

# XWCH3

## Instruction & Service Manual



ORIGINAL INSTRUCTIONS

### WORLD LEADER IN CONTACT CLEANING

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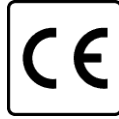
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## SAFETY WITH YOUR CLEANING HEAD

At TEKNEK we want you to operate your Cleaning Head in conditions of maximum safety at all times. Listed below are procedures that should be followed during set up and operation of the machine.

- 1 When removing the equipment from the transport box ensure that lifting aids are available and in place as required – refer to section 2. Removal of most TEKNEK Cleaning Heads **requires more than one person** and care must be taken to avoid personal injury and damage to the machine during withdrawal from the transport box. Ensure that the machine is installed safely and cannot topple over during use by mounting it on a stand or bolting it to the floor (dependent on machine type).
- 2 **All** Teknek Cleaning Heads, which are electrically powered, **must be connected to earth**. Check also that the intended electrical supply complies with the designated machine specification. The operating voltage is specified on the identification plate fitted adjacent to the power inlet socket.
- 3 Before pressing the start button to operate the machine, **please read the entire contents of this manual** to understand the workings of the machine. Ensure that any new operators of the machine are given full instruction on use and an opportunity to read the manual before operating the equipment
- 4 If the Instruction and Service Manual is lost a new copy should be ordered from the manufacturer. The address may be found on the Identification Plate on the machine.
- 5 Safety considerations dictate that **NO loose clothing** should be worn adjacent to the machine when it is in operation. **All long hair must be tied back** and preferably covered by a cap or a hair net. **Gloves, if worn, must fit the hands snugly**, as any surplus material at the fingertips constitutes a hazard when feeding workpiece during the cleaning cycle.
- 6 Teknek machines use a sheeted Adhesive Roller – if un-sheeted material is being used ensure that extreme care is exercised when purging the Adhesive Roller using the knife and that the blade is retracted immediately after use.
- 7 **DO NOT** place fingers into areas that could expose them to injury such as open doors or covers or into the contact area of the cleaning rollers and the adhesive rollers.
- 8 **NEVER** tamper with or override switches, which may be visible, when doors or covers are open as this practice could result in severe personal injury.
- 9 **NEVER** interfere with or adjust pneumatic components, if fitted, as this practice could result in severe personal injury. Authorised Personnel should always carry out Servicing and repairs.
- 10 Before opening the machine for service or repair the electrical and pneumatic supplies (if applicable) should **ALWAYS** be disconnected by Authorised Personnel.
- 11 Finally, if the specification of the Cleaning Head is changed or modified in any way by the user following delivery from TEKNEK then it becomes the user's responsibility to ensure that the appropriate Machinery Directives are complied with.

### **WARNING NOTICE TO INSTALLERS AND USERS**

**TEKNEK Limited have designed the XWCH3 series for installations that are within the safety protection of one of a customer's parent machine or production line and have, as such, fitted NO specific safety protection devices to the XWCH3 series.**

## SAFETY DATA SHEET

### ADHESIVE ROLLS SAFETY ISSUES

#### ROLL CONSTRUCTION

Adhesive Rolls are made of pressure sensitive adhesive on a paper or filmic base and are generally safe and present no hazard to health provided normal rules for goods industrial hygiene are observed.

The following advice is given to ensure storage and usage of these products.

#### HANDLING & STORAGE

On receiving goods, inspect packages for signs of damage. Inform supplier of shortage or damage immediately. Store material in clean dry area. Material should be stored in original packaging until required.

Rolls stored on their side not in original packaging may pressure mark or produce a flat if stored for long periods.

Shelf life is two years when stored correctly in original packaging.

**Storage temperature should not exceed 23 °C (73 °F) and 50% relative humidity.**

#### IN THE EVENT OF FIRE

The adhesive rolls will burn in the event of contact with flame. Fumes may be given off by the acrylic adhesive and silicone release coating itself. Fires may be extinguished with water provided that live electrical equipment is not in the vicinity. The advice of your Fire Officer should be sought, having regard for the layout of your premises and the particular operation involved.

#### WASTE DISPOSAL

Adhesive Roll off-cut may be disposed of through normal trade re-use outlets. If disposed of in a legal tip in compliance with relevant laws or incinerated in a licensed site in compliance with relevant laws, the following should be noted:

Acrylic adhesive coated products should only be incinerated if the incinerator can cope with corrosive flue gasses.

#### MACHINE SAFETY ISSUES

#### OZONE EMISSIONS

The high voltage static elimination equipment in Teknek Machinery has been thoroughly tested and complies with OSHA Standard.

The maximum Allowable Concentration (MAC) of ozone under this regulation is 0.1 parts per million. The maximum output in the vicinity of Teknek static eliminating devices is 0.04 ppm.

**IMPORTANT NOTICE: Published information concerning products is based upon research that the Company believes to be reliable but such information does not constitute a warranty. Because of the variety of possible uses for Teknek products and the continuing development of new uses, the purchaser should carefully consider the fitness and performance of the product for each intended use and the purchaser assumes all risks in connection with such use. Seller shall not be liable for damages in excess of the purchase price of the product or for incidental or consequential damages.**

**All specifications are subject to change without prior notice.**

## TEKNEK GUARANTEE

**Teknek Limited ("TEKNEK")** guarantees that in the event of the **XWCH3 Cleaning Head** becoming defective due to faulty materials or workmanship within 12 months from the date of purchase (assuming a two shift operation cycle), the company shall replace all defective parts free of charge subject to the following conditions:-

- i) **TEKNEK** is satisfied that the Product has not been misused or used or operated in any way contrary to the instructions in the Manual provided.
- ii) **TEKNEK** is satisfied that repairs have not been carried out or have been attempted by persons not authorised by **TEKNEK**.
- iii) The product is made available for inspection by **TEKNEK** or its Authorised Distributor and **TEKNEK** is reasonably satisfied that the product is defective.
- iv) No replacement parts or adhesive rolls other than those recommended by **TEKNEK** are or have been used in or with the Product.

### **The following points should also be noted:-**

- v) This Guarantee is offered in addition to your statutory rights.
- vi) Component parts, which require replacement due to normal wear and tear such as the Blue Rubber Rollers, are excluded from this guarantee. **The Blue Rubber Cleaning Rollers** carry a 6-month guarantee based on a 2 shift cycle, excluding damage caused by use of unsuitable solvents or by knives, or by other misuse and general wear.
- vii) This Guarantee is limited to the supply of replacement parts only i.e. any labour provided will be charged at the rate applicable at the time of any repair.
- viii) **Teknek Limited** is a Scottish company and this Guarantee is issued subject to Scots Law.

Please note that the use of spare parts or consumables other than **TEKNEK** recommended items may severely damage or significantly reduce the performance of your equipment and may damage the media being processed by the Cleaning Head.

**The use of non TEKNEK adhesives or cleaning rollers shall immediately void the warranty.**

## 1 INTRODUCTION

The **XWCH3** Cleaning Head has been developed for cleaning applications where economy of space and consistently heavy-duty reliable performance are critical factors. This exciting product further advances the cleaning process technology developed by **TEKNEK** and complements the existing range of Industrial Cleaning Heads.

