEW Inverter drives all 8 Display = INHIBIT Pic.2
PLC AUT1 Power light = ON (Seimens programable Logic Controler) Pic.3
Device CS Power light = ON (PLIZ Saftey Relay) Pic.4
Device FA1 Power light = ON (24 VDC Power Supply) Pic.5
Altistarts Power lights = All dark (Spindle Motor Drives & Brakes) Pic.6

Operator Interface will boot up slowly.While displaying the following messages. Pic.7
1 Message = This device contains free software
2 Message = Transfer
3 Main screen = Very similar to screen shown on page #1
These results will be the same with control panel switches all ON or OFF

Action = Open door switch = Turn to the right OPEN Pic.7
Result = Door locking solenoids will release. And you can open doors Pic.8.
These results will be the same with control panel switches all ON or OFF

Action = E-stop = out/on or ON key switch = ON
Result = Nothing will change

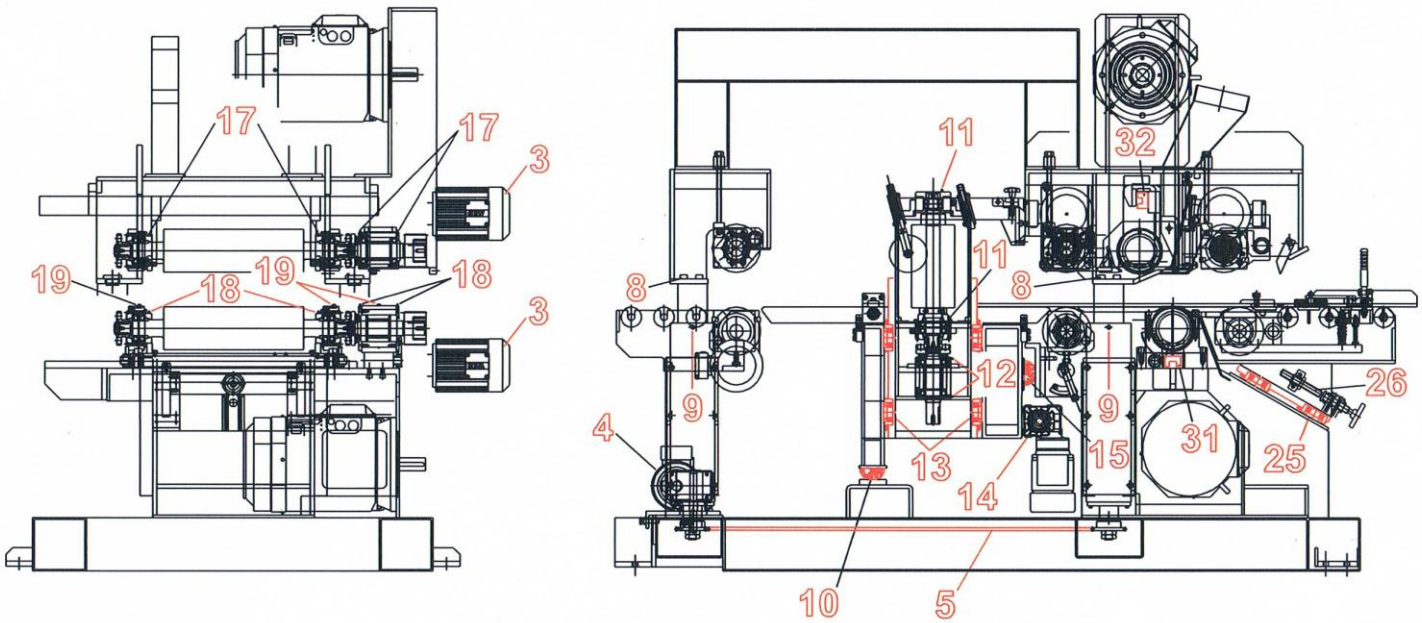
Action = Open door switch = OFF
Result = Doors will be locked Handles have to be inserted into the locks. Handles can be inserted even if the door lock switch is closed.
= Machine start push button will now work.

Action = Press machine start Push button Then Release
Result = Safety relays in machine will come on. Green light on button will light.
Rdy Will show on the Altistarts.
CH. 1 and CH 2 Lights on the PLIZ will be on.

Action = ON key switch off
Result = Main screen will display (Motors are braking wait) Will take about 30 Seconds
Information Screen will show (Thermic Motor) this is all right.
Loud clunk from the safety relays will indicate that the doors can be opened.

