

TEKNEK | TEK-NW3 USER GUIDE & SERVICE MANUAL



CONTACT DETAILS:

THE TEK-NW3 is manufactured by Teknek ltd, an ITW Company. If you have any problems during installation, use or ongoing service please contact us at:

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01 | MACHINE SAFETY

SAFETY WITH YOUR MACHINE

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

- When removing the equipment from the transport box ensure that lifting aids are available and in place as required. Removal of most TEKNEK cleaning machines 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 by securely mounting it to the frame of parent machine (dependent on machine type).
- All Teknek Narrow Web Clean Machines must be connected to earth (also known as ground).
- Ensure the intended electrical supply complies with the designated machine specification. The standard electrical supply is 24v DC line running signal.
- Before operating the machine, please read the contents of this manual.
- Ensure that new operators of the machine are given full instruction on use and read the manual before operating the equipment.
- NO loose clothing should be worn when the machine is in operation. All long hair must be tied back.
- DO NOT place hands into areas that could expose them to injury.
- NEVER tamper with or override switches that may be visible when doors or covers are open as this practice could result in personal injury.
- NEVER interfere with or adjust pneumatic components, as this practice could result in personal injury. Authorised Personnel should always carry out servicing and repairs.
- Before opening the machine for service or repair, the electrical and pneumatic supplies from the host machine should ALWAYS be disconnected by Authorised Personnel.
- If the specification of the TEK-NW3 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.

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.

NOTE - Machine specifications may be subject to change without prior notice.

02 | TEKNEK GUARANTEE

TEKNEK guarantees that in the event of the TEK-NW3 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:

- 1. 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.
- 2. TEKNEK is satisfied that repairs have not been carried out or have been attempted by persons not authorised by TEKNEK.
- 3. The product is made available for inspection by TEKNEK or its Authorised Distributor and TEKNEK is reasonably satisfied that the product is defective.
- 4. No replacement parts or Adhesive rolls other than those recommended by TEKNEK are or have been used in or with the Product.

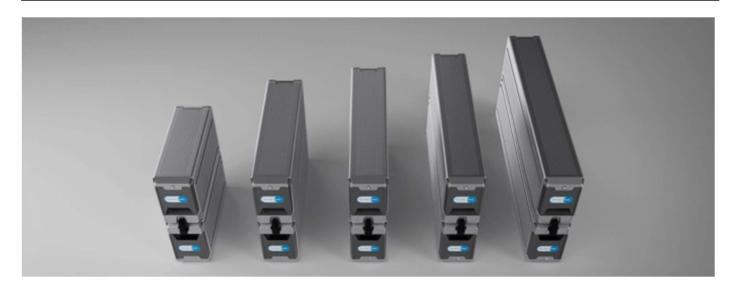
The following points should also be noted:

- 5. This Guarantee is offered in addition to your statutory rights.
- 6. Component parts, which require replacement due to normal wear and tear are excluded from this guarantee.
- 7. 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.
- 8. TEKNEK 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 web being processed by the Narrow Web Cleaner.

NB - Due to the nature of some materials that are processed through the machine it may be necessary to review the replacement of the Cleaning Rollers on a regular basis.

03 | INTRODUCTION



The TEK-NW3 is the next evolution of Teknek's pioneering Narrow Web cleaning machine. Completely re-engineered, the TEK-NW3 offers superior cleaning, enhanced ease of use and increased robustness all within an environmentally optimised chassis.

Compatible with Teknek's specially formulated Cleaning Rollers and Adhesive Rolls, the TEK-NW3 removes contamination from web without abrasion or chemicals. Available in either Single Sided or Double Sided cleaning configurations, Teknek Cleaning Rollers make contact with the web as it passes through the machine, picking up dirt and other particulate contaminate before transferring it to Adhesive Rolls that leave the Cleaning Rollers clean and ready to continue to remove further contaminate.

An anti-static system is integrated into the TEK-NW3 neutralising any static charge present on the media. A passive anti-static system is included as default, while an active system can be included as an optional extra.

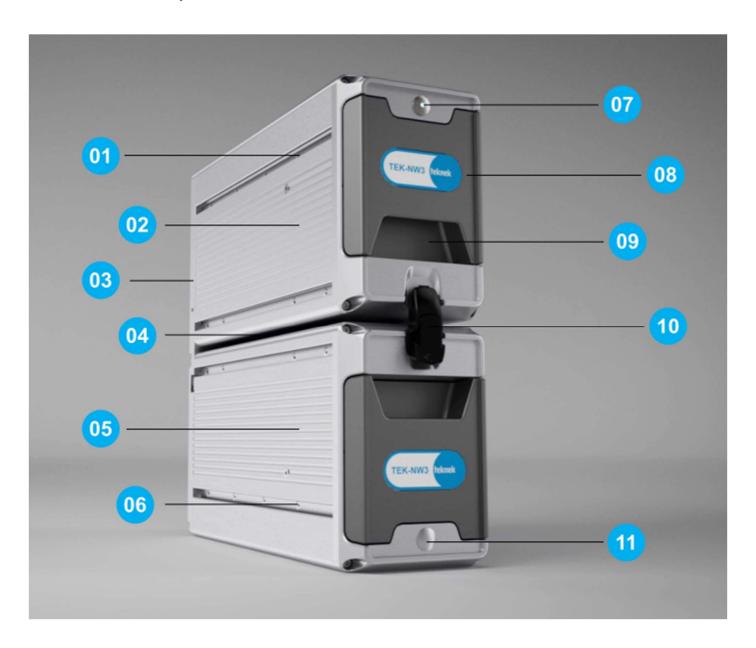
The TEK-NW3's compact size and new external mounting system allows it to be added easily into any line or machine. Additional feet allow quick and secure bottom mounting, while universal threaded holes in the back plate can facilitate rear fixation. Divertor Rollers can be added in a variety of positions to the Bottom Side Cleaner to guide web into and out of the machine with minimal stress. For guick web change over or rethreading, the Top Side of the TEK-NW3 opens upwards fully assisted by gas struts.

Upper and lower adhesive rolls are withdrawn from the cleaning head by means of slides and may be refreshed and replaced easily. It is recommended that the refreshing operation is done while the web is stationary. Removal and replacement of the Cleaning Rollers is a simple process using the quick release system. A newly patented latch mechanism prevents the Adhesive Roll drawer being closed if there is no Adhesive present, stopping accidental cleaning.

The standard TEK-NW3 series is supplied with a 2 meter flying lead, for machine control/power supply. This arrangement allows the customer to integrate the machine with the parent machines' line running signal. The air line is fitted to a 6mm barb fitting, set at a 5-7 bar pressure.

Vertical webs can also be processed but the machine should be supplied and fitted with diverter roller(s) and the gas struts require to be changed (Contact Teknek for retrofit kits).