The cleaning method consists of rotating rubber rollers, specially formulated to **TEKNEK** specification, which remove contamination from each side or a single side of the media without abrasion or the use of chemicals. The contaminants are simultaneously transferred to adhesive rollers, allowing the rubber rollers to continue the cleaning process.

In addition, an optional anti-static system neutralises any static charge that may be present on the cleaned media, thus preventing further attraction of airborne contaminants.

The **XWCH3** retains all the proven design features of **TEKNEK** Cleaning Heads and introduces further innovations including:-

- Automatic separation of the Adhesive Rollers from the Rubber Rollers.
- 112mm (4.4") diameter Rubber Cleaning Rollers
- A 3" (76mm) Adhesive Roll System for increased operating time between purges. .
- Excellent access to Adhesive Rollers by optional 'side pull out'.
- Excellent access to Cleaning Rollers by optional 'side pull out'.
- Large line speed range options up to 350 m/min.
- Full compliance with CE and EMC regulations.
- Minimum downtime for routine and emergency maintenance.
- Simple control system.
- Robust construction.
- Simple installation into existing production lines
- Static removal system

The **XWCH3 Cleaning Head** can be produced in many variations,

Single Sided

Double Sided

With slides, one slide, no slides

100mm and 25mm separation

Vertical VCH, Upside-down UCH and Horizontal HCH

The above versions are all available in the following cleaning roller formats:

1. **Panel**
2. **Film**
3. **ULTRAClean**
4. **NANOClean**

The range is also provided with or without dust covers as per customer requirements.

**TEKNEK** equipment is continuously developed and therefore we reserve the right to modify or alter it without notification.

## 2 UNPACKING PROCEDURE

### *Information for Machine Builders and Installers*

1. The machine is shipped in a wooden crate.
2. The Cleaning Roller(s) and the Adhesive Roller(s) are not installed in the machine – but packed separately. They must be carefully removed and stored until required.
3. The Control Box is also packed separately – remove and store safely.
4. Cover Set(s) may be installed – these should be removed before lifting the machine from the crate - so care is required not to damage them.
5. The machine can be safely lifted by slinging onto the rear extrusion cross member or by using any of the M12 holes on the ends – ensure that if slides are fitted that they are fully home and locked.
6. Check that any slings do not damage the connectors on the ends of the frame.
7. Remove the cleaning head from the transport box.
8. Check unit for transit damage.
9. Confirm that the Serial Number on the machine matches that shown on the cover of this Service and Instruction manual.
10. In the case of damage or a discrepancy please notify the Authorised Distributor or TEKNEK Head Office immediately.

### 3 XWCH3 INSTALLATION

*Information for Machine Builders and Machine Installers*

#### 3.1 PRE-INSTALLATION

**IMPORTANT:** This machine is supplied un-guarded, customers must ensure that suitable guarding is provided to ensure the safety of all personnel from nips and trapping hazards before the machine is put into service.

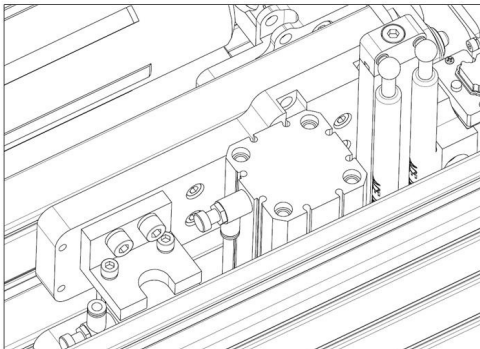
- 1 Place the cleaning head on a suitable workbench or work area.
- 2 Thoroughly clean down the Cleaning Head with Isopropyl Alcohol in order to prevent the possibility of a transfer of contamination particles from the frame to cleaned materials exiting the cleaning head roller.
- 3 Due to the speciality of the mounting frames manufactured for each specific cleaning head, the following assumes that the framework / installation location is ready to accommodate setting up of the machine to the substrate. Details of the various mounting points can be found in the Installation Drawings relevant to the version of the machine that has been ordered.

#### 3.2 INSTALLATION and MACHINE SETUP

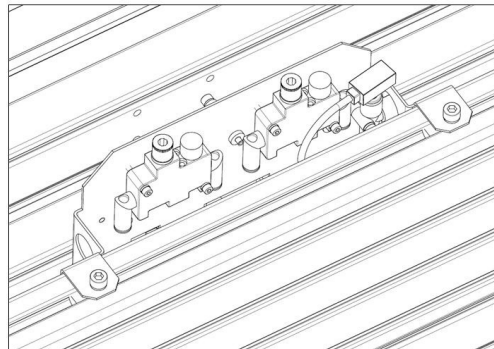
*Information for Machine Builders*

1. Install the cleaning head into the working location
2. Centralise the cleaning head into the working position.
3. Ensure that the machine is in the OFF condition.
4. Connect the machine to the pneumatic supply.
5. Install the Blue Cleaning Roller(s) (roller mount assemblies are fitted with M8 caphead screws)
6. Using the 'Jacking and Adjusting Screws', set and check that the full width of the blue roller is clear from the cleaning point by the design dimension and is parallel – this dimension can be 25mm or 100mm depending on customer selection.
7. Operate the machine to check that the Rubber Cleaning Roller moves to the correct operating position.
8. In the unlikely event that the machine movement is too fast or slow - the speed of the machine movements may be adjusted by the flow control valves on the pneumatic cylinders if required. READ NOTE in Section 9 - This must only be done by a qualified engineer.
9. The fasteners mounting the cleaning head should now be fully tightened to stop any further movement of the machine (It is good practice to mark the screws to confirm (a red spot of paint/varnish) to indicate that they are fully tightened and checked).

Flow Controls on Actuators



Pneumatic Distribution and Control





### 3.3 WIRING AND PNEUMATIC CONNECTION

#### *Information for Machine Builders*

1. The XWCH product Control Box should be mounted near to the machine or in the designated area in the installation drawings. There are two versions of the Control Box – the standard unit with buttons and the PLC control unit with a touch screen.
2. The control box is connected to the machine by an umbilical cable.
3. Mains Electrical Power is supplied to the Control Box.
4. Pneumatic Air supply – Oil free and clean dry air set at a minimum of 5 bar - is connected to the XWCH machine by a 6mm tube. The air pressure is detected on the machine and a confirmation signal transmitted to the control box.
5. The exhaust air from the machine is collected and delivered to a 4mm fitting at the other side of the machine. This may be further piped away from the machine if required.
6. Pneumatic and Electrical Connection Diagrams are attached.
7. Finally assemble the Adhesive Roller(s) into the machine – check the orientation of the adhesive wind – see section 6.3.

NOTE – a line run signal may be required (check your machine specification) - and a minimum air pressure supply is required as the machine is fitted with a pressure sensor that prevents the machine being operated if the pressure is too low.

