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# **PALLET ASSEMBLY TABLE**

adjustable for various sizes



Technical Documents Manual and WHS



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# **1.1 IDENTIFICATION** CE Brand A Model в С Serial nr. D Year www.profixrd.sk DIAGRAM THE PLACE OF THE RATING PLATE AND SERIAL NUMBER

Pallet assembly table PT-1900 was marked with a rating plate which is affixed on the right side of the table, on the side support, in its upper part, above the control panel with levers.

When the product is bought, it is necessary to check the serial number of the table with the number in guarantee card, sales note and manual. The meaning of particular numbers from the rating plate is written below:

 ${\bf A}$  - the brand of the machine

B - the model of the machine

C- eight-digit serial number

D - year of construction



## **1.2 INTENDED USE**

PT-1900 is a universal nailing machine for wooden pallets of different types. There is a rail mounting system for balancers in its upper part which is equipped with movable carts (trolleys) where nailers are suspended. PT-1900 ensures the work study and comfort. It guarantees the increase of work efficiency, space- saving (it takes only 3,3 m<sup>2</sup>) and reduces the costs of preparing templates for different types of pallets.

During traditional nailing two workers are able to produce about 250 pallets during one shift. Over the same period of time, a single operator using PT-1900 has the capability to produce about 210-230 pallets.

PT-1900:

- ensures increase of work productivity
- it acts like a template for EUR pallets and different sizes also those on 2, 3 or 4 rows of blocks
- designed to be manned by one operator
- enables quick and easy modification from one size into another
- it is equipped with function of pneumatic clamping of blocks and the pushback of the ready pallet
- it ensures the work study by the system of suspended nailers on balancers

## **1.3 ACCESSORIES AND ITEMS OF EQUIPMENT**

EQUIPMENT	PT-1900	NUMBER	
MANUAL	ST	1 pe.	
GUARANTEE CARD	ST	1 pe.	
NOTIFICATION OF FAILURE FORM / INCIDENT REPORT	ST	1 pe.	
TABLE - THE MAIN BODY	ST	1 pe.	
VERTICAL PROFILE	ST	2 pes.	
HORIZONTAL PROFILE	ST	2 pes.	
TWO-PIECE CRANE	ST	3 pes.	
MOVABLE CART (TROLLEY) WITH A SNAP HOOK	ST	3 pes.	
NAILER POWER SUPPLY TIPPED	ST	3 pes.	
WITH A FEMALE QUICK COUPLING			
TEMPLATE FOR THE BOTTOM OF THE PALLET	ST	3 pes.	
CRANK	ST	1 pe.	
FILTER-REGULATOR	ST	1 pe.	
AIR PREPARATION BLOCK I FLR AIR UNI T	ST	2 pes.	
BALANCER	OP	2 pes.	
NAILER		2 pes.	
COMB 200 mm WIDE	OP	on client's request	

4

SE - Standard Equipment AO - Accessory Options



## 1.4 TRANSPORT, ASSEMBLY, ACTUATION

PT-1900 table is ready for sale in a part-assembled condition.

Items delivered with the table include technical manual, guarantee card, standard equipment mentioned in "ITEMS OF EQUIPMENT" section and accessory options (available on customer's order).

The delivery takes place by means of the car transport according to individual agreements with the customer.

During loading and unloading operations general rules of proceedings and safety regulations for such conditions should be observed. It is required for people operating trans-shipping equipment to be entitled to man their machines.

PT-1900 must be fastened firmly on the platform with transport belts, protected against displacement.

During trans-shipment special attention should be paid not to damage or scratch the elements of table equipment or the coat paint.

Lifting the cargo must be carried out only by the qualified personnel.

## ONLY A FORKLIFT OF ADEQUATE SIZE AND WITH FORKS WHICH ARE LONG ENOUGH SHALL BE USED FOR OPERATIONS!!!

During transport PT-1900 must be fastened firmly with transport belts.

THE FORKS OF THE FORKLIFT MUST BE INSERTED AT THE TABLE BASIS, ONLY IN PLACES PRESENTED IN THE PICTURE.