KEY FEATURES | DOUBLE SIDED MACHINE CLOSED:



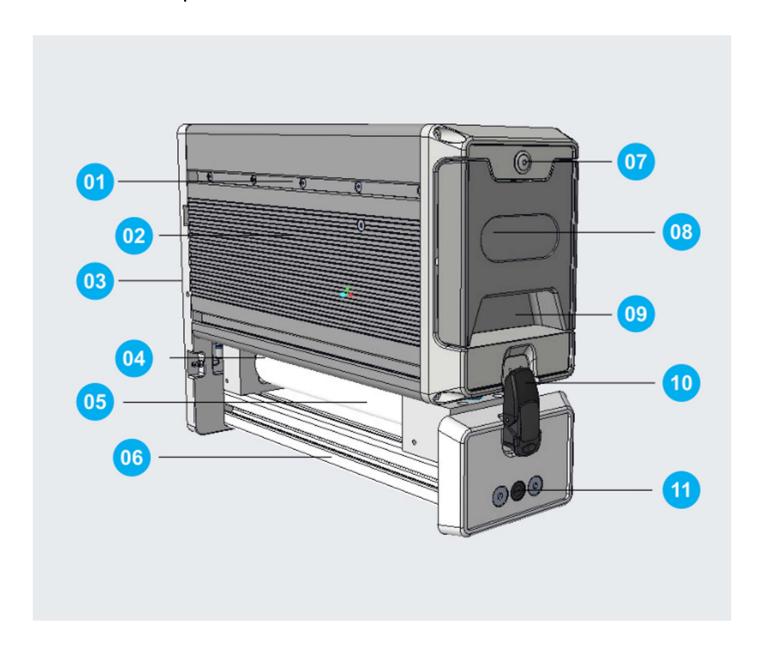
01	Top accessory mounting rail	07	Control & Feedback Button
02	Top Cleaning Module	08	Adhesive Drawer
03	Back plate	09	Adhesive Drawer Handle
04	Web entry / exit channel	10	Front Locking Catch
05	Bottom Cleaning Module	11	Fuse Port
06	Bottom Accessory Mounting Rail		

KEY FEATURES | DOUBLE SIDED MACHINE OPEN:



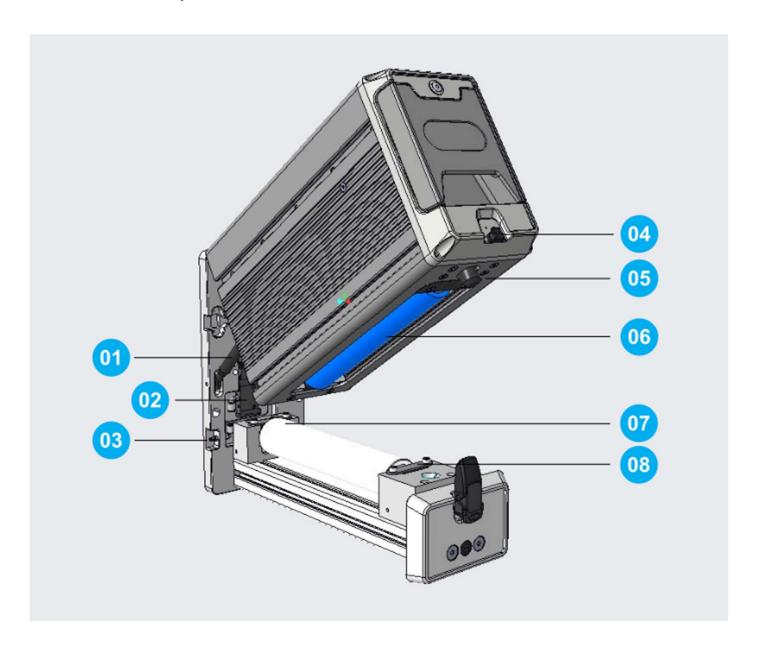
01	Gas Strut	04	Front Locking Catch Nib
02	Solenoid	05	Alignment Knob
03	Pneumatic Air Inlet Connection	06	Topside Cleaning Roller
		07	Bottom Side Cleaning Roller

KEY FEATURES | SINGLE SIDED MACHINE CLOSED:



01	Top accessory mounting rail	07	Control & Feedback Button
02	Top Cleaning Module	08	Adhesive Drawer
03	Back plate	09	Adhesive Drawer Handle
04	Web entry / exit channel	10	Front Locking Catch
05	Bottom Support Roller	11	Fuse Port
06	Bottom Accessory Mounting Rail		

KEY FEATURES | SINGLE SIDED MACHINE OPEN:



01	Gas Strut	04	Front Locking Catch Nib
02	Solenoid	05	Alignment Knob
03	Pneumatic Air Inlet Connection	06	Topside Cleaning Roller
		07	Bottom Side Support Roller
		08	Roller Retention Bracket

04 | TEK-NW3 MODEL VARIATIONS

The TEK-NW3 can be purchased in a range of versatile options depending on your needs. This User Manual covers the instructions for how to install, operate and service each of these variations. The core variations are as follows:

CLEANING SIDE

SINGLE	Single Sided cleaning machines clean the top side of a web material only. The top	
SIDED	side of the machine houses the Cleaning Roller and Adhesive Roll. The bottom side of	
	the machine houses a non-cleaning 'Support' roller.	
DOUBLE	Double Sided cleaning machines clean the top and bottom sides of a web material at	
SIDED	the same time. Both the top and bottom sides of the machine house a Cleaning Roller	
	and an Adhesive Roll.	

CLEANING MODE

AUTO MODE	In Auto Mode, an external Line Run Signal from an external Line Control PLC controls the Machine.
MANUAL MODE	In Manual Mode, the Operator can 'PAUSE' operation of the machine from the external Line Control PLC.

MOUNTING

BASE	For Base Mounting, feet are fitted to the bottom of the machine using the T-Slot channels on either side of the machine.
	Charmers on entrer side of the machine.
BACK	For Back Mounting, the TEK-NW3 can be fixed to a supporting surface by screwing
	into the 8 taped holes on the rear of the Back Plate

NOTE: For either mounting location, the machine can be orientated vertically or horizontally but the machine should be supplied and fitted with diverter roller(s) and the gas struts require to be changed (Contact Teknek for retrofit kits). **The orientation of the machine should be specified at point of purchase to ensure it is configured correctly.**

ANTI-STATIC SYSTEMS

PASSIVE	A Passive Anti-Static Bar is fitted as standard on the exit side of machine, by the cleaning roller to reduce any static built up on the web as it passes through the Cleaning Roller
ACTIVE	An Active Anti-Static Bar can be fitted in place of the Passive Anti-Static Bar as an optional extra. It is fitted on the exit side of the machine, by the cleaning roller, to reduce any static built up on the web as it passes through the Cleaning Roller. The bar is powered externally by a limited 24V power supply.

DIVERTOR ROLLERS

ENTRY / EXIT	Divertor Rollers can be added to either side of the Bottom Side Cleaning Module, by
/ TOP /	attaching the bracket provided to the Top and Bottom external mounting rails with T-
BOTTOM	Nuts. Different brackets supplied can vary the height of the Divertor Rollers so web
	can be easily guided in the direction desired with minimal stress.