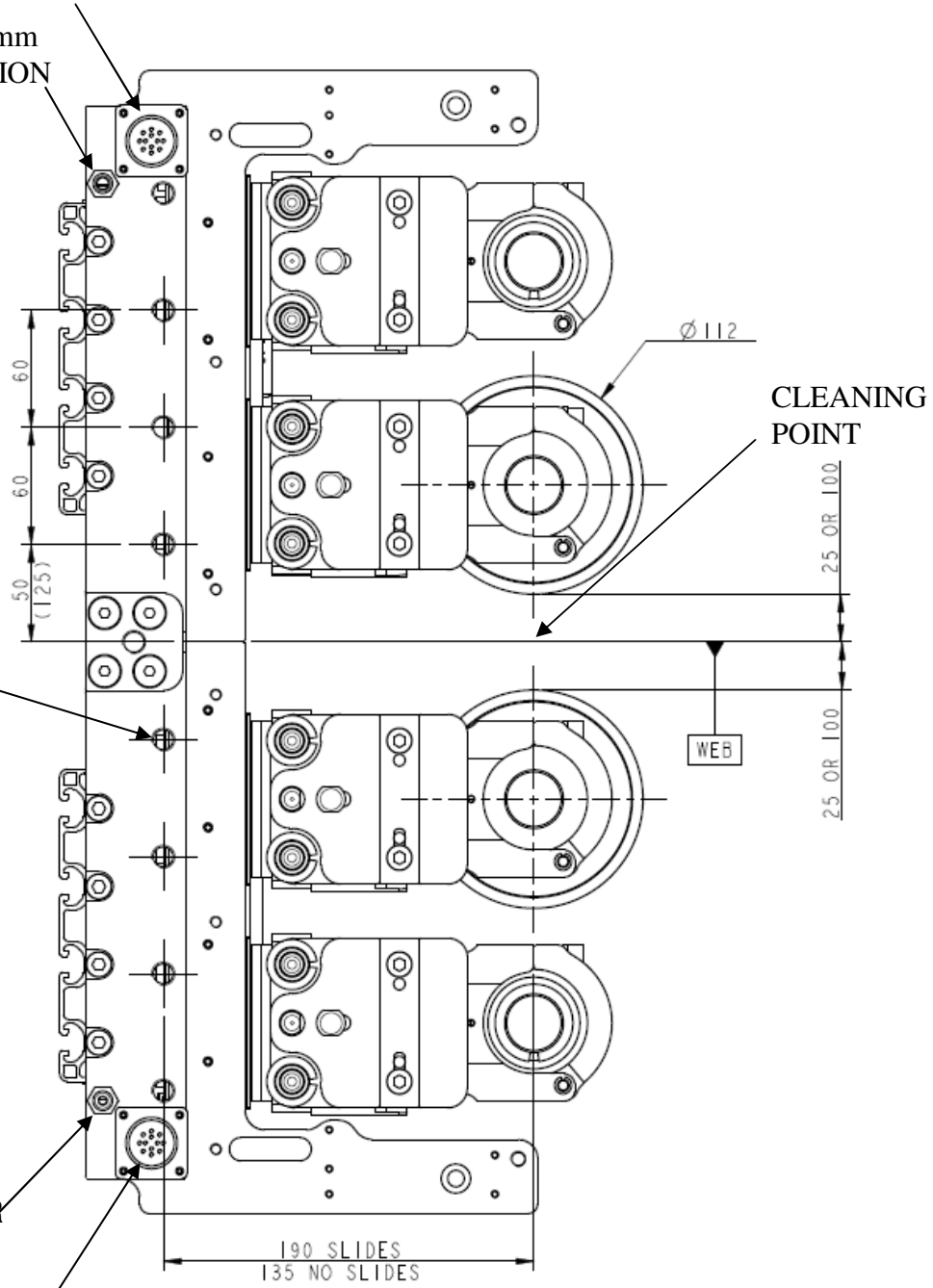
ELECTRICAL CONNECTION

IN – AIR 6mm CONNECTION

M12 x 25

OUT – AIR 4mm

ELECTRICAL CONNECTION



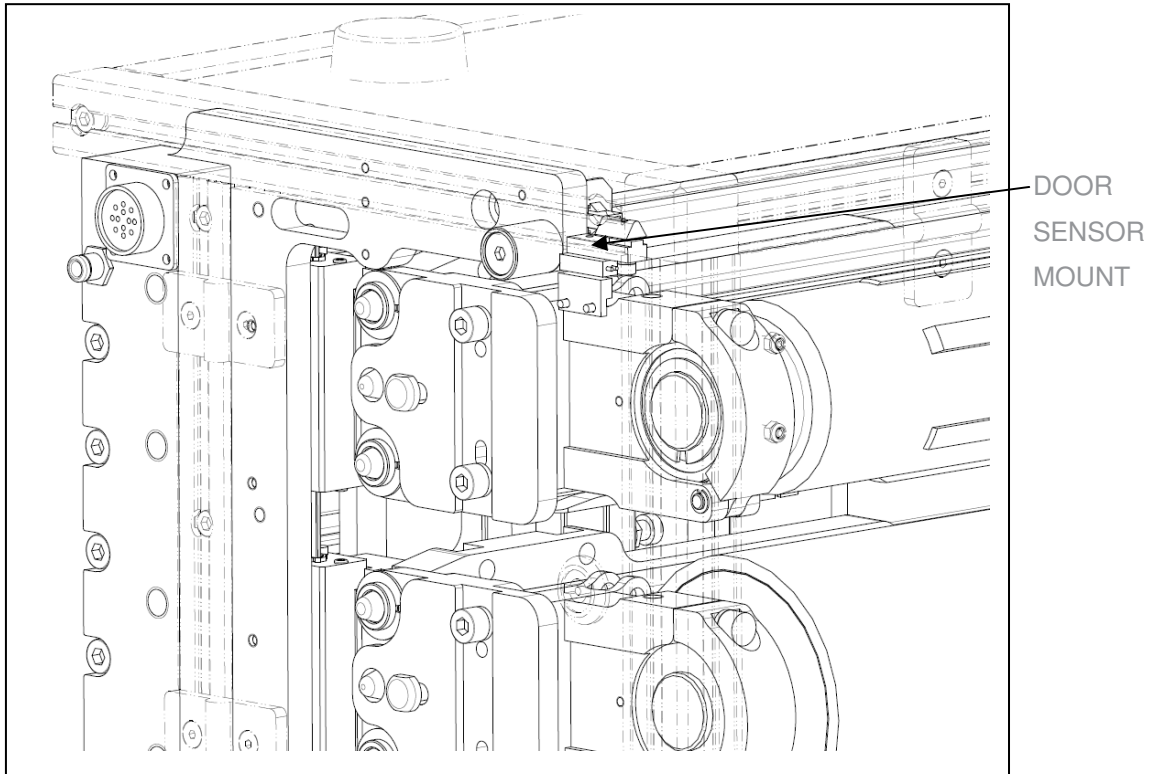
This drawing is for a 'generic' XWCH machine and shows the features required for installation. The cover set (if supplied) should be assembled to the machine after the machine has been installed – ensure that the components are installed in accordance with the instructions.

### 3.4 FITTING THE COVER SET – IF SUPPLIED

#### *Information for Machine Builders and Installers*

The cover set (if supplied) should be assembled to the machine after the machine has been installed – ensure that the components are installed in accordance with the instructions.

Assemble the parts of PL54489 to install the Cover Support Insert to each side and Switch Components to the pull-out side.