#### ARRANGEMENT OF THE TABLE AT THE WORK PLACE:

- the place of the table arrangement should ensure a relevant workspace, adequate pneumatic installation (operating pressure about 8 bars, minimal effectiveness of the compressor 300 l/min., hose diameter minimum 12 mm tipped with a female Quick coupling
- all the conditions and requirements necessary for installation must be meet for the Unit delivery
- a shelter or roofing shall be provided in case of the table working outside. The machine is not designed to work in rain or temperatures below 5 Celsius degrees
- besides the workspace, at least 1 meter of free space shall be provided around the machine in all directions of movement
- make sure there is enough space for timber, scraps from pallets or ready products

In an agreement with the customer, the producer will set the table up, adjust, actuate and provide a training for operators at a fee or free of charge depending on the findings.



## 2.1 FUNDAMENTAL SAFETY PRINCIPLES

Prior to commencing work with the table, the operator must closely read the manual for Pneumatic Nailing Table PT-1900.

While the machine is in use all the instructions must be observed.

- The machine must be checked before every actuation, especially in the context of safety
- If the information included in the manual is not clear, it is necessary to contact the seller, authorized technical service or manufacturer
- Careless or improper use of the machine and failure to follow the instructions poses a danger to life and health of operators and third parties
- It is forbidden to operate the machine by unauthorized people, including children, people under the influence of alcohol or drugs
- It is forbidden to use the machine contrary to its purpose. Anyone who uses the machine contrary to its purpose, takes full responsibility of the resulting consequences
- Prior to commencing work, it is necessary to make sure if there are no individuals or obstacles in the vicinity of the table
- During operation the machine should be placed on a stable, level surface. It is unacceptable for the machine to operate on uneven surface. It may have a significant impact on the product (lack of dimension repeatability)
- Any modifications or alternations of the pneumatic table are forbidden and relieves AIRFIX company of their responsibility for any harm or health burden
- It is forbidden to provide any maintenance, regulating or service works when compressed air is connected. Before proceeding to the foregoing works, disconnect the air and empty the pneumatic installation by e.g. executing the ejecting procedure of the pallet.
- In case of any irregularities or malfunctions, the table must be disconnected until the fault is eliminated
- Follow fundamental safety principles in case of any maintenance tasks. In case of any harm, the injury should be washed and disinfected or when it is mare serious, seek medical advice
- During the guarantee period all works may only be carried out by:
- authorised guarantee service
- the user himself, but only upon prior written approval from the producer and only after obtaining relevant indications
- in case of any need to replace the elements, it is required to use only original parts. Otherwise, the machine may pose danger to lives and safety



#### 2.2 INFORMATION AND WARNING STICKERS

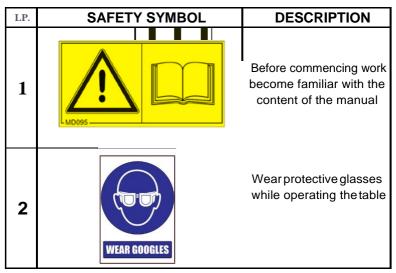
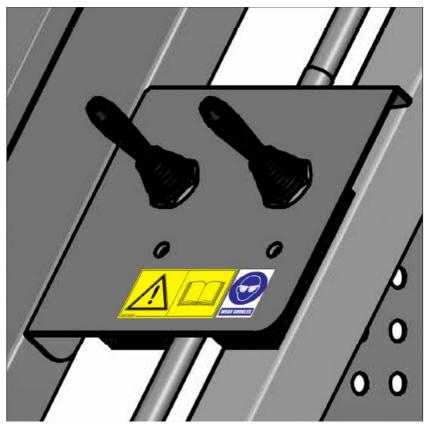


TABLE 2.2. INFORMATION AND WARNING STICKERS



**DIAGRAM 2.2A** 

Table PT-1900 is marked with information and warning stickers shown in table 2.2. The place of the symbols is shown in the picture 2.2A.

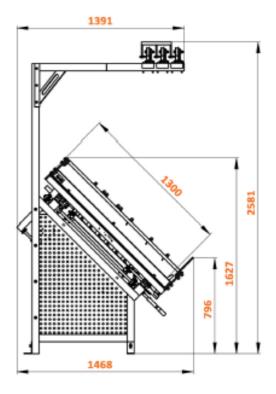
The user of the machine is obliged to care for the symbols readability, as well as other signs affixed on the machine. In case of their worn-out it is necessary to replace them with new ones. They are available at the manufacturer's post or the place where the machine was purchased.