05 | UNPACKING







01	REMOVE	 Ensure the packaging is orientated top side up Carefully open the box to reveal the TEK-NW3 Lift out the machine and remove all surrounding packaging from the machine. Refer to the weight on the side of the box to inform the number of 'Lifters' required.
02	REVIEW	 Check for any transit damage – Please notify TEKNEK immediately should there be any damage or discrepancy. Refer to the serial number on the machine when ordering spare parts
03	RECYCLE	 Please ensure all packaging is fed into their respective recycling streams as per their markings

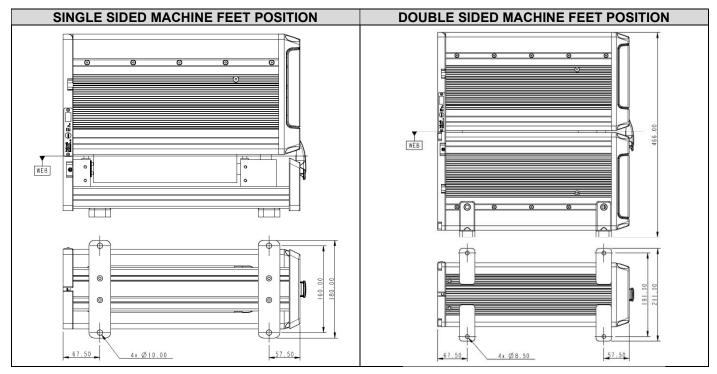
06 | SET UP

Depending on the configuration of the machine you have ordered there may be additional Accessories that to fit to your TEK-NW3 prior to installation. Please see below how to fit / configure these items:

BASE MOUNTING FEET:



01	UNPACK	 The Base Mounting Feet will come supplied in a separate 'Accessories Box', labelled MA78783 that contains 4 feet and all the necessary fasteners. An 6mm Allen Key (not supplied) is required. Remove the Feet from the box and remove any attached protective packaging.
02	FIT T-NUTS	 Insert the T-Nuts [Teknek Part Number: FA78883] into the Bottom T- Slot Mounting Channel: 2 on each side.
03	FIX FEET	 Slide each of the 4 feet under the Bottom Side Cleaning chassis in line with their respective T-Nuts, insert the supplied bolts [Teknek Part Number: FA29949] and tighten with an 6mm Allen Key.
04	SPACE FEET	 Refer to Drawing Pi78878 (Double Sided) and Pi79032 (Single Sided) for spacing and locations of feet.



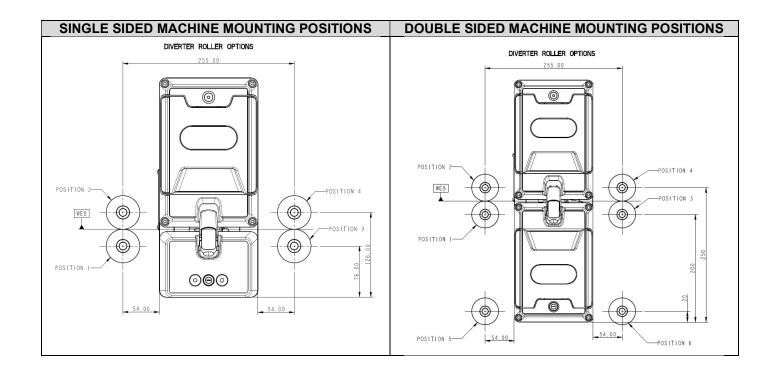
FITTING DIVERTOR ROLLERS:



01	UNPACK	Divertors Rollers, their brackets and fixings will be supplied in
		accompanying 'Accessories Boxes'.
		There are a range of different Divertor Roller mounting positions, which
		require different brackets. The required brackets will be automatically
		supplied dependent on the machine specified at purchase. Refer to
		Drawing Pi78878 (Double Sided) and Pi79032 (Single Sided) and the table below to see the different mounting positions and the
		brackets supplied.
		Remove all items from the Accessory Boxes and remove all protective
		packaging.
02	FIT T-NUTS	Insert the T-Nuts [Teknek Part Number: FA78884] into their
		appropriate T-Slot Mounting Channels on the Cleaning Modules. Slide
		into their approximate final location.
03	FIT BRACKETS	Align the REAR Divertor Roller brackets with its associated T-Nuts and in part the graph in the second in
		insert the supplied screws [Teknek Part Number: FA1185] through the bracket into their T-Nuts. Loosely tighten the bracket in place with the
		supplied custom 4mm Allen Key [Teknek Part Number: HA79034].
04	FIT DIVERTOR	Take the Divertor Roller and fix one end to the fitted Mounting bracket.
	ROLLER	Tighten the Roller to the Bracket using the supplied M4 Screw [Teknek
		Part Number: FA1154] with an 3mm Allen Key (not supplied).
		 Adjust the position of the Divertor Roller Bracket relative to the rear of
		the machine until the edge of the Divertor Roller is 50mm from the rear
		face of the back plate.
		 Fit the SECOND Divertor Roller bracket and slide up until flush with the end of the Divertor Roller.
05	TIGHTEN	Insert the supplied screws into the bracket and into the Divertor Roller
	ROLLER	and tighten until secure.

DIVERTOR ROLLER POSITIONS:

SINGLE SIDE	D MACHINE	DOUBLE SIDED MACHINE	
Divertor roller position	Mounting bracket supplied	Divertor roller position	Mounting bracket supplied
Position 1	MA78874	Position 1	MA78774
Position 2	MA78875	Position 2	MA78775
Position 3	MA78874	Position 3	MA78874
Position 4	MA78875	Position 4	MA78875
		Position 1 + 5	MA78776
		Position 3 + 6	MA78776



FITTING ACTIVE ANTI-STATIC BARS:



01	UNPACK	 If Active Anti-Static Bars have been specified, they will be supplied in separate Accessory Boxes, along with the necessary fixing brackets. Along with each Active Anti-Static Bar, you will be supplied with 2 x L brackets [Teknek Part Number: SM78938] and associated T-Nuts [Teknek Part Number: FA78884] and Screws [Teknek Part Number: FA1183]
02	FIT T-NUTS	 Insert the T-Nuts [Teknek Part Number: FA78884] into their appropriate T-Slot Mounting Channels on the Cleaning Modules. Slide into their approximate final location.
03	FIT L-BRACKETS	 Align the L-Brackets [Teknek Part Number: SM78938] with their associated T-Nuts and insert the supplied screws [Teknek Part Number: FA1183] through the bracket into their T-Nuts. Loosely tighten the bracket in place with a 4mm Allen Key (not supplied).
04	MOUNT ANTI- STATIC BAR	 Take the Anti-Static Bar and fix one end to the Rear L-Bracket [Teknek Part Number: SM78938], using the screw and nut on the Anti-Static Bar. Ensure the ionisation points of the Anti-Static bar are facing towards the Web.

		 Slide the second bracket up underneath the Anti-Static Bar and fix the bar to the bracket.
		 Once you are happy with the position, tighten all screws
05	CONNECT ANTI- STATIC BAR	 Connect the screw connector of cable [Teknek Part Number: EW79031] provided with the Anti-Static Bar, to the side of the anti-static bar.
		 Take the free end of the cable and connect 6-pin connector to the reciprocal connector in the side of the rear plate of the machine. There are connection ports on either side of the machine. Chose the closest one to the mounting point.
06	READY	 Your Active Anti-Static Bar is now ready. The Bar will be controlled and powered dependent on the Mode of the machine [See Section 09 Mode Selection & 10 Machine Operation]

07 | INSTALLATION



01	PREPARE	 Locate the machine as near as possible to the mounting area. Ensure that the area that is allocated for the unit is prepared for installation.
02	ALIGN	Refer to Drawing Pi78878 (Double Sided) and Pi79032 (Single Sided) for BACK MOUNTING OPTIONS and positioning relative to the Web. Single Sided Machines: Align the machine so that the web is just in contact with the SUPPORT ROLLER in the bottom section. Ensure the machine is level. Ensure the machine is perpendicular to the running direction of the web. NOTE: When cleaning, the web should typically be centred within the cleaning width of the machine, leaving an equal space either side of the web. Double Sided Machines: Align the machine so that the web is just in contact with the Cleaning Roller in the bottom cleaning module, and that the Cleaning Roller in the Top Side Cleaning Module is clear of the web. Ensure the machine is level.
		 Ensure the machine is perpendicular to the running direction of the web. NOTE: When cleaning, the web should typically be centred within the cleaning width of the machine, leaving an equal space either side of the web.
03	FIX	Securely fasten the unit to the installation area as required using the mounting holes within the Base Mounted Feet or the Back Plate as detailed in the Layout Drawings:

