



General Specifications for the:

**WINTECH FASTWIRE
CONTOUR CUTTER
(FW2000 Series)**



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MACHINE DESCRIPTION

Wintech's Fastwire contour cutting machine consists of a fixed cutting table with horizontal linear bearings mounted along the two long sides. An aluminium gantry, housing the endless loop abrasive cutting wire, moves horizontally along the cutting table. Within the gantry, another system of linear bearings is used to control the vertical movement of the cutting wire.

The Fastwire Motor, a direct drive electric motor, is mounted with the gantry assembly. The motor is controlled by an Inverter speed controller to operate at 85 Hz or 4700 rpm. The cutting wire rides on four wheels within the gantry, one wheel being directly driven by the saw motor.

Vertical movement of the cutting wire and the horizontal movement of the gantry are controlled by stepper motors, mounted beneath the cutting table as part of the gantry carriage.

Control Cabinet

The control cabinet contains the positioning control electronics. The electronics module responsible for controlling the motion of the machine is called the *Indexer*. The Indexer connects to Input and Output boards, which take inputs from the machine and controls outputs to the machine. Cable ducts carry all control and power wires from the machine to the control cabinet. This cabinet also contains the Fastwire Saw Motor control.

Wintech Profiler Software

A computer with the powerful Wintech Profiler software drives the machine, translating designs for foam shapes into profile signal commands for the indexer card. The computer that runs the software resides inside the console and connects to the indexer inside by a serial cable.

The main power switch is located on the side of the cabinet. This switch also switches the power to the computer. The computer should always be shut down before the main switch is switched off.

Remote Handset

A 13 button manual cordless (radio controlled) handset enables the operator to manually control movement of the cutting wire position. In addition, the operator can start, cancel and pause cutting jobs as well as control the cutting speed.

Spares Kit & Manuals

A spares kit containing a selection of commonly used parts is available for the machine. Additional spare parts can be ordered through the nearest Wintech distributor. Machines are also supplied with a comprehensive user manual containing machine use and maintenance information.

Safety Fence Interlocks

The Control Cabinet is already wired with connectors and a safety relay which can be used for whatever Safety Fencing you require in your factory. Safety Fencing is recommended to prevent access to the cutting area whilst the machine is operating. It also prevents machine operation whilst an 'unsafe' condition exists. Additionally, an Emergency Stop function is provided, allowing immediate machine shut down should an unforeseen event occur.

OPTIONS

AutoNEST Software – The existing nesting function within the Profiler software allows efficient nesting of a single entity in a block. The AutoNEST software option can be used in conjunction with the Profiler software for more efficient nesting where multiple quantities of different shapes are to be cut from a single block in a single cut job.

Block Detection – A set of sensors are mounted on the machine frame to detect the front edge of the block. The cutting frame automatically positions itself in reference to the front edge of the block at the start of a cut job (ie. It does not have to be positioned manually by the operator using the remote handset), allowing for less manual intervention during processing.

Digitiser Tablet – The digitiser tablet can be used for tracing around existing shape templates or actual shapes, creating drawings to be used in the Wintech Profiler software. The drawings can then be conveniently stored on the computer, ready for regular production jobs.

Hotwire Option – A 10-wire hotwire frame (manual loading) can be attached to the Fastwire aluminium gantry, to enable operators to cut EPS using multiple wires.

Powered Turntable – A turntable can be inset into the machine table to enable 2-axis cutting, without having to manually handle the block on the table. After the first cut job is completed, the turntable can be rotated to turn the block to the required position (0-360 degrees) so that the second cut job can be performed. The rotating movement is powered and can be controlled from the control cabinet. The maximum diameter of the powered turntable on most machines is 1800mm (max. turntable diameter on a 1300mm wide machine is 1000mm).

NOTE ON MACHINE USE

The Fastwire machine is primarily designed to cut computer-drawn and nested shapes (complex and simple) from a range of flexible and rigid PU foams, including EPS. It can also be used as a sheeting machine.

With EPS, note carefully that moisture in the block is a critical consideration. This is especially true when the hotwire option of the Fastwire machine is used to cut EPS blocks. When EPS blocks are moulded, moisture remains between the beads. This dries from the outside of the block, often resulting in a wet centre. Uneven moisture in the block will affect the accuracy and quality of the finished product.