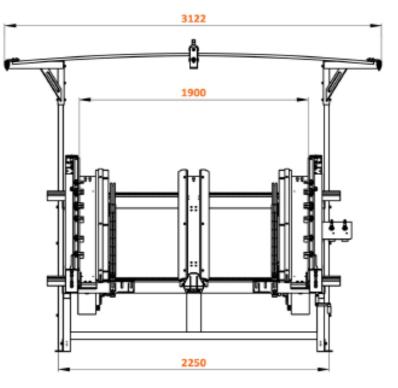


## 3.1 TECHNICAL SPECIFICATION

#### **TECHNICAL SPECIFICATION OF THE PALLET ASSEMBLY TABLE PT-1900**

Dimensions	Unit of measurement	PT-1900
Overall width	mm	3122
Overall depth	mm	1468
Overall height	mm	2581
The width of the table for transport	mm	2250
The depth of the table for transport	mm	1468
Permissible dimensions of the pallet Unit of measurement		PT-1900
Maximal width of the pallet	mm	1900
Maximal height of the pallet	mm	1300
Minimal width of the pallet {for a pallet with two rows of blocks)	mm	600
Minimal height of the pallet	mm	600
Maximal dimensions of the block	mm	145x145
Other information	Unit of measurement	PT-1900
Demand for compressed air	l/min.	300





The size of Pneumatico PT-1900 in mm



## 3.2 CONSTRUCTION AND PEFORMANCE OF THE TABLE

PT-1900 is a machine designed for pallet producers who appreciate high quality, speed, diversity of pallet types, easiness to modify to a different size and possibility to be manned by one operator.

Thanks to many pneumatic elements, taking advantage of only compressed air PT-1900 guarantees comfortable, fast and effective work.

What is more, by adjustment possibilities pallets may have different sizes as well as different number of deckboards and blocks.

"CLAMPING" gives the possibility to place the deckboards and blocks precisely before nailing. There is no possibility for the elements to change the position, so the final product is very accurate.

It is possible to make any pallet you wish, of any size in the perimeter of the table.

#### **4 TERMS OF USE**



## 4.1 PREPARATION FOR WORK BEFORE ACTUATION

The producer guarantees that the table is fully operational, was quality-controlled according to thorough procedures and permitted for use. However, it does not exempt the operator from checking the machine before work. Technical manual is provided along with the table.

Prior to work actuation the operator is obliged to inspect the technical condition of the table. What is mare, by regulation, adjust the table to required position.

To this end:

- get familiar with the manual and follow its instructions
- carry out the inspection of the table concerning its condition (dents, cracks, breaks, breaks off)

If there are no objections, compressed air can be connected to the machine. It shall be done with a female Quick coupling, a hose of inner diameter at least 12 mm. The capacity of the compressor shall be at least 300 l/min.

Next, using central air regulator set the operating pressure not more than 3 - 4 bar.

Carry out tests of clamping and ejecting. The control over clamping and ejecting takes place by changing the position of "CLAMP" and "EJECT" levers.



## 4.2 TABLE SIZE ADJUSTMENT

For below mentioned activities 6 and 10 mm Allen wrench should be used (delivered with the table). Due to different sizes of pallets that may be produced, the table requires to be modified. In order to change the table to a required size, below mentioned activities must be undertaken:

• STEP 1 Release the brake (35) situated in the left upper part of the table.



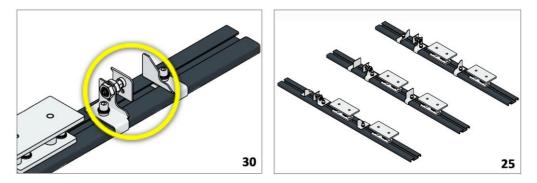
• STEP 2 Using the crank (26) set the accurate width of the pallet.



• STEP 3 Block the brake (35) by tightening the socket screw.



• **STEP 4** Regulate the pallet blocks by loosening the angles **(30)** which are located on the battens **(25)**. Set the required position of the blocks and tighten them firmly to the battens.

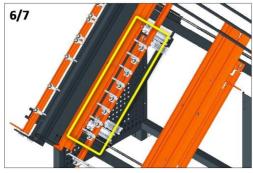




## 4.2 TABLE SIZE ADJUSTMENT

• STEP 5 Clamp the blocks using "Z" lever (Z/15). Put the top deckboards.

• STEP 6 Depending on the number of top deckboards regulate the combs (7) which are tightened to the battens (6). Combs which are not going to be used for a particular type of the pallet move away or remove from the battens.