		TEK-NW3 Single Sided: Pi79032TEK-NW3 Double Sided: Pi78878
04	GROUND	 Connect the loose 2m fly lead [Teknek Part Number: EW79025] to the machine loom protruding from the back plate of the machine. Ensure the Green Wire (Machine Earth) is connected to ground on the production Line.
05	CONNECT	 Connect the unit to power, line signal and pneumatics as per the drawings: Electrical Connection Schematics: EW78995 Pneumatic Connection Schematics: EW78997
06	CLEAN	 Thoroughly clean down the machine with Tekwipes. Undo the latch holding the cleaning heads together and lift the top head. Remove the piece of paper between the blue rollers. (For shipping purpose). Clean down the blue rollers following the instructions in Section 11, Maintenance. Allow drying completely. Access the Adhesive rolls and remove the outer cellophane wrapping. Install into the machine as per guidelines in Section 10, Machine Operation. Take special care to ensure the Adhesive Rolls are inserted in the correct orientation relative to the flow direction of the web.
07	READY	 The TEK-NW3 Cleaning Head is now ready to use. Please read Section 1, Machine Operation before operating the machine

ADHESIVE ORIENTATION

It is important that the Adhesive Rolls are placed into the TEK-NW3 machine in the proper orientation relative to the direction of the Web Flow. Incorrect orientation of the Adhesive Rolls will result in Adhesive wrapping around the Cleaning Rollers.

Web flow is defined from the perspective of an Operator standing in front of the TEK-NW3's pull-out doors.

WEB FLOW DIRECTION FROM LEFT TO RIGHT

When the web passes through the TEK-NW3 from Left to Right, please load Adhesive Rolls as follows:

ADHESINE WRAD	TOP SIDE ADHESIVE ROLL	Load the Roll so that the Orange Dot on Adhesive Roll is orientated towards the REAR of the machine.
ADHESIVE WRAD	BOTTOM SIDE ADHESIVE ROLL	Load the Roll so that the Orange Dot on the Adhesive Roll is orientated towards the FRONT of the machine.

WEB FLOW DIRECTION FROM RIGHT TO LEFT

When the web passes through the TEK-NW3 from Right to Left, please load Adhesive Rolls as follows:

ADHESNE .	TOP SIDE ADHESIVE ROLL	Load the Roll so that the Orange Dot on Adhesive Roll is orientated towards the FRONT of the machine.
WEB CHESNE	BOTTOM SIDE ADHESIVE ROLL	Load the Roll so that the Orange Dot on the Adhesive Roll is orientated towards the REAR of the machine.

08 | MODE SELECTION

The TEK-NW3 can be purchased in 2 modes: either **AUTOMATIC or MANUAL**. The machine will be set to the specified mode before shipping and cannot be altered without altering the machine by a Teknek qualified Service Engineer.

For each of these MODES, the machine can be operated with **CONTINUOUS POWER** or **NON-CONTINUOUS POWER**.

AUTO MODE

In Auto Mode, an external Line Run Signal from an external Line Control PLC controls the Machine.

OPERATION WITH CON	TINUOUS POWER	
ACTIVATING/ STOPPING CLEANING:	 To start cleaning, an external Line Run Signal triggers the Adhesive Roll/s to be brought onto the Cleaning Rollers. The Active Anti-Static Bar/s will be turned on. The machine will enter the 'RUNNING' state. To stop cleaning, an external Line Run Signal triggers the Adhesive Roll/s to be lifted off the Cleaning Rollers. The Active Anti-Static Bar/s will turn off. The machine will remain in the 'READY' state. 	
OPENING/ CLOSING ADHESIVE ROLL DRAWER:	 Pulling open either the Top or Bottom Adhesive Roll drawer will trigger the Adhesive Roll/s to lift off the Cleaning Rollers and the Active Anti-Static Bar/s to turn off. The Control Button will display an 'ERROR', state. Re-closing BOTH the Top and Bottom Adhesive Roll drawers will send a signal to the external Line Control PLC that the machine is 'READY' and waiting on a 'RUN' signal. The Adhesive Roll/s will remain in the off state and the Active Anti-Static Bar/s will remain off. 	
UNLATCHING/ LATCHING THE TOP SIDE CLEANING MODULE:	 Unlatching the Top Side Cleaning Module at any point will trigger the Adhesive Roll/s to lift off the Cleaning Roller/s and turn off the Active Anti-Static Bar/s (if fitted). The Control Button will display an 'ERROR' State. Closing the Top Module and relatching will send a signal to the external Line Control PLC that the machine is 'READY' and waiting on a 'RUN' signal. 	
OPERATION WITH NON-CONTINUOUS POWER		
OPERATION WITH NON	-CONTINUOUS POWER	
OPERATION WITH NON ACTIVATING/ STOPPING CLEANING:	 To start cleaning, an external Line Run Signal triggers the Adhesive Roll/s to be brought onto the Cleaning Rollers. The Active Anti-Static Bar/s will be turned on. The machine will enter the 'RUNNING' state. To stop cleaning, an external Line Run Signal triggers the Adhesive Roll/s to be lifted off the Cleaning Rollers. The Active Anti-Static Bar/s will turn off. The Machine will remain in the 'OFF' state. 	
ACTIVATING/ STOPPING	 To start cleaning, an external Line Run Signal triggers the Adhesive Roll/s to be brought onto the Cleaning Rollers. The Active Anti-Static Bar/s will be turned on. The machine will enter the 'RUNNING' state. To stop cleaning, an external Line Run Signal triggers the Adhesive Roll/s to be lifted off the Cleaning Rollers. The Active Anti-Static Bar/s 	

	Roller/s and the Active Anti-Static Bar/s turned on (if fitted). If there is no Power, the Adhesive Roll/s will remain off and the Active Anti-Static Bar/s off.
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MANUAL MODE

In Manual Mode, the Operator can 'PAUSE' operation of the machine from the external Line Control PLC. It works in the following way:

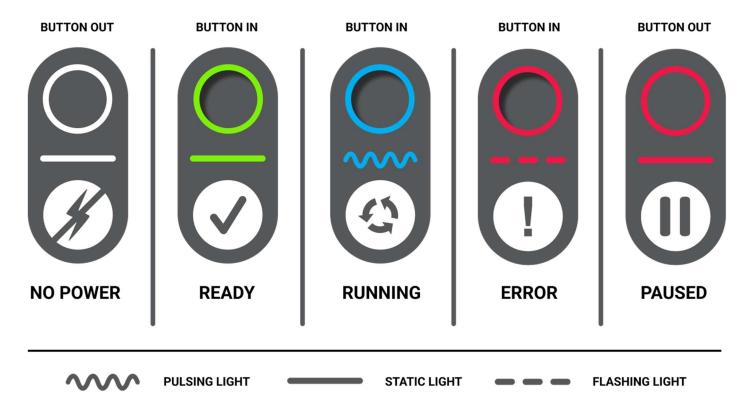
OPERATION WITH CON	ITINUOUS POWER
ACTIVATING/ STOPPING CLEANING:	 Pressing the Control Button 'IN' moves the machine into the 'READY STATE' and informs the external Line Control PLC it is ready and waiting for a 'Line Run Signal'. On receipt of a 'Line Run Signal', the Adhesive Roll/s move onto the Cleaning Roller/s enabling web cleaning to commence; in addition, Active Anti-Static Bar/s will turn on (if fitted). The machine enters 'RUNNING' state. In Double Sided machines both top and bottom Adhesive Rolls are brought on and off at the same time. When the 'Line Run Signal' is stopped, the Adhesive Roll/s will disengage from the Cleaning Roller/s and the Active Anti-Static Bar/s will turn off. The machine will enter the READY' state awaiting a new 'Line Run Signal'.
PAUSING CLEANING:	 If the machine is receiving a 'Line Run Signal' from the external Line Control PLC, an operator can 'PAUSE' cleaning, by pressing the Control Button into the 'OUT' State. When paused, the machine will tell the external Line Control PLC the machine is NOT ready to run; the Adhesive Roll/s will move off the Cleaning Rollers and the Active Anti-Static Bar (if fitted) will turn OFF. The machine will enter the 'PAUSED' state.
OPENING/ CLOSING ADHESIVE ROLL DRAWER:	 Pulling open either the Top or Bottom Adhesive Roll drawer at any point will trigger the Adhesive Roll/s to lift off the Cleaning Roller/s and turn off the Active Anti-Static Bar/s if fitted. The machine will enter the 'ERROR' state. Closing BOTH Adhesive Roll drawers will resume operation of the machine: If the Control Button was previously in the 'IN' state, the machine will revert to the 'READY' state and the Cleaning Roll/s and Active Anti-Static bar/s (if fitted) will remain off until an new external 'Line Run Signal' is received. If the Control Button was previously in the 'OUT' state and the machine was 'PAUSED', closing both drawers will revert the machine to the 'PAUSED' state with the Adhesive Roll/s disengaged and the Active Anti-Static bars off (if fitted).
UNLATCHING/ LATCHING THE TOP SIDE CLEANING MODULE:	 Unlatching the Top Side Cleaning Module at any point will trigger the Adhesive Roll/s to lift off the Cleaning Roller/s and turn off the Active Anti-Static Bar/s if fitted. The Control Button will display an 'Error State'. Closing the Top Module and relatching will return the machine either to the 'READY' state if the Control Button was 'IN' or the 'PAUSED' state if the Control button is 'OUT'.
	-CONTINUOUS POWER
ACTIVATING/ STOPPING CLEANING:	 If the Control Button is in the 'IN' position, on receipt of an external 'Line Run' signal from the Line Control PLC, the machine will enter the 'RUNNING' state. The Adhesive Roll/s move onto the Cleaning Roller/s enabling web cleaning to commence and the Active Anti-Static Bar/s will turn on (if fitted). In Double Sided machines both top and bottom Adhesive Rolls are brought on and off at the same time.

	When the 'Line Run Signal' is stopped, the Adhesive Roll/s will disengage from the Cleaning Roller/s and the Active Anti-Static Bar/s will turn off. The machine will enter the 'NO POWER' state.
PAUSING CLEANING:	 If the machine is receiving a 'Line Run Signal' from the external Line Control PLC, an operator can 'PAUSE' cleaning, by pressing the Control Button into the 'OUT' State. When paused, the machine will tell the external Line Control PLC the machine is NOT ready to run; the Adhesive Roll/s will move off the Cleaning Rollers and the Active Anti-Static Bar (if fitted) will turn OFF. The machine will enter the 'PAUSED' state.
OPENING/ CLOSING ADHESIVE ROLL DRAWER:	 Pulling open either the Top or Bottom Adhesive Roll drawer at any point will trigger the Adhesive Roll/s to lift off the Cleaning Roller/s and turn off the Active Anti-Static Bar/s if fitted. The machine will enter the 'ERROR' state. Closing BOTH Adhesive Roll drawers will resume operation of the machine: If the Control Button was previously in the 'IN' state and the machine was receiving an external Line Running Signal the Adhesive Roll/s will be brought onto the Cleaning Roller/s and immediately enter the 'RUNNING' state. WE STRONGLY RECOMMEND YOU DO NOT DO THIS. If the Control Button was previously in the 'OUT' state and the machine was 'PAUSED', closing both drawers will revert the machine to the 'PAUSED' state with the Adhesive Roll/s disengaged and the Active Anti-Static bars off (if fitted).
UNLATCHING/ LATCHING THE TOP SIDE CLEANING MODULE:	 Unlatching the Top Side Cleaning Module at any point will trigger the Adhesive Roll/s to lift off the Cleaning Roller/s and turn off the Active Anti-Static Bar/s if fitted. The Control Button will display an 'ERROR' State'. Closing the Top Module and relatching will return the machine either to the 'RUNNING' state if the Control Button was 'IN' or the 'PAUSED' state if the Control button is 'OUT'.

09 | MACHINE FEEDBACK STATES

MANUAL MODE - CONTINUOUS POWER

In Manual Mode, the Control Button illuminates to provide feedback on the state of the machine as follows:

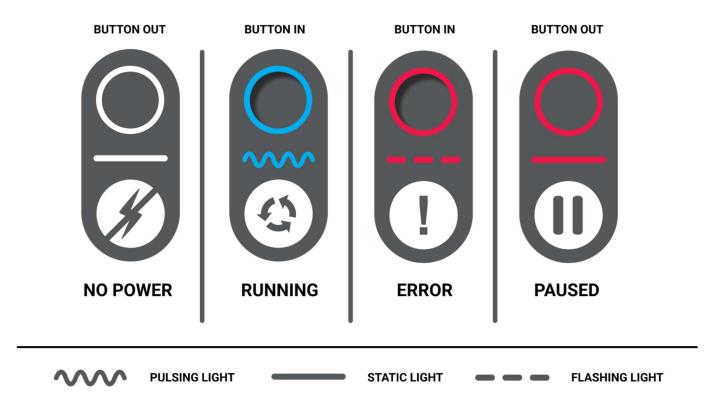


MACHINE STATE	BUTTON FEEDBACK	BUTTON STATE	MACHINE ACTIVITY
No Power	Button has no light	OUT	 No power is running to the machine. The machine defaults to a 'NOT READY' state for the external Line Control PLC. No line running signal has been sent from the external PLC
Ready	Button is Green and Static	IN	 The machine has 24V power. The Active Anti-Static Bar (if fitted) has power but is OFF. The machine has told the external Line Control PLC it is READY and is waiting for a 'Line Run Signal'. All Adhesive Doors are closed. The Top side cleaning module is locked down
Running	Running Button is Blue and Pulsing		 The machine has 24V power. The Active Anti-Static Bar (if fitted) has power and is ON. The machine has received a 'Line Run Signal' from the external Line Control PLC The Adhesive Rolls have been brought onto the Cleaning Rollers

			The machine has 24\/ newer
Error	Button is Red and Flashing	IN	 The machine has 24V power. The machine has told the external Line Control PLC the machine is NOT ready to run. The Active Anti-Static Bar (if fitted) has power and is OFF. The Adhesive Rolls have been lifted off the Cleaning Rollers One / all of the following might have occurred: One/ both Adhesive Doors are open – if the door doesn't close check there is an Adhesive Roll in the carriage. The Top side cleaning module is NOT locked down
Machine Paused	Button is Red and Static	OUT	 The machine has been paused by the Operator. The machine has 24V power. The machine has told the external Line Control PLC the machine is NOT ready to run. The Active Anti-Static Bar (if fitted) has power and is OFF. The Adhesive Rolls have been lifted off the Cleaning Rollers