*Teknek equipment has not been designed, tested, nor approved to work in hazardous areas. Should customers choose to install Teknek equipment in hazardous areas, the customer must ensure that all necessary regulation and compliance issues are dealt with. Teknek accepts no liability for equipment used in hazardous environments.*

## 4 MACHINE OPERATION

### *Information for Machine Operators*

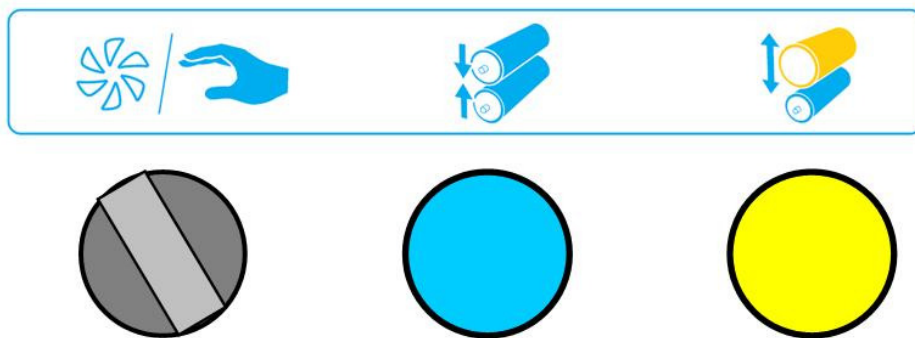
- 1 It is important that any operators using the XWCH machine are give clear instructions on how the product operates and what it designed to do.
- 2 Operate the Cleaning Head by inputting a controlling signal to the control box or pressing the START button.
- 3 Check that the Cleaning Head rollers move to the '**IN/ON**' operating position, i.e. the cleaning roller contacts the material to be cleaned and the adhesive roll is contacting the rubber roller.
- 4 If the web is moving - the blue roller and adhesive roll should be turning together with the processing of the web or substrate.
- 5 Operate the machine to the '**OUT/OFF**' condition and check that the Rollers return to their '**OUT/OFF**' position. The blue roller and adhesive roll should now be out of contact with each other.
- 6 Carry out this test until the operator is satisfied that the cleaning head operates correctly and that the cleaning roller contacts the substrate, support or pressure roller along its full length.
- 7 Ensure that the operator(s) is comfortable with the operation of the machine and does not require further training to ensure safe operation.


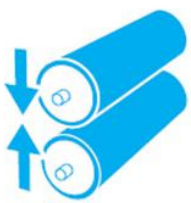

## 5 CONTROL BOX LAYOUTS

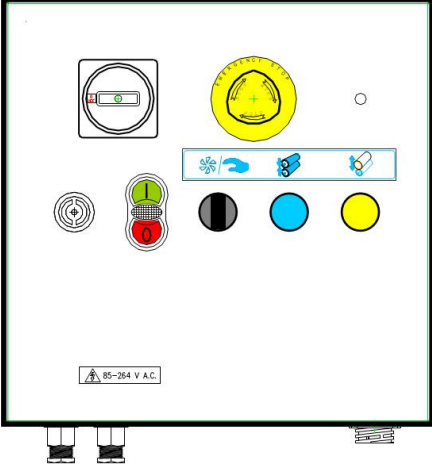
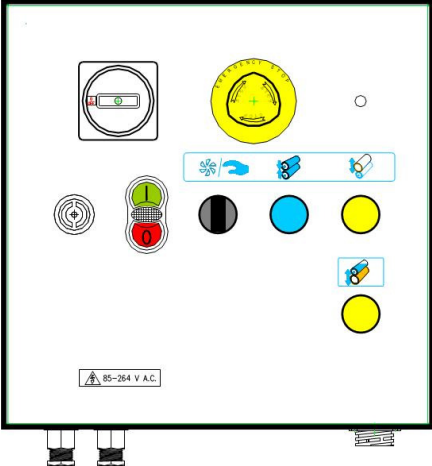
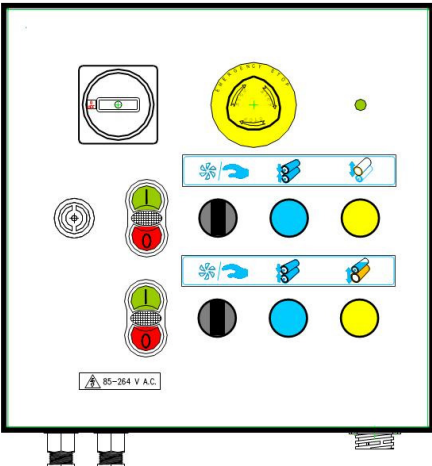
Drawings for the control box types are located at the rear of the manual.

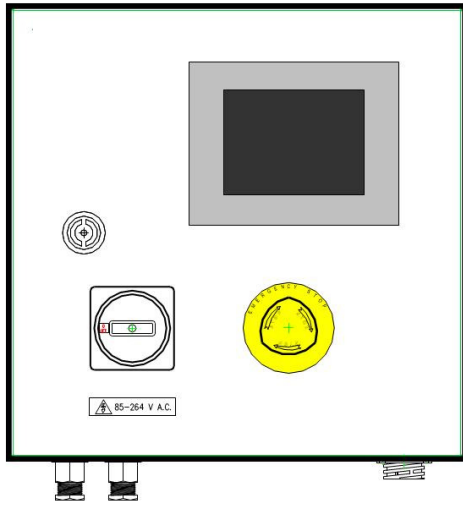
MACHINE TYPE	CONTROL BOX LAYOUT	DRAWING NUMBER
SINGLE SIDED VERTICAL	1 x SINGLE SIDE	Pi55781
SINGLE SIDED HORIZONTAL	1 x SINGLE SIDE	Pi55781
SINGLE SIDED UPSIDE DOWN	1 x SINGLE SIDE	Pi55781
DOUBLE SIDED	1 x DOUBLE SIDED	Pi55782
TWO MACHINE CONTROL	1 x 2 SINGLE SIDE	Pi55783
MACHINE WITH COVERS	ProFace PLC	Pi55923

## CONTROL BUTTONS AND INDICATORS



SYMBOL	DESCRIPTION
	<p><b>AUTO / MANUAL SWITCH</b></p> <p><b>AUTO</b> - IS USED TO OPERATE THE MACHINE FROM A LINE SIGNAL</p> <p><b>MANUAL</b> – IS SELECTED WHEN THE OPERATOR NEEDS TO OPERATE THE MACHINE ROLLERS</p>
	<p><b>CLEANING ROLLER INDICATOR</b></p> <p>THIS INDICATOR ONLY OPERATES WHEN THE RUBBER CLEANING ROLLER IS IN THE OPERATING POSITION</p>
	<p><b>ADHESIVE ROLLER BUTTON</b></p> <p>THIS BUTTON REMOVES / REPLACES THE ADHESIVE ROLLER FROM THE RUBBER CLEANING ROLLER. WHEN THE ADHESIVE ROLL IS ON – THE BUTTON IS ILLUMINATED</p>




CONTROL BOX TYPES	PART NUMBERS
	<p><b>SINGLE SIDED</b></p> <p><b>Control Box Part Number EP55796</b></p> <p><b>Layout Part Number Pi55781</b></p>
	<p><b>DOUBLE SIDED</b></p> <p><b>Control Box Part Number EP55797</b></p> <p><b>Layout Part Number Pi55782</b></p>
	<p><b>TWO MACHINES IN ONE BOX</b></p> <p><b>Control Box Part Number EP55798</b></p> <p><b>Layout Part Number Pi55783</b></p>