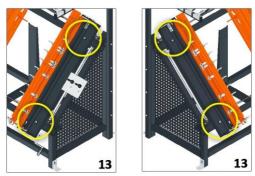
- STEP 7 Nail the top of the pallet.
- + STEP 8 Release the clamp using ''Z'' lever {Z/15).
- STEP 9 Eject the pallet using "W" lever {W/16).
- STEP 10 Rotate the pallet 180 degrees (tum over) and then release "W" lever {W/16).
- STEP 11 Make sure the pallet clings to the table.

• STEP 12 Take the T-tracks {21) down, next regulate every comb cantilever which is located in the side T-track {20). Move away the elements which are not going to be used.



• STEP 13 Put the bottom deckboards on the comb cantilevers and nail them.

In case of nailing stringer pallets, push the battens with combs and side battens (after loosening two screws **{13**} together with side support to the required distance.

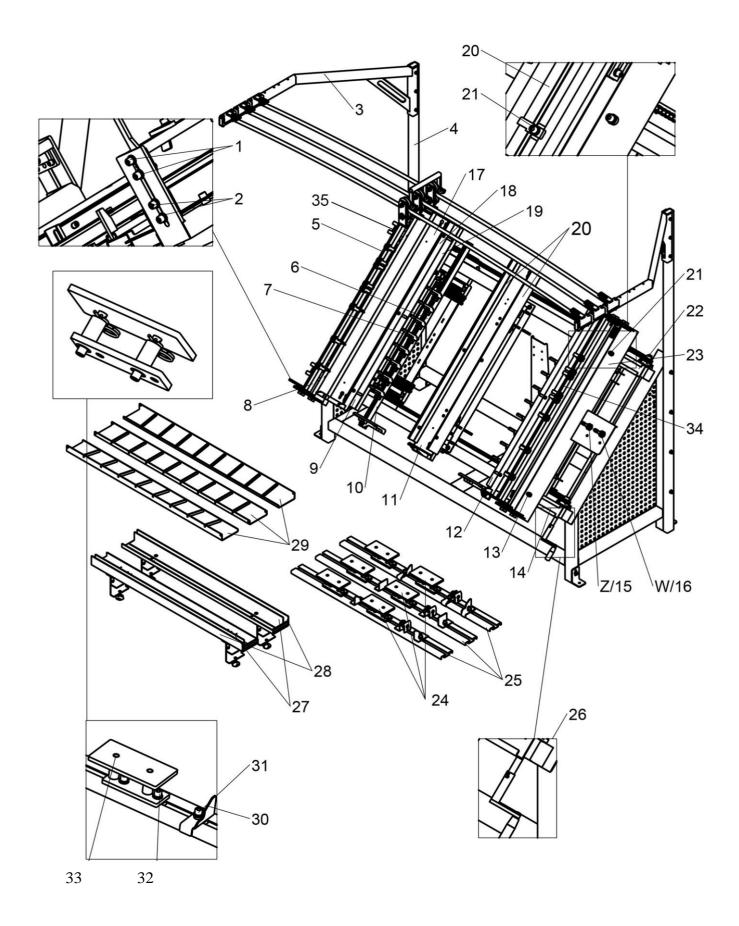


Remove the battens with angles **{25)** in order to put them in place of cantilevers. The basic toolkit comprises also of templates **{29)** to nail semi-finished EUR type pallets\*. The templates must replace the battens with angles **{25)**. Thanks to that, it is possible to make 9 semi-finished pallets.



\* Ask for details.

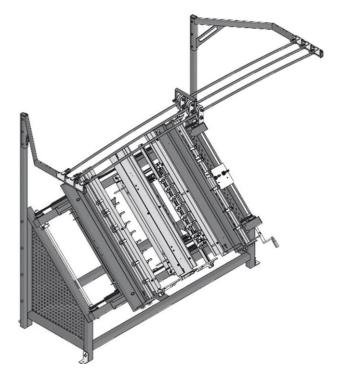




If certain parts are needed, please submit your request at sales@palletnailingmachines.com

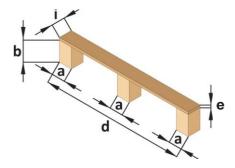


#### 4.2.1 ASSEMBLY OF SEMI-FINISHED PRODUCTS (bottom deckboards with 2 or 3 blocks)



#### Dimensions of nailed elements:

**a.** 70 -145 mm **b.**70 -120 mm d.800 -1900 mm e.12 - 27 mm **i.** 70 -145 mm





#### The set consists of:

- 2 templates with scale to set the external blocks (29) placed on external supports (17) regulated symmetrically in relation to the centre, by means of the chain drive system.
- 1 template with scale to set the middle blocks (29) situated on a stationary middle support (11)
- 2 T-tracks with combs to set the boards (34)
  2 pneumatic lifts (12) for the pushback of the ready pallets