MANUAL MODE - NON-CONTINUOUS POWER

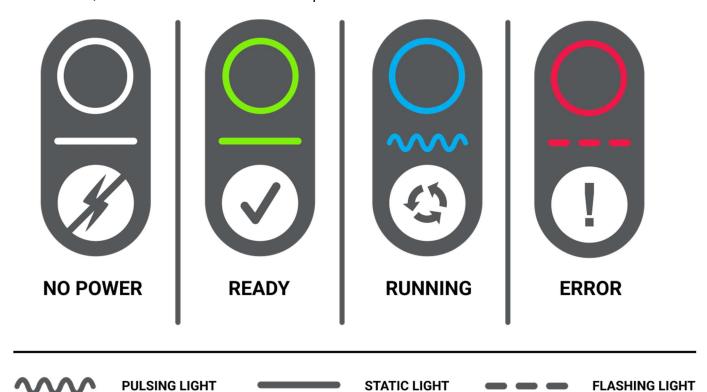
In Manual Mode, the Control Button illuminates to provide feedback on the state of the machine as follows:



MACHINE STATE	BUTTON FEEDBACK	BUTTON STATE	MACHINE ACTIVITY
No Power	Button has no light	OUT	 No power is running to the machine. The machine defaults to a 'NOT READY' state for the external Line Control PLC. No line running signal has been sent from the external PLC
Running	Button is Blue and Pulsing	IN	 The machine is receiving a 'Line Run Signal' from the external Line Control PLC and is receiving 24V power. The Active Anti-Static Bar (if fitted) has power and is ON. The Adhesive Rolls have been brought onto the Cleaning Rollers
Error	Button is Red and Flashing	IN	 The machine is still receiving an external Line Control PLC and is receiving 24V power. The machine has told the external Line Control PLC the machine there is an ERROR, and it is NOT ready to run. The Active Anti-Static Bar (if fitted) has power and is OFF. The Adhesive Rolls have been lifted off the Cleaning Rollers One / all the following might have occurred: One / both Adhesive Doors are open – if the door doesn't close check there is an Adhesive Roll in the carriage. The Top side cleaning module is NOT locked down
Machine Paused	Button is Red and Static	OUT	 The machine has been paused by the Operator. The machine is receiving a 'Line Run Signal' from the external Line Control PLC and is receiving 24V power. The machine has told the external Line Control PLC the machine is NOT ready to run. The Active Anti-Static Bar (if fitted) has power and is OFF. The Adhesive Rolls have been lifted off the Cleaning Rollers

AUTO MODE - CONTINUOUS POWER

In Auto Mode, the Control Button illuminates to provide feedback on the state of the machine as follows:



NOTE:

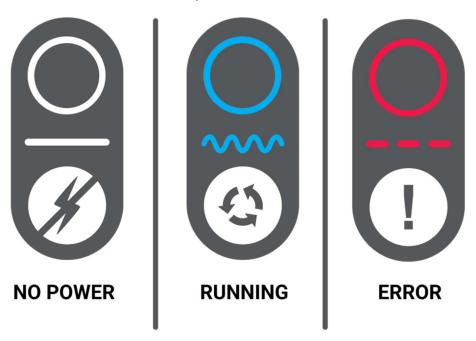
- In AUTO MODE the positional states of the Control button are DISABLED i.e., whether the Button is IN or OUT does not affect the operation of the machine.
- There is no 'Pause' Function in Auto Mode

MACHINE STATE	BUTTON FEEDBACK	BUTTON STATE	MACHINE ACTIVITY
No Power	Button has no light	NA	 No power is running to the machine. The machine defaults to a 'NOT READY' state for the external Line Control PLC. No line running signal has been sent from the external PLC
Ready	Button is Green and Static	NA	 The machine has 24V power. The Active Anti-Static Bar (if fitted) has power but is OFF. The machine is waiting for a 'Line Run Signal' from the external Line Control PLC. All Adhesive Doors are closed. The Top side cleaning module is locked down
Running	Button is Blue and Pulsing	NA	 The machine has 24V power. The Active Anti-Static Bar (if fitted) has power and is ON. The machine has received a 'Line Run Signal' from the external Line Control PLC The Adhesive Rolls have been brought onto the Cleaning Rollers

Error	Button is Red and Flashing	NA	 The machine has 24V power OR has received a 'Line Run Signal' from the external Line Control PLC The Active Anti-Static Bar (if fitted) has power and is OFF. The Adhesive Rolls have been lifted off the Cleaning Rollers One / all the following might have occurred: One/ both Adhesive Doors are open – if the door doesn't close check there is an Adhesive Roll in the carriage. The Top side cleaning module is NOT locked down
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AUTO MODE – NON-CONTINUOUS POWER

In Auto Mode, the Control Button illuminates to provide feedback on the state of the machine as follows:





PULSING LIGHT

STATIC LIGHT



FLASHING LIGHT

NOTE:

- In AUTO MODE the positional states of the Control button are DISABLED i.e., whether the Button is IN or OUT does not affect the operation of the machine.
- There is no 'Pause' Function in Auto Mode

MACHINE	BUTTON	BUTTON	MACHINE ACTIVITY
STATE	FEEDBACK	STATE	
No Power	Button has no light	NA	 No power is running to the machine. The machine defaults to a 'NOT READY' state for the external Line Control PLC. No line running signal has been sent from the external PLC

Running	Button is Blue and Pulsing	NA	 The machine is receiving a 'Line Run Signal' from the external Line Control PLC and is receiving 24V power. The Active Anti-Static Bar (if fitted) has power and is ON. The Adhesive Rolls have been brought onto the Cleaning Rollers
Error	Button is Red and Flashing	NA	 The machine is receiving an external Line Control PLC and is receiving 24V power. The Active Anti-Static Bar (if fitted) has power and is OFF. The Adhesive Rolls have been lifted off the Cleaning Rollers One / all the following might have occurred: One/ both Adhesive Doors are open – if the door doesn't close check there is an Adhesive Roll in the carriage. The Top side cleaning module is NOT locked down

10 | MACHINE OPERATION

START-UP OPERATION

MANUAL MODE:

01	STOP	 Ensure the line has stopped. Ensure the Control Button is in the 'OUT' State (the button will NOT be depressed or illuminated).
02	OPEN	Open the Front latch and guide the Top Cleaning Module upwards.
03	CLEAN	 Manually rotate the Top/ Bottom Cleaning rollers and check they are in a good state: Consistent diameter along the Roller / no cuts or diverts out of the roller / no residue on the surface of the Rollers. If residue is present, follow steps in Section 11 Maintenance, for cleaning with Roller Doctor.
04	THREAD	 Thread the Web through the machine ensuring it is positioned in the middle of the Bottom Module Cleaning Roller / Bottom Support Roller
05	CLOSE	 Close the machine, pulling the Top Cleaning Module down and ensuring the Front Latch is fully closed locking it in place.
06	REFRESH	 Open the Adhesive Roll Drawer/s and Refresh the Adhesive if required. Check the Adhesive Roll has been correctly orientated in the Drawer. Close the Drawer/s ensuring they are fully closed and locked into place.
07	CHECK	Check the Power and Air supplies are connected
08	START	 Depress the Control Button into the 'ON' State and await the 'Line Run Signal' from the external Line Control PLC. On activation you'll hear the Adhesive Rolls move on the Cleaning Rollers.