Jogging only works in the UP or Sides OUT direction Their is something in the machine.
Set works will not work either. See Prox Switches Pic.9

Action= Was in run mode than Key = Off
Result = PLIZ Chan 1 turns off ,Than after timer times out. Saftey Relays turn OFF.
Pic.10



GREASE — OIL

POS	DESCRIPTION	QT.	WORKING HOURS	LUBRICANT USED	QUANTITY	NIPPLE
3	SEW GEARBOX FEEDING	6	50 ANNUAL	ISO VG220CLP	LEVEL CONTROL EMPTYING	
4	GEARBOX (ELEVATION)	1	50 ANNUAL	ENERGOL GR XP 320	CHECK / REMOVE CHANGE / COVER	
5	CHAIN (ELEVATION)	1	50	ENERGREASE LS EP 00	LUBRICATE	
8	COLUMNS ACME SCREWS	4	3X ANNUALLY	ENERGREASE LS EP 00	UNSCREW SCREWS / ADD 1/8 TO 3/4 OZ.	
9	COLUMN SLIDES	4	50	DIESEL MOTOR OIL	LUBRICATE	
10	HORIZONTAL SLIDE	3	50	LGHP 2/0.4 (SKF)	2 PUMPS	
11	BEARING SIDE HEADS	4	50	LGHP 2/0.4 (SKF)	2 PUMPS	
12	BEARING SIDE HEADS	4	50	LGHP 2/0.4 (SKF)	2 PUMPS	
13	HEIGHT ADJUSTMENT SLIDE	12	50	LGHP 2/0.4 (SKF)	2 PUMPS	
14	HORIZONTAL ACME SCREW	1	50	ENERGREASE LS EP 00	LUBRICATE	
15	HORIZONTAL SLIDE	4	50	LGHP 2/0.4 (SKF)	2 PUMPS	
17	BEARING TOP CUTTERHEAD	4	50	LGHP 2/0.4 (SKF)	2 PUMPS	
18	BEARING BOTTOM CUTTERHEAD	4	50	LGHP 2/0.4 (SKF)	2 PUMPS	
19	ECCENTRIC BOTTOM CUTTERH.	3	50	VANELLUS C3	2 PUMPS	
25	ELEVATION SLIDE INFEED TABLE	4	50	LGHP 2/0.4 (SKF)	2 PUMPS	
26	ELEVATION SCREW INFEED TABLE	1	50	DIESEL MOTOR OIL	LUBRICATE	
31	SLIDE BOTTOM HEAD	2	50	LGHP 2/0.4 (SKF)	2 PUMPS	
32	SLIDE TOP HEAD	2	50	LGHP 2/0.4 (SKF)	2 PUMPS	

VG 220 OILS — FOR SEW FEED MOTOR GEARBOXS

SHELL	BP	TEXACO	CASTROL
OMALA F220	ENERSYN GR-XF 220	MEROPA 220	OPTIGEAR BM 220

SKF LGHP 2/0.4 HIGH PERFORMANCE POLYUREA.
THE SPINDLE BEARINGS COME SHIPPED WITH THIS GREASE.
IT IS BEST IF YOU ARE NOT GOING TO USE THIS GREASE TO USE GREASE THAT IS COMPATIBLE.
THICKENER/BASE OIL: POLYUREA (DI-UREA)/ MINERAL OIL

BP ENERGREASE LS EP 00	CHEVRONTEXACO MULTIFAK 6833 EP 00
LITHIUM BASE 95 WEIGHT GEAR OIL	

Lubrication Chart

<TIMBERWORK> 4-510

Ref.: RIVER VALLEY, 39.830TW

KÄLIN Kälin Hobeltechnik AG

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Bearing Grease Recommended :

The bearings rotate at about 6000 RPM and high-speed grease is required.

SKF LGHP 2/0.4 High performance polyurea
The Spindle bearings come shipped with this grease. (See picture Below)
It is best if you are not going to use this grease to use grease that is compatible.
Thickener/base oil: polyurea (di-urea)/ Mineral oil

The grease needs to be filled to the point that it is coming out of the labyrinth seals. The high-speed bearings do not use a contact seal as they would overheat. The seal is created by grease coming out thru the labyrinth. As long as there is some grease coming out contamination can not enter the bearing. Enough grease needs to be added to replenish the grease that leaves. And to renew the older grease as it breaks down and picks up contaminants. After enough grease has been added to fill the open spaces galleys and the bearing only enough grease to maintain the seal should be added. In normal service this is about 5 shots of grease per month. More frequent intervals can be used but nor more than 5 shots per session should be added. Too much grease is harmful as it causes overheating and can cause bearing skidding.

Door Lock Manual Override Keys

In order to open the door in the case of no electrical power available.
It is necessary to use the key provided. Also in order to open up the Lock a tamper proof torx bit is needed.