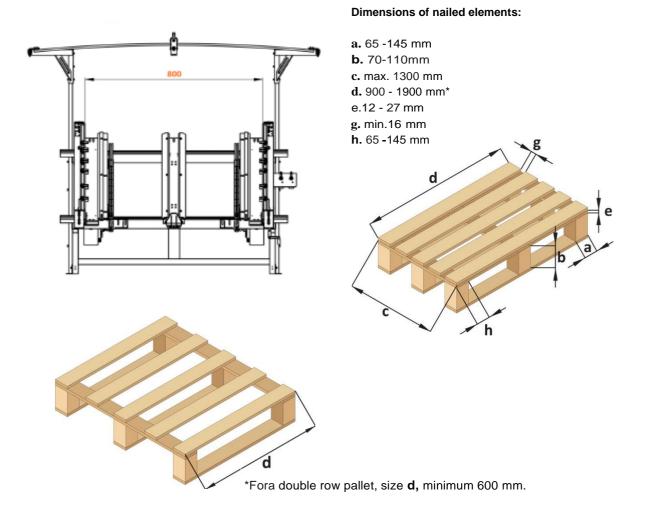
#### The sequence of operations:

- 1. Put the blocks on templates (29)
- 2. Unblock Z lever-CLAMP
- 3. Take the T-tracks with combs down (34)
- 4. Set the boards
- 5. Nail the elements
- 6. Unblock Z lever clamping (Z/15)
- 7. Force the elements out by changing W lever-EJECT (W/16)

The number of horizontal bords depends on the board width (8-13).



## 4.2.2 ASSEMBLY OF EUR-TYPE PALLETS



#### The set consists of:

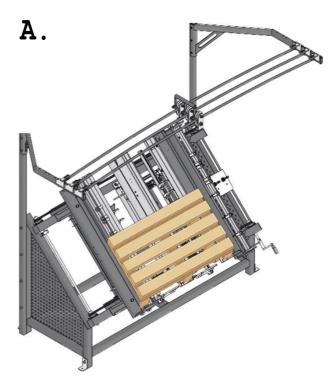
- 2 templates with scale to set the external blocks (29) placed on external supports (17) regulated symmetrically in relation to the centre, by means of the chain drive system.
- 1 template with scale to set the middle blocks (29) situated on a stationary middle support (11)
- 2 T-tracks with combs (5) to set the bottom boards after nailing the top and overturning
- 2 internal combs (10) to set the top boards
- 2 pneumatic lifts (12) for the pushback of the ready pallet.

#### The sequence of operations:

The drawing and setting is presented on the following page.



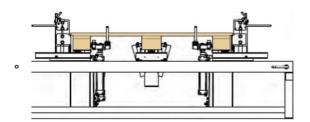
## 4.2.3 ASSEMBLY OF EUR-TYPE PALLETS



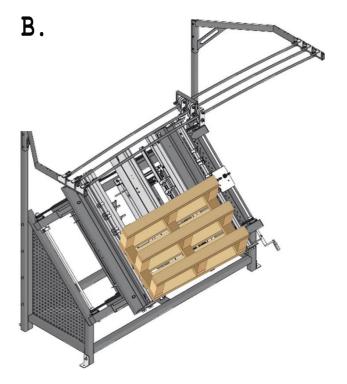
#### EUR-type tour-way pallets

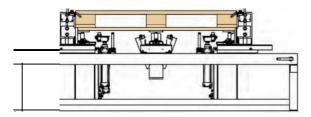
Nailing is undertaken by a two-step process:

A. Nailing top boards to the blocks - pneumatic clamping of the blocks, next after nailing, pneumatic lifting to overturn the pallet.