**PLC (ProFace) Control**

**Control Box Part Number  
EP55922**

**Layout Part Number  
Pi55923**

Machine Instruction	ProFace LCD Screen
<p><b>START SCREEN</b></p>	 <p>The start screen features the Teknek logo in a large grey circle on the right. To the left, it says "WORLD LEADER IN CONTACT CLEANING". Below the logo, it reads "XWCH Contact Cleaner" and "www.teknek.com". At the bottom right, there is a copyright notice: "© 2009 TEKNEK".</p>
<p><b>SINGLE SIDE MACHINES</b></p> <p>I = START  O = STOP  A = AUTO  M = MANUAL  RR = CLEANING ROLLER  AR = ADHESIVE ROLLER</p>	 <p>The screen displays "TEKNEK" and "XWCH" at the top. Below are four circular buttons labeled "A", "M", "RR", and "AR". Underneath these are four square buttons: a large "I" button, a circular refresh button, and two square buttons with upward-pointing arrows. At the bottom is a large square button with a circle inside.</p>
<p><b>DOUBLE SIDE MACHINE</b></p> <p>I = START  O = STOP  A = AUTO  M = MANUAL  RR = CLEANING ROLLER  AR = ADHESIVE ROLLER</p>	 <p>The screen displays "TEKNEK" and "XWCH" at the top. Below are four circular buttons labeled "A", "M", "RR", and "AR". Underneath these are four square buttons: a large "I" button, a circular refresh button, and two square buttons with upward-pointing arrows. At the bottom is a large square button with a circle inside. To the right of this button are two circular buttons labeled "RR" and "AR", each with a square button below it containing a downward-pointing arrow.</p>



## 6 MAINTENANCE

### 6.1 PURGING ADHESIVE ROLLS

#### *Information for Machine Operators*

This operation should be carried out on a shift basis or more often if operating conditions dictate.

Teknek recommends that the line is STOPPED and the XWCH machine is OFF before any purging operations on the adhesive rolls – if conditions allow - the adhesive may be purged while the web is running through XWCH machines at speed below 50m/min.

This is achieved by pressing the adhesive roll button on the control box and waiting until the Adhesive Roll has lifted clear from the cleaning roller and stopped rotating.

If the machine is fitted with adhesive roll slide out system, unlock the slide by operating the knob on the catch of the Adhesive Carriage and pull out to the side.

Extreme care should be taken not to touch or contaminate the Cleaning Roller as this may still be rotating and cleaning.

To remove a layer from the adhesive roll, lift the loose edge, pull contaminated sheet clear.

This will expose a fresh layer of adhesive, ensuring the optimum performance of the rubber-cleaning roller.

Carefully tape back the loose edge of the adhesive onto the roll.

A check of the Operating Pressure in the Airshaft each time the adhesive is purged is recommended. This can be done by trying to push the Adhesive Roll(s) along the Airshaft. This simple check can lead to early detection of inflation problems with a shaft before it becomes critical. If the pressure is too high then the adhesive may show contaminated high spots above the grippers and if the pressure is too low the adhesive roll may move during operation.

If fitted, firmly replace the Adhesive Carriage slide into the machine and ensure that the lock is activated.

Depress the adhesive roll switch mounted on the front of the control box to reapply the adhesive roll back on to the rubber cleaning roll.

**NOTE: IT CAN BE GOOD PRACTICE TO TAPE DOWN THE CUT EDGE**

(Please take advice on this - as it is a preventative action that may be used to prevent damage should an operator insert the Adhesive Roll the wrong way)

## 6.2 REPLACING THE ADHESIVE ROLLS

Information for Machine Operators

The Adhesive Roll is mounted on an Airshaft and this item **MUST** be deflated to allow the Adhesive Roll(s) to be removed.

Once the new Adhesive Roll(s) is in position, the Airshaft **MUST** be re-inflated to retain the Adhesive Roll.

### WARNING!

The Airshaft must only be re-inflated using the Air Gun System supplied by TEKNEK to the recommended pressure range (see Table below).

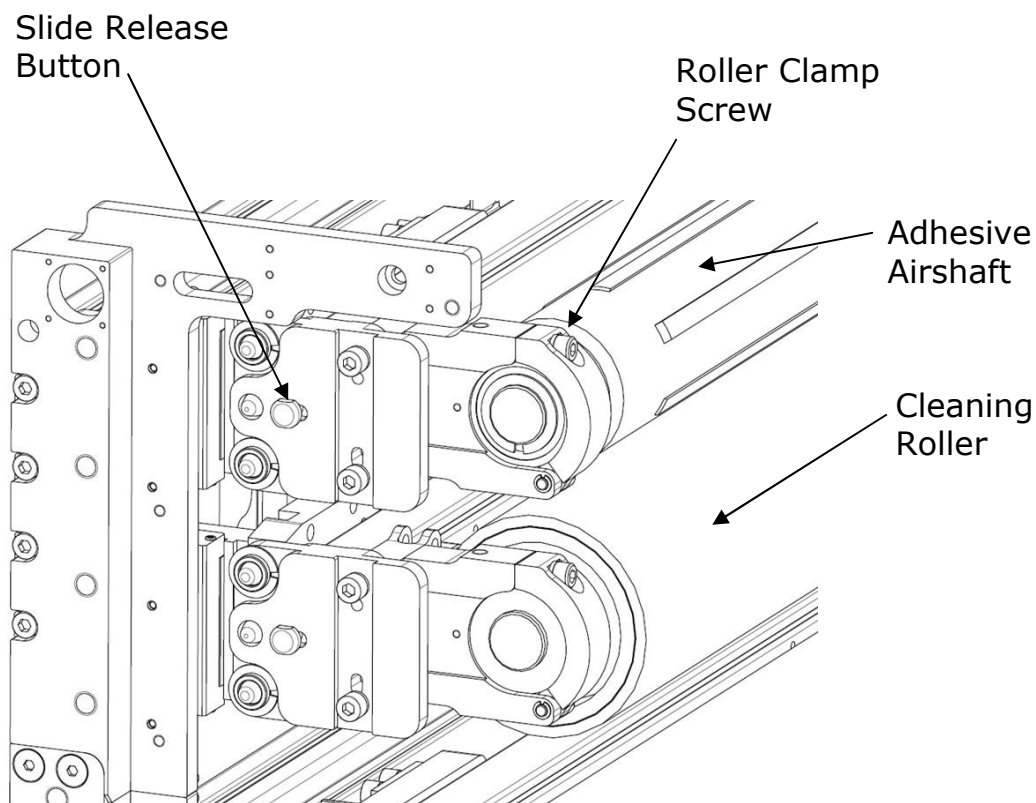
If this pressure is exceeded, the Airshaft may cause uneven patches to appear on the Adhesive Roll and reduce the cleaning efficiency of the machine.

More information on the Airshafts is found in Sections 6.4 and 8.5 of this Manual.

Check the Operating Pressure in the Airshaft each time the adhesive is purged. This can lead to early detection of inflation problems with a shaft before it becomes critical.

A check of the shaft pressure before each shift – or before the machine is used after a period of idleness – is strongly recommended.