AUTO MODE:

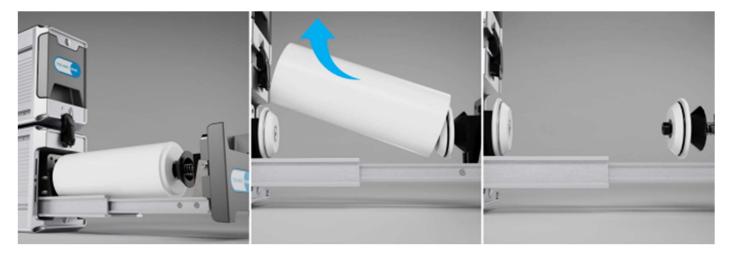
01	STOP	Ensure the line has stopped.
		Ensure the Control Button is NOT illuminated
02	OPEN	Open the Front latch and guide the Top Cleaning Module upwards.
03	CLEAN	 Manually rotate the Top/ Bottom Cleaning rollers and check they are in a good state: Consistent diameter along the Roller / no cuts or diverts out of the roller / no residue on the surface of the Rollers. If residue is present, follow steps in Section 11 Maintenance, for cleaning with Roller Doctor.
04	THREAD	Thread the Web through the machine ensuring it is positioned in the middle of the Bottom Module Cleaning Roller / Bottom Support Roller
05	CLOSE	 Close the machine, pulling the Top Cleaning Module down and ensuring the Front Latch is fully closed locking it in place.
06	REFRESH	 Open the Adhesive Roll Drawer/s and Refresh the Adhesive if required. Check the Adhesive Roll has been correctly orientated in the Drawer. Close the Drawer/s ensuring they are fully closed and locked into place.
07	CHECK	Check the Power and Air supplies are connected
80	START	 Your TEK-NW3 is ready to receive a 'Line Run Signal' from the external Line Control PLC.

REFRESHING ADHESIVE ROLLS



01	STOP	 Before refreshing Adhesive, we recommend first ensuring the TEK-NW3 is in the 'OFF' State. For MANUAL MODE machines, adjust the 'Control Button' so it is NOT depressed or illuminated. I.e., it is in 'PAUSED' state or 'NO POWER' For AUTO MODE machines, ensure the TEK-NW3 has received a remote off signal, and the Control Button is NOT illuminated.
02	OPEN	Insert your fingers into the recessed Drawer Door handle and pull the drawer out fully until you hear it engage with the front of machine. The Adhesive Roll should now be fully visible and accessible.
03	REFRESH	 Find the edge of the Adhesive wrap, peel and lift until you remove a complete layer of the Adhesive from the Adhesive Roll. The remaining visible Adhesive layer should be fresh and clean. Teknek Cleaning Rollers are most effective when paired with fresh Adhesive Roll. For Double Sided cleaning TEK-NW3 machines, always refresh the Top and Bottom Adhesive Rolls equally and at the same time to ensure optimum cleaning.
04	CLOSE	 Close the drawer fully, ensuring the rear magnets catch and lock the drawer in the closed position.
05	REPEAT	It is recommended that Adhesive Refreshing be carried out minimum once every 8 hours, or more frequently if the dust level is high.

REPLACING THE ADHESIVE ROLLS



01	STOP	Before replacing Adhesive Rolls, we recommend first ensuring the TEK-NW3 is in the 'OFF' State. For MANUAL MODE machines, adjust the 'Control Button' so it is NOT depressed or illuminated. I.e., it is in 'PAUSED' state or 'NO POWER' For AUTO MODE machines, ensure the TEK-NW3 has received a remote off signal, and the Control Button is NOT illuminated.
02	OPEN	 Insert your fingers into the recessed Drawer Door handle and pull the drawer out fully until you hear it engage with the front of machine. The Adhesive Roll should now be fully visible and accessible.
03	REMOVE	 Grip the Adhesive Roll and pull it towards you, compressing the spring on the roller spigot. Tilt the far end of Adhesive Roll upwards and lift out of the carriage. NOTE: The 'Adhesive Roller Catch' will now prevent the drawer from being closed until a new Adhesive Roll has been inserted.
04	REPLACE	 Take the new replacement Adhesive Roll and place the nearest end onto the Quick Release Holder disk at and angle, pulling it towards you to compress the spring. Push the far end of the Adhesive Roll down and locate on the far Quick Release Holder disk, releasing pressure on the spring. CHECK THE ADHESIVE ROLL IS IN THE CORRECT ORIENTATION NOTE: The 'Adhesive Roller Catch' will now be disabled allowing the drawer to be closed.
05	CLOSE	Close the drawer fully, ensuring the rear magnets catch and lock the drawer in the closed position.

REPLACING THE CLEANING ROLLERS:



01	STOP	 Before refreshing Adhesive, we recommend first ensuring the TEK-NW3 is in the 'OFF' State. For MANUAL MODE machines, adjust the 'Control Button' so it is NOT depressed or illuminated. I.e., it is in 'PAUSED' state or 'NO POWER' For AUTO MODE machines, ensure the TEK-NW3 has received a remote off signal, and the Control Button is NOT illuminated.
02	OPEN	Open the Front latch and guide the Top Cleaning Module upwards.
03	UNSCREW	 Unscrew the Cleaning Roller Retention bracket at the nearside end of the Roller, with an 3mm Hex Allen Key, making sure to keep the 2 removed screws safe.
04	REMOVE	 Lift the nearside end of the Cleaning Roller, pull the Roller towards you and lift out of the machine.
05	REPLACE	 Line up the mounting block of the replacement Cleaning Roller with the far end bracket and push into the pocket at an angle. Push the nearside end of the Roller into the nearside mounting block. Screw down the Cleaning Roller Retention Bracket Remove the protective covering on the Cleaning Roller so it is ready for use.

11 | MAINTENANCE

TEKNEK ELASTOMER CLEANING ROLLER WARRANTY

Teknek warrants each elastomer roller sold by it, to be free of defects in both material and workmanship under normal use and service for a period of 12 months from the actual date of shipment. This warranty does not apply to rollers which have been altered, damaged, improperly stored, installed, or maintained or subjected to abuse or abnormal operation. Teknek's liability under this warranty is limited to replacement of defective product. In no event, shall Teknek be liable for any collateral, consequential, indirect, or incidental damages arising out of or connected in any way with the use or loss of use of any elastomer roller.

This warranty is only valid if:

- Teknek Tekwipes are the only product used for cleaning the rollers.
- The rollers have been maintained in accordance with the Teknek maintenance procedure.
- Teknek Adhesive rolls have been used with the elastomer rollers.

DO NOT USE SOLVENTS OR OTHER "ROLLER CLEANING FLUIDS". THIS WILL INVALIDATE THE WARRANTY.

ROLLER MAINTENANCE

FREQUENCY	ACTIVITY
EACH SHIFT	Remove a layer of adhesive at least once a day at the beginning of the shift to maximise particle collection.
DAILY	Clean the elastomer rollers every day using the microfibre Tekwipes. [Teknek Part Number: Mi6700]
WEEKLY	Inspect the elastomer rollers and use the Roller Doctor Pads to remove any visible marks and/ or blemishes. [Teknek Part Number: PL63097SP].
EVERY 3 MONTHS	Perform a deeper cleaning of the elastomer rollers using the Roller Doctor Pads Kit. (Roller Doctor). WARNING: Do not allow Roller Doctor to come-in-contact with plastic parts as
	damage may occur.