**B.** Nailing the bottom boards





#### The sequence of operations:

Α

В

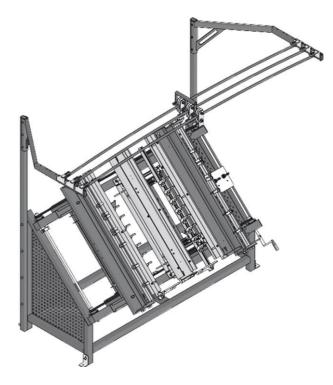
- 1. Set the blocks regulating the position of the angle irons (30)
- 2. change the position of Z lever CLAMP  $(\mathbb{Z}/15)$
- 3. set the top boards using the position of the combs (10)4. nail the elements
- 5. unblock Z lever- CLAMP ( $\mathbb{Z}/15$ }
- 6. force the elements out by changing  $\,W\,\text{lever-EJECT}\,(W\!/\!16\}$
- 7 rotate the pallet 180 degrees (overturn)

#### 8. unblock lever W - EJ ECT(W/16}

- 9. take the T-tracks with combs down (34)
- 10. set the bottom boards
  - 11. nail the elements
  - 12. lift the ready pallet changing W lever-  $\mbox{EJECT}\,(W\!/\!16\}$

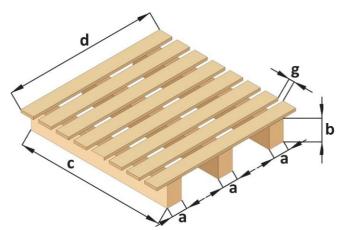


## 4.2.4 ASSEMBLY OF STRINGER PALLETS (on 3 stringers)



#### Dimensions of nailed elements:

**a.** 40 -145 mm **b.** 75 -140 mm **c.** 600 - 1300 mm **d.** 800 - 1900 mm **g.** min. 16 mm





#### The set consists of:

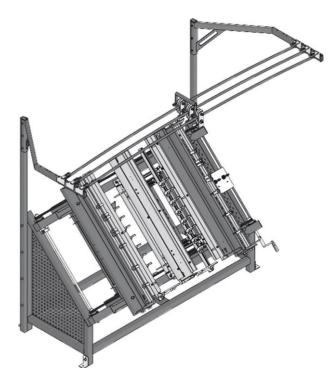
- 2 external supports (17) regulate d symmetrically in relation to the centre, by means of the chain drive system.
- 1 stationary middle support (11)
- 2 T-tracs with combs to set the boards (34)
- 2 pneumatic lift s (12) for the pushback of the ready pall et

#### The sequence of operations:

- 1. Set the stringers on supports (17) (11) (remove the battens with angles from the supports)
- 2. Change Z lever CLAM P (Z/15)
- 3. Take the T-tracks with combs down (5)
- 4. Set the boards
- 5. Nail the element s
- 6. Unblock Z lever CLAM P(Z/15)
- 7. Force the element s out by changing W lever EJ ECT (W/16}

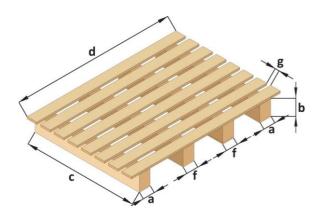


## 4.2.5 ASSEMBLY OF STRINGER PALLETS (on 4 stringers)



#### **Dimensions of nailed elements:**

**a.** 40 -145 mm **b.** 75 -140 mm **c.** 600 - 1300 mm **d.** 800 - 1900 mm **f.** 40 -125 mm **g.** min.16 mm





#### The set consists of:

2 external supports **(13)** regulated symmetrically in relation to the centre, by means of the chain drive system

- 1 set for middle stringers (27) (additional equipment)
- 2 T-tracks with combs to set the boards (34)
- 2 pneumatic lifts (12) for the pushback of the ready pallet

#### The sequence of operations:

- 1. Set the stringers both on supports (17) and the set for middle stringers (27)
- $\textbf{2.Change } \textbf{Z} \text{ lever- CLAMP} \left( \textbf{Z} / \textbf{15} \right\}$
- 3. Take the T-tracks with combs down (34)
- 4. Set the boards
- 5. Nail the elements
- 6. Unblock Z lever CLAMP  $(Z/15\}$
- 7. Force the elements out by changing W lever-EJECT (W/16}

The number of horizontal bords depends on the board width (8-13).