AIRSHAFT SIZE	MINIMUM PRESSURE	OPERATING PRESSURE
3 INCH (76mm)	21 PSI / 1.5 BAR	29 PSI / 2 BAR



## 6.3 REMOVING THE ADHESIVE ROLLS

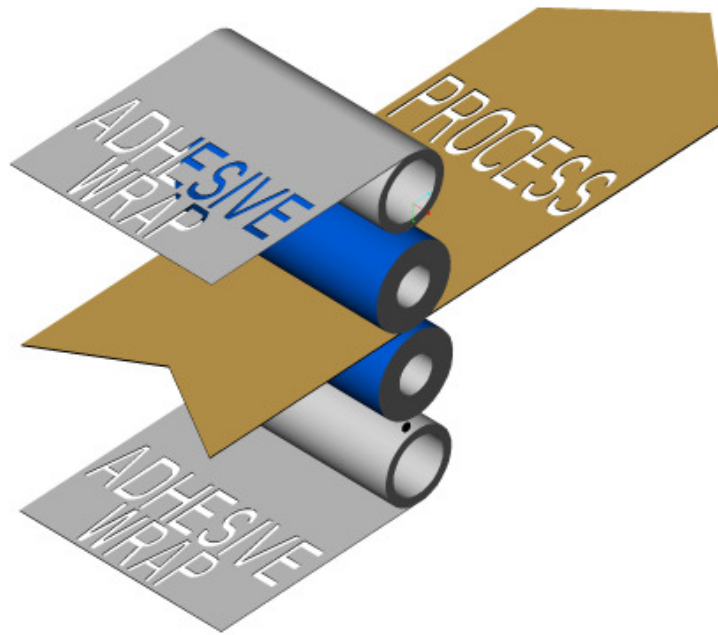
### *Information for Machine Operators*

1. The Adhesive Roll Airshaft is removed by un-clamping the bearing retainers (one each side), to release the Airshaft Bearings from the Holders.
2. Refer to Section 6 for correct removal and replacing of the adhesive roll and correct orientation of the adhesive roll to prevent unwinding of the adhesive during machine operation.
3. Two operators should perform both the purging and fitting of the longer adhesive rolls.
4. The Adhesive Roll Airshaft is replaced into the Holders by pushing it into the Holders and re-attaching the Bearing Clamps or allowing the 'Adhesive Roll Clamp Blocks' to capture the bearings.
5. Information on machines fitted with twin Adhesive Rolls.
6. The Airshaft for machines fitted with twin Adhesive rolls has two adhesive rolls placed on a common airshaft.
7. When these are replaced they must be 'butted' hard against each other and rotated to place the start of the wind at the same position on each roll before the shaft is inflated to the recommended pressure.
8. When purging this unit, treat the two rolls as one, and remove the same amount from each roll.

## WARNING!

Please note the direction of the wrap of the adhesive with respect to the direction of the processed material. If the wrap is in the wrong direction – the Adhesive WILL unwind on to the Rubber Cleaning Roller and this will lead to downtime, as repairs will be required to the XWCH3 to recover the Rubber Cleaning Roller from the Adhesive.

Please note the direction of the wrap of the adhesive rolls



## 6.4 AIRSHAFT INFORMATION

### Air Shafts for use in TEKNEK Clean Machines Internal Concentric Expansion Rubber Pad Metal Body Types

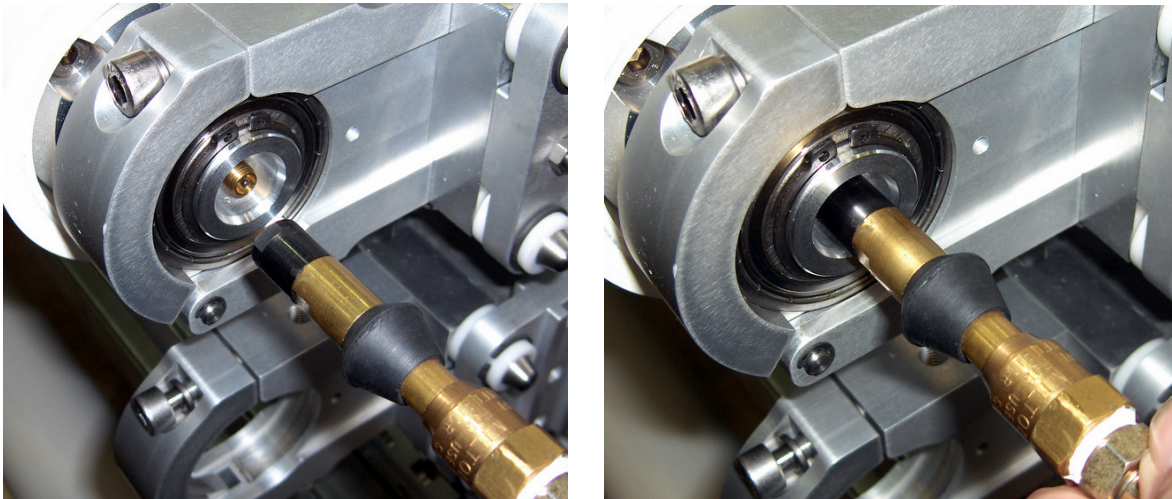
#### Operating Instructions

*These Airshafts are designed specifically for holding rolls of Teknek Adhesive Material ONLY in the Teknek Clean Machine.*

- 1 Connect Air Hose Supply Box to a convenient dry air source. Use only the specially designed Safety Inflation Tool to expand the Airshaft.
- 2 In no case should the shaft be operated with less than the minimum pressure (see table). This shaft is designed to support the Core Adhesive Roll and be driven by the Adhesive Roll freely running on the bearings only in a Teknek Clean Machine.

AIRSHAFT SIZE	MINIMUM PRESSURE	OPERATING PRESSURE
3 INCH (76mm)	21 PSI / 1.5 BAR	29 PSI / 2 BAR

- 3 Position the shaft in the Adhesive Roll Core. Do not inflate while the shaft is spinning.
- 4 To inflate, push the air inflation tool nozzle firmly into the valve receiver, located inside the boss diameter at the end of the shaft. This action will depress both the valve button and the tip of the inflation tool. Hold the nozzle in place for approximately 10 seconds until the line pressure air gauge indicates a return of the desired pressure.



- 5 To deflate the shaft, push in on quick release air valve, allowing the air to escape through the hole in the centre of the button. Remove the shaft from the roll / core.

#### CAUTIONS

- Do not deflate while the shaft is spinning.
- Do not use finger to release air from side valve.

## 7 CLEANING RUBBER ROLLERS

*Information for Machine Operators*

**WARNING – THE LINE MUST BE STOPPED  
ALWAYS DISCONNECT THE CLEANING HEAD POWER SUPPLY(S) BEFORE  
PERFORMING ANY INTERNAL CLEANING OPERATION**

The adhesive roll should be removed from the machine to facilitate access to the rubber roller for cleaning and prevent damage to the adhesive surface.

### 7.1 NANOCLEEN ROLLERS

Rollers should only be touched wearing clean white cotton gloves and should only be cleaned with special NANOWipe cloth and water – see NANOClean sheet at end of manual.

#### **On a daily basis**

Wipe the roller/s using the NANOWipe cloth dampened using clean water and wrung out until just damp.

NEVER use Tekwipes, Isopropyl alcohol or other solvent cleaners on the Nanoclean rollers.

If the surface of the roller/s deteriorates or contamination is evident contact Technical Services for assistance.

### 7.2 FILM, PANEL, ULTRACLEEN TYPE ROLLERS

#### **On a daily basis**

The rubber roller/s should be vigorously wiped using Tekwipes, Teknek Part No. Mi6700.