CLEANING STATIC BARS

FREQUENCY	ACTIVITY
WEEKLY	The active anti-static bars (if fitted) should be cleaned with a nylon bristle brush to
	remove contamination from the needle points. [Teknek Part Number Mi4609SP].

REPLACING THE FUSE

If the fuse in the machine has failed and needs to be replaced, follow the steps below:

FREQUENCY	ACTIVITY	
POWER OFF	Ensure the power supply to the machine has been switched off / disconnected	
REMOVE	 Locate the Fuse port on the front plate of the Bottom Module Unscrew the Fuse port cover. Remove the defective fuse 	
REPLACE	Insert a new 2A fuse	
RESTART	Reconnect the 24V power supply	

12 | FAULT FINDING

FAULT	POSSIBLE CAUSE	ACTION REQUIRED
Machine does not operate	No power electrical or pneumatic	Ensure a 24v supply / line run signal is present as well as 5- 7 bar, dry and oil-free compressed air.
Anti-static bar not operating (if active antistatic is fitted)	 The fuse in the power loom has failed. The Anti-Static bar has disconnected from the Main Machine Loom. 	 Check the Fuse Check the connection of the cable between the Anti-Static Bar and the machine [Teknek Part Number: EW79031]
Adhesive paper wraps around blue rollers	 Wrongly installed adhesive rolls 	Check section in manual on adhesive orientation.
The Elastomer Cleaning Rollers are covered with contaminants	 The Adhesive Rolls are saturated with contaminants 	Check and purge the adhesive rolls
The machine does not operate as expected.	 Machine maybe set up for the wrong mode of operation. 	Check jumper connections on connection board
The Adhesive Rolls do not engage with Elastomer Cleaning Rollers	 The Air supply to the cylinders is incorrect. 	Check air supply is correct pressure (5-7bar), dry and oil-free.
Machine not cleaning surfaces satisfactorily	 Adhesive rolls empty The Cleaning Rollers are covered with contaminants. 	 Replace adhesive rolls Check the Cleaning Rollers for damage and clean them as outlined in 'Maintenance'.
Adhesive drawer doesn't close	There is no Adhesive Roll fitted within the module and the Adhesive Roll Catch is preventing the drawer from closing.	Insert a new Adhesive Roll into the machine.
Adhesive drawer doesn't stay shut	 There is material caught between the drawer door and the surround preventing the locking magnets from engaging. There the drawer magnets have moved out of position 	 Clear any material stuck too / lodged between the drawer and the surround. Check the machine back plate and endure the magnets are still present.
Top Module doesn't stay open	The pneumatic struts have lost their strength	Check the pneumatic struts are gassed. If not contact our Technical Services team for a replacement.

13 | SPECIFICATION

Machine Dimensions	Refer to:
	Pi78878 (Double Sided)
	Pi79032 (Single Sided)
Machine Type	In-line Narrow Web Cleaner
Machine Construction	Extruded aluminium chassis with die cast aluminium front
	surround and drawer door. Machined aluminium back plate.
Finish	Powder coated.
Capacity	Capacity Accommodates materials up to 3.2mm (0.126") thick.
Speed	As per Installed Web Speed (250m/min max)
Air Supply	5 - 7 bar, dry and oil-free compressed air
Power	24V +/-1V, 2A max
Web Direction	Models available to suit either Left to Right or Right to Left web
	flow relative to machine.

14 | RECOMMENDED SPARES

PREVENTATIVE MAINTENANCE TOOLS

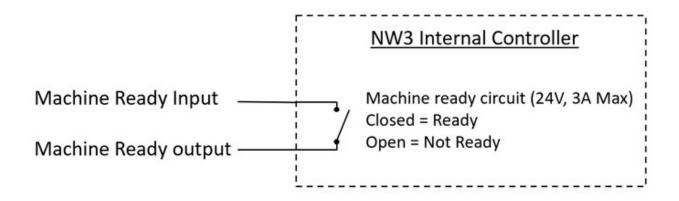
TEKNEK PART NUMBER	DESCRIPTION	
Mi6700	Tekwipes	
PL63097	Roller Doctor Pack	
Mi4609SP	Anti-static Cleaning Brush	
Mi2393SP	Anti-Static Checker	

PREVENTATIVE MAINTENANCE PARTS

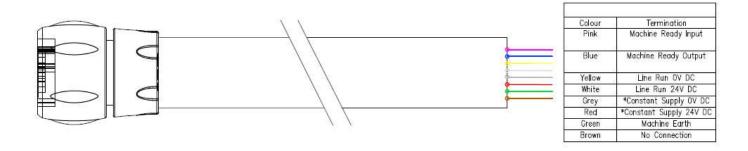
TEKNEK PART NUMBER	DESCRIPTION
MP78291	Adhesive Roller Guard Catch
PN61990	Piston Rod Seal
FA20648	Cleaning Roller Retention Bracket Screws (M5 x 12 Countersunk)
HA78556	Front Latch and Latch Keeper
EP78482	Solenoid Valve Assembly
EW79025	2m fly lead
NA	Replacement Fuse: 2A, 5 x 20mm

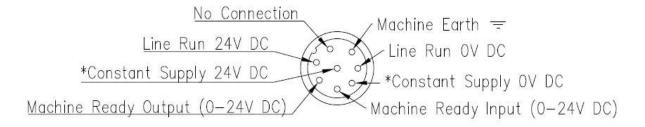
15 | ELECTRICAL CONNECTIONS

MACHINE READY CIRCUIT FOR REMOTE EXTERNAL MACHINE FEEDBACK



EXTERNAL MACHINE CONNECTIONS

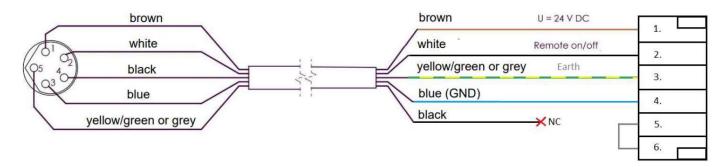




NOTES:

Connection	Notes	
Line Run	Should be 24V +/-1V, 2A max	
Constant Supply	If the machine is fed with a constant 24V, +/-1V, 2A max DC supply the	
	following features will be available:	
	Machine Status Feedback via the RGB Control Button	
	Machine Ready Status updates to the Remote Line Control	
Machine Earth	Must be connected to earth	

STATIC BAR CONNECTIONS:



PIN	DESCRIPTION	
1	+24V DC, 500mA max	
2	Remote ON/OFF. +24V, 100mA max	
3	Earth (Machine Earth)	
4	Ground (Analogue)	
5	Shorted together to indicate presence of Static Bar.	
6	Shorted together to indicate presence of Static Dal.	

16 | DRAWINGS INDEX

DESCRIPTION	NUMBER
Electrical Connection Schematic	EW78995 – Double Sided
	EW78995 – Single Sided
Pneumatic Schematic	 EW78997 – Double Sided
	EW78997 – Single Sided
CAD Model details / Mechanical Drawings	 TD78946 – Double Sided
	 TD78536 – Single Sided
Machine Dimensions and Installation Set Up	 Pi78878 (Double Sided)
	Pi79032 (Single Sided)