To avoid this problem, profiling should be done:

1. With a completely dry block, preferably oven-dried. Using a hot-wire to contour cut dry EPS is recommended;
2. With a completely wet block, recently moulded. Wet foam can be accurately profiled using the Fastwire but the cutting speed is reduced and the cut surface will be “unsealed”.

Loading/unloading blocks

Forklifts are often used to load the blocks. Forklift drivers must be aware of the possibility of knocking the Fastwire cutting frame with the forklift when loading and unloading blocks onto the machine (especially when un-clamping). The customer may need to provide some barriers to withstand forklift knocks near the machine to help prevent such incidents.

TECHNICAL SPECIFICATIONS

	<u>Min.</u>	<u>Max.</u>
Maximum cutting width (depends on model no/machine size)	1300mm	3000mm
Maximum cutting length (depends on model no/machine size)	3000mm	5000mm
Maximum cutting height		1270mm
Floor space:		
- width, incl. safety screens (not incl. control cabinet)	3700mm	5400mm
- length, incl. safety screens (not incl. control cabinet)	6700mm	8700mm
- height (not incl. control cabinet)	3850mm	3850mm
Max. cutting speed (*)	80mm/sec	
Hot-wire option	10-wire manual, each with safety system	
Hot-wire safety system	Overload and leakage protected	
Wire voltage supply	30VAC ~ 140VAC, microprocessor controlled	
Operator handset	Cordless – standard	
Digitiser tablet	Optional	
Profiler software	Standard	
AC power supply (customer specified at time of order) (**)	-	
Voltage (3 phase and earth)	200 – 480 vac +/- 6%	
Frequency	50 or 60Hz +/- 1%	

(*) Actual cutting speeds will depend on a number of factors including the complexity of the profile to be cut, the cut width, the foam density and hardness ratio, the type of foam being cut, the quality of the foam (eg. with or without fillers), and the quality/type of the abrasive wire used.

For harder and/or denser foams, we strongly recommend that customers supply a test foam block, along with drawings of the most commonly cut shapes, so that actual cutting speed data can be provided.

(**) Should be free of sags, surges, spikes and noise.

Environment:

Temperature

0-25 degrees Celsius

Humidity

Max 80% non condensing

Wintech Engineering

TERMS AND CONDITIONS OF SALE

Definitions

In the context of this document the following interpretation will apply. Wintech Engineering or its nominated agent or distributor ("Company"), will supply goods and/or options and services ("Goods") to its Customer ("Buyer") on the following Terms and Conditions of Sale ("Terms").

EX Works Delivery Time (EXW)

EX Works Delivery Time (EXW- as defined in Incoterms 2000), will vary according to model and circumstances but is approximately 16 working weeks upon receipt of deposit and subject to confirmation that the Company accepts the order ("Accepted Order"). The Company will not be liable if Goods are completed later than the indicated (EXW) date, regardless of the cause of the delay. Delivery to site will be dependent on shipping agency's advice.

Payment

Unless prior approval has been given, Buyers are required to pay a minimum 35% deposit by way of telegraphic transfer when an order is placed, so as to make the order valid. Payment of the balance shall be made prior to shipping by way of telegraphic transfer or confirmed irrevocable letter of credit acceptable to the Company (machine purchases only). Where final payment is not received within 30 days of notification of machine completion, the deposit may, at the Company's sole discretion, be forfeited and the machine may be sold to another of the Company's buyers, unless alternate arrangements have been previously agreed upon.

A Purchase Order must be supplied, prior to the issuing of a commercial invoice, upon which payment is to be made, in order to finalise the sale or service. This relates to Machine, Service and Spare Parts payment.

Validity of Quoted Prices and Orders

Quoted prices in Australian dollars remain valid for 30 days from the date of the quote. Quoted prices in other currencies will fluctuate as per the exchange rates of the day. A quote is not in itself an offer that when accepted creates a binding relationship between the Company and the Buyer. No order made by a Buyer will be binding on the Company until accepted in writing by the Company ("Accepted Orders"). Accepted Orders placed with the Company will only be accepted on these Terms. No Accepted Order may be cancelled except with the Company's written consent and on terms that will indemnify the Company against all costs, losses, expenses and liabilities directly or indirectly incurred by the Company in connection with or in relation to the Accepted Order.

Instruction Manuals

One set of manuals with instructions for maintenance and operation of the machine and relevant electrical and installation drawings will be supplied.