#### **On a weekly basis**

If the surface of the roller/s deteriorates or contamination is evident vigorously wipe down using Scotchbrite Pad, Teknek Part number Mi5068 and Isopropyl alcohol together.

NOTE: Always allow Isopropyl alcohol to evaporate from the Film, Panel, Ultraclean rollers before allowing the Adhesive roll to come into contact with the rubber roller/s.

**DO NOT USE ACETONE, SCREEN WASH OR ANY SOLVENT BASED CLEANER ON ANY TEKNEK RUBBER ROLLER AS THIS WILL DAMAGE THE COMPONENT AND INVALIDATE WARRANTY.**

**ENSURE THAT NO CLEANING LIQUID FLUIDS IMPREGNATE THE ADHESIVE ROLLER SURFACES**

### 7.3 REMOVING AND REPLACING THE CLEANING ROLLERS

**WARNING – THE LINE MUST BE STOPPED**  
**ALWAYS DISCONNECT THE CLEANING HEAD POWER SUPPLY(S) BEFORE PERFORMING ANY INTERNAL OPERATIONS.**

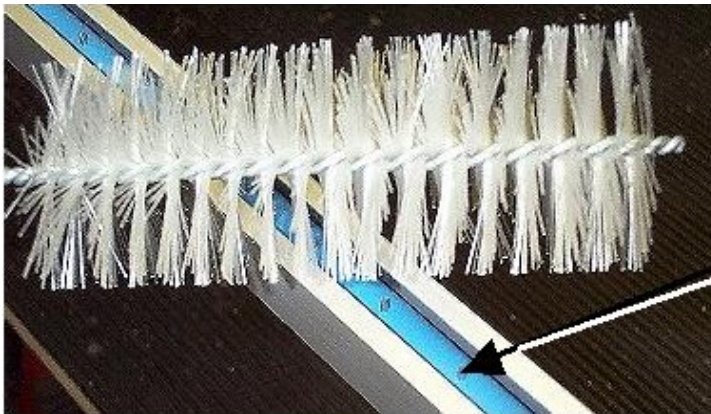
1. If fitted, unlock the slide by pressing of the knob on the catch of the Rubber Roller Carriage and pull out to the side.
2. The Rubber Cleaning Roller is removed by un-clamping the bearing retainers to release the bearings from the holders. Note that the screw is captive in the holder.
3. Two operators should perform both the removal and re-fitting of the longer Rubber Rollers if the machine is over 1200mm wide.
4. The Rubber Roller is replaced into the Holders by pushing it into the Holders and re-attaching the Bearing Clamps.
5. Check that the bearing clamps have been securely fastened.
6. Check that Rubber Cleaning Roller is free to rotate
7. If fitted on telescopic slides firmly replace the Rubber Roll Carriage into the machine and ensure that the lock is activated.

## 7.4 CLEANING ANTI-STATIC BAR (IF SUPPLIED FOR YOUR APPLICATION)

*Information for Machine Operators*

**WARNING – THE LINE MUST BE STOPPED**  
**ALWAYS DISCONNECT THE CLEANING HEAD POWER SUPPLY(S) BEFORE PERFORMING ANY INTERNAL CLEANING OPERATION.**

1. On a daily basis any anti-static bars supplied should be cleaned to remove any contamination from the needle points,
2. TEKNEK recommend using a cleaning brush (Teknek Part Number TK 5598).
3. Failure to adhere to this instruction will diminish the performance of the anti-static bar.
4. Static bar checker (Teknek Part Number Mi2393) can be used to monitor the effectiveness of the static bar.





<b>TIMING</b>	<b>ACTION</b>	<b>REFER TO MANUAL</b>
Each 8 hour Shift or As determined by contamination levels	Purge Adhesive Rollers	Section 6.1
Daily	Clean Anti-Static Bar Clean Rubber Roller with Tekwipes	Section 7.4
Weekly	Clean Rubber Rollers Thoroughly	Sections 7.1, 7.2
4 -6 Weekly	Scotchbrite Rubber Rollers	Sections 7.1, 7.2

### 8.1 BASICS

<b>PART No</b>	<b>DESCRIPTION</b>	<b>QTY</b>
MI6700	TEKWIPES (TUB) WIPES	1
TK5598	ANTI STATIC BAR CLEANING BRUSH	1
MI5068	SCOTCHBRITE PAD	1
MI2393	ANTI STATIC BAR CHECKER (IF REQUIRED)	1
ARBSXXXX	ADHESIVE ROLLS (AS REQUIRED FOR YOUR INSTALLATION)	A/R

## 8.2 INTERMEDIATE

PART No	DESCRIPTION	QTY
MS22414	M8 Captive Screw (Roller Holders)	8
HA54444	Static Earthing Brush	8
PN54357	Pneumatic Piston Dia 50 x 25 stroke	2
PN54358	Pneumatic Piston Dia 50 x 100 stroke	2
PN54359	Pneumatic Piston Dia 40 x 20 stroke	2
SP54486	Gas Spring 100 Stroke 200N	2*
SP54488	Gas Spring 100 Stroke 400N	2*
SP54636	Gas Spring 40 Stroke 400N	2*
SP54638	Gas Spring 40 Stroke 200N	2*
Bearings	See Following Sheet(s)	-
FA9616	Circlip External 030	8

\* CONTACT TECHNICAL SERVICES FOR THE GAS SPRING PART NUMBERS FOR YOUR MACHINE – MACHINE TYPE AND SERIAL NUMBER ARE REQUIRED

### 8.3 ADVANCED

PART No	DESCRIPTION	QTY
HA54395	Linear Guideways	<p><b>Dependant on Machine Type</b></p> <p><b>Contact Technical Services</b></p>
HA54396	Linear Slide Rail Standard	
HA54397	Linear Slide Rail Long	
HA53210	Spring Plunger M5 St St	
MA54448	Bearing Clamp 55	
PL54354	Roller Mount Assembly 55	
MS54442	Slide Docking Pin	
MP54443	Slide Docking Bush	
MS54418	Locking Pin	
FA4142	Circlip External 018	
MS54445	Latch Button	
MS54417	Latch Snib	
Telescopic Slide	See Following Sheet	
Rubber Roller	See Following Sheet	
Airshaft	See Following Sheet	

### 8.4 CONTROL BOX DETAILS

PART No	DESCRIPTION	QTY
Pi55781	Control Box XWCH3 (SS)	Contact Technical Services
Pi55782	Control Box XWCH3 (DS)	Contact Technical Services
Pi55783	Control Box XWCH3 (2x SS)	Contact Technical Services

## 8.5 ROLLERS AND BEARINGS

ALWAYS QUOTE THE MACHINE TYPE AND SERIAL NUMBER WHEN REQUESTING ASSISTANCE, ADVICE OR SPARE PARTS FROM TEKNEK XWCH3-3112 RANGE

**BEARINGS** (Must be fitted using heat)

ADHESIVE ROLL	BE9394
RUBBER ROLLER	BE9394

**CLEANING ROLLERS** (For applications that require a High Speed Roller the ref. 'B' is inserted after the 'SA' e.g. SA11735 becomes SAB11735)