#### **5 MAINTEINANCE**



#### 5.1 MAINTENANCE AND REGULATION

In order to guarantee the proper work of the pneumatic table, it is required to follow the below mentioned procedures:

- examine the chain tension (in the bottom and upper side of the table), chain lubrication (grease)

- examine the table size accuracy, its symmetry and diagonals. In case of any irregularities it is required to regulate the nominal values of the table by loosening (with due care) the regulating elements and taking full measurements

of the table.refill the oil of pneumatic tools which is located in two FLR Air Units on the right and left side of the table

- monitor the pressure parameters both in exchanged FLR Air Units and the power supply central regulator
- exchange filters in FLR Air Units and the central regulator every 6 months
- monitor the tightening of the screws
- monitor if there are no leakiness in pneumatic installation
- check periodically the condition of vertical profiles, rails and trolleys

#### 6.1 GUARANTEE

#### **GUARANTEE CARD**

Na me of the machine/ Name of item
Type of the machine
Serial number
Recipient/ Customer

Terms of guarantee:

Sell-by date

- 1. PROFIX RD, s.r.o. shall guarantee that the machine is fully operational in accordance with technical and operative conditions included in the manual.
- 2. The guarantee will be respected after submission of correctly filled guarantee card and original invoice of the purchase. The dates from guarantee card and invoice must be the same.
- 3. The guarantee period is 12 months.
- 4. Repairs shall be carried out free of charge. Repairs shall not exceed 14 days, as far as it is not necessary to bring spare parts from the manufacturer. The guarantee period extends by the time of the repair.
- 5. Guarantee claims will be rejected in case of damages resulting from the fault of the Purchaser or from improper operation (contrary to the instructions in the user manual) as well as those contrary to the provisions of the existing Directive on electromechanical devices.
- 6. The Seller shall not be liable for inappropriate choice of the machine.
- 7. Excluded from the guarantee are mechanical damages of the construction, switchers etc. caused by the user.
- 8. Outside the scope of the guarantee are technical parameters of the machine except standards declared by the manufacturer.
- 9. Outside the scope of the guarantee are all wearing parts and all materials used for maintenance e.g. inserts in FLR Air Units.
- 10. Guarantee claims will be rejected in case of damages resulting from the fault of the Purchaser during improper transport.
- 11. The guarantee becomes void in case of:
  - failure to respect the deadlines, lack of documentation concerning purchase and showing filters and oil replacement. - inadequate air compressed pressure
  - failure to comply with the provisions concerning shift and weekly reviews as well as maintenance (see point 5)
  - misuse of the machine contrary to the user manual
- 12. PROFIX RD liability under guarantee relates to repairs, exchange or return of the overpaid amount whereby the choice is made by PROFIX RD. Any other claims are excluded from the scope of the guarantee.
- 13. The ownership of the faulty parts belongs to PROFIX RD.
- 14. The guarantee applies to manufacturing defects, faulty construction and defected/improper materials used for their production.
- 15. PROFIX RD liability under guarantee is void in case of repairs and maintenance provided by third parties. Outside the scope of the guarantee are any modifications provided by third parties or the Purchaser himself.
- 16. Packing of ordered goods is being monitored and recorded data is one of the methods used for analysing quantity claims.
- 17. Seller's liability under warranty shall be precluded.

Legible signature of the recipient

Legible signature of the dealer



## GUARANTEE CARD

Number	Defect description	Date of declaration	Date of repair	Remarks

#### **INCIDENT REPORT/ FAILURE FORM**

Name of the company

Address:

Name of the contact person:

Telephone number/ fax number:

Type of the table/ model of the table

Serial number:

Defect description:

NOTE: In case of the fault during the guarantee period it is indispensable to attach the copy of the invoice and the guarantee card!

Please make copy, complete it legibly and send to:

PROFIX RD, s.r.o. Liptovský Mikuláš, Slovakia

Stamp and signature of the person reporting the incident



#### 6.2 COMPLAINT PROCEEDINGS

- 1. The ground to start complaint proceedings is a written report of the incident including details about the product, its serial number, defect description, the number of the invoice. The Customer is also obligated to give mare details about the incident by phone or email.
- 2. The Producer gives the number for particular complaint which will be used during correspondence concerning the claim.
- 3. A failure report or complaint shall not entitle the Customer to withhold the payment for the delivered product.
- 4. The Producer, provided that he considered the complaint, covers the costs of repairs and spare parts.
- 5. The Producer undertakes to handle the complaint as soon as possible.
- 6. The Customer is not entitled to handle with faults himself at the cost of the producer
- 7. Any interference of the Customer in the pneumatic table construction is a premise to terminate the guarantee
- 8. All issues which are not provided for in the above mentioned conditions shall be determined by the provisions of the Civil Code.