ALL CLEANING WIDTHS ( 600 – 2500mm )
CONTACT TECHNICAL SERVICES

### ADHESIVE AIRSHAFTS

CLEANING WIDTH														
600	750	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000	2200	2400	2500
PL54601	PL54602	PL54603	PL54604	PL54605	PL54606	PL54607	PL54608	PL54609	PL54610	PL54611	PL54612	PL54613	PL54614	PL54615

AIRSHAFT SIZE	MINIMUM PRESSURE	OPERATING PRESSURE
3 INCH (76mm)	21 PSI / 1.5 BAR	29 PSI / 2 BAR

## 8.6 ADHESIVE ROLLS

3" ADHESIVE ROLLS (For 'Sheeted' Adhesive rolls, pre-fix reads 'ARBS' e.g. ARBS1500)

**XWCH3**

**CLEANING ROLLER TYPE**

MACHINE VERSION	Adhesive Width (mm)	No Adhesives	PANEL FILM	ULTRACLEEN NANO	AR Face (mm)
600	622	1	ARBS0600	ARNS0600	622
750	762	1	ARBS0750	ARNS0750	762
1000	1000	1	ARBS1000	ARNS1000	1000
1100	1100	1	ARBS1100	ARNS1100	1100
1200	1200	1	ARBS1200	ARNS1200	1200
1300	1300	1	ARBS1300	ARNS1300	1300
1400	1400	1	ARBS1400	ARNS1400	1400
1500	1500	1	ARBS1500	ARNS1500	1500
1600	1600	2	ARBS0800	1x ARNS1600	1600
1700	1700	2	ARBS0850	1x ARNS1700	1700
1800	1820	2	ARBS0910	1x ARNS1820	1820
2000	2000	2	ARBS1000	1x ARNS2000	2000
2200	2200	2	ARBS1100	ARNS1100	2200
2400	2400	2	ARBS1200	NOT AVAILABLE	2440
2500	2500	2	ARBS 1400 + 1100	NOT AVAILABLE	2500

## 8.7 SLIDE SYSTEMS

TELESCOPIC SLIDES SYSTEMS (IF FITTED)

CLEANING WIDTH – SLIDE TYPE												
600	750	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000	2200
SD54501	SD54502	SD54503	SD54504	SD54505	SD54506	SD54507	SD54508	SD54509	SD54510	SD54511	SD54512	SD54513

FURTHER LISTS OF RECOMMENDED SPARES

A list consisting of major spare parts and complete sub-assemblies.

It can be transmitted from the TEKNEK Technical Services on request.

Please always quote the machine type and serial number.

**IMPORTANT NOTE**

Before adjusting anything on the machine or control system – TEKNEK recommends that the user confirms that the machine(s) are indeed outside the Design Specification as delivered to your requirements.

The speed of operation of the machine is pre-set at the factory before delivery.

The contact pressures of the Cleaning and Adhesive Rollers are pre-set at the factory before delivery.

Increasing the pressure of contact of the Cleaning Roller or the Adhesive Roller will impair machine performance and the life of the rollers.

Increased contact pressure will significantly reduce the cleaning efficiency.

**POSSIBLE CAUSE**

**CORRECTIVE ACTION**

i) Head coming down too quickly or too slowly.

Check and adjust airflow control.

ii) Head going up too quickly or too slowly

Check and adjust airflow control.

iii) Adhesive paper wraps around rubber roller.

Adhesive roll incorrectly installed. Remove, check orientation and replace. Consider taping edge of adhesive.

iv) Contamination not being picked up.

i) Check cleaning roller is contacting web - adjust if necessary.

ii) Check cleanliness of rubber roller. Clean with Tekwipes.

iii) Ensure adhesive roll is purging cleaning roller. Remove outer layer of adhesive roll.

vi) Head not correct distance clear of substrate when in OFF condition

Adjust height setting of head as per installation.

## 10 Machine Specifications and Dimensions

<b>GENERAL CONSTRUCTION</b>	Aluminium End Blocks and general machined parts, Aluminium Alloy Tube Rubber Roller. Covers (if fitted) Aluminium Extrusion with PETG panels. Mounting frame – ITEM 40 x 160 Extrusion profile
<b>FINISH ON SELECTED PARTS</b>	Natural Anodised Aluminium
<b>CAPACITY/SPEED RANGE</b>	For XWCH3 same as line speed or up to 350m/min
<b>POWER SUPPLY REQUIREMENTS</b>	
Cleaning Head Control Box	85 – 264v AC, 50/60 Hz
AIR IN AIR OUT	5 - 7 Bars Oil Free – 6mm hose connection 4mm tube fitting for exhaust air

**INSTALLATION DRAWING SETS**  
(SUPPLIED IN THIS MANUAL)

CONTACT TECHNICAL SERVICES FOR FURTHER INFORMATION

**Single Sided Machines VCH / HCH      REFERENCE MACHINE DRAWING**

XWCH3 25 SLIDES VCH	Pi58265
XWCH3 100 SLIDES VCH	Pi58266
XWCH3 25 SLIDES UCH	Pi58265
XWCH3 100 SLIDES UCH	Pi58266
XWCH3 25 1 SLIDE VCH	Pi58265
XWCH3 100 1 SLIDE VCH	Pi58266
XWCH3 25 1 SLIDE UCH	Pi58265
XWCH3 100 1 SLIDE UCH	Pi58266
XWCH3 25 NS VCH	Pi58265
XWCH3 100 NS VCH	Pi58266
XWCH3 25 NS UCH	Pi58265
XWCH3 100 NS UCH	Pi58266

**Double Sided Machines**

XWCH3 25 25 SLIDES	Pi58267
XWCH3 100 25 SLIDES	Pi58268
XWCH3 100 100 SLIDES	Pi58269
XWCH3 25 25 1SLIDE	Pi58267
XWCH3 100 25 1SLIDE	Pi58268
XWCH3 100 100 1SLIDE	Pi58269
XWCH3 25 25 NS	Pi58267
XWCH3 100 25 NS	Pi58268
XWCH3 100 100 NS	Pi58269

**VCH = VERTICAL ORIENTATION**

**UCH = UPSIDE-DOWN ORIENTATION**

**HCH = HORIZONTAL ORIENTATION**

**SLIDES = BOTH CLEANING AND ADHESIVE ROLLERS FITTED WITH SLIDES**

**1SLIDE = ADHESIVE FITTED WITH SLIDES**

**NS = NO SLIDES FITTED**



**SUB ASSEMBLIES**

TD54360  
PL55515  
PL54440  
PL54441  
PL54354  
PL54377  
PL54378  
PL54379  
PL54399  
PL57359  
SA57347

SLIDE MODULE ASSEMBLY  
CONTROL CHASSIS ASSEMBLY  
SPRING ASSEMBLY 25  
SPRING ASSEMBLY 100  
ROLLER MOUNT ASSEMBLY 55  
ACTUATOR ASSEMBLY 25  
ACTUATOR ASSEMBLY 100  
ACTUATOR ASSEMBLY AR  
ROLLER HOLDER SET  
INSTALLATION KIT BASIC  
INSTALLATION SUGGESTION

<b>EW55786</b>	-	<b>Electrical Schematic Diagram</b>
<b>EW55706</b>	-	<b>Electrical Schematic Diagram</b>
<b>EW56518</b>	-	<b>Electrical Schematic Diagram</b>

PN57284 - Pneumatic Schematic

**End of Document**