Design of Goods

While every effort will be made to supply items and equipment complying with published specifications, in the interest of continuing product improvement the Company reserves the right to modify, without notice, any specifications or equipment in a manner that does not materially detract from the fitness of the Goods for their intended purpose.

Off Site Works

Quoted services that include off site labour (such as Installations, Commissioning and Service Work) at the premises of the Buyer, are made on the basis that, other than where the quote specifically states otherwise, all work will be carried out during normal working hours. Normal working hours being Monday to Friday, 10hours day time work per Day, but excluding Western Australian Public Holidays.

Shipment & Taxes

When an order is placed unless specific instructions on delivery are given at the time, Wintech reserves the right to arrange the most economical courier of their choice and all freight charges quoted are the responsibility of the buyer. Local import taxes, duties, levies and the like are not included in the Company's quoted prices and are the responsibility of the Buyer.

Inspection of Goods

On receipt of parts they are to be inspected, and if parts are found defective, damaged or short supplied it is to be reported to Wintech within seven (7) days after the date of delivery. The responsibility will be at the cost of the Customer after this period. The Company or its agents will replace free of charge provided they are reported within the stated period. Wintech will bear no responsibility after the seven (7) day period has expired.

Warranty – New Machines

New machines are warranted for a period of twelve (12) months or two thousand * (2,000) machine hours from date of commissioning by the Company or its nominated agent/s or 14 months from date of shipment (ex Works), whichever occurs first. The Company or its agents will replace or repair, free of charge (ex-works) any parts found to be defective provided that the failure has occurred during ordinary use of the equipment and that the defective parts are returned, carriage paid, to the premises of the Company for the purpose of assessment (see Warranty Claim Procedures). The Company's liability under these Terms is expressly limited to replacement of defective parts or incorrectly supplied parts or a liability to pay the Buyer an amount equal to which ever is the lowest amount of:

- a) Cost of replacement Goods;
- b) Cost of obtaining equivalent Goods; or
- c) Cost of having the Goods repaired,

Installation of the Company machines shall be carried out by the Company or by an approved agent. Failure to do so will void the machine warranty.

All freight, local import taxes, duties, levies and the like, travel, accommodation and out-of-pocket expenses incurred in replacement or repair of equipment are to be borne by the Buyer. Any decision to waiver these costs (in part or in full) remains at the sole discretion of the Company. No precedence for future waiving of any costs is implied nor intended and the normal terms and conditions of warranty apply unless otherwise stated (in writing) by the Company.

If the goods are not manufactured by the Company, the guarantee of the manufacturer of those Goods is accepted by the Buyer and is the only guarantee given to the Buyer with respect to those Goods. The Company agrees to assign to the Buyer upon request by the Buyer, the benefit of any warranty or entitlement to the Goods that the manufacturer has granted to the Company to the extent that such is assignable.

* NB. Machine hours accumulate whenever power is applied to the cabinet (Operators Console).

Warranty – Spare Parts

Spare Parts are warranted for a period of six (6) months from date of sale by the Company or its nominated agent/s. Any spare parts found to be defective provided that the failure has occurred during ordinary use of the equipment and that the defective parts are returned, carriage paid, to the premises of the Company for the purpose of assessment (see Warranty Claim Procedures). The Company's liability under these Terms is expressly limited to replacement of defective parts or incorrectly supplied parts or a liability to pay the Buyer an amount equal to which ever is the lowest amount of:

- a) Cost of replacement Goods;
- b) Cost of obtaining equivalent Goods; or
- c) Cost of having the Goods repaired,

Spare parts failure within the warranty period due to incorrect storage, handling, installation or operation by the Buyer or anyone other than the Company or an approved agent will automatically void the spare parts warranty.

Spare parts replaced under "New Machine Warranty" are guaranteed for the remaining portion of the new machine warranty period only and this guarantee extinguishes upon reaching the new machine warranty expiry date.

All freight, local import taxes, duties, levies and the like incurred in replacement or repair of spare parts are to be borne by the Buyer. Any decision to waiver these costs (in part or in full) remains at the sole discretion of the Company. No precedence for future waiving of any costs is implied nor intended and the normal terms and conditions of warranty apply unless otherwise stated (in writing) by the Company.

If the goods are not manufactured by The Company, the guarantee of the manufacturer of those Goods is accepted by the Buyer and is the only guarantee given to the Buyer with respect to those Goods. The Company agrees to assign to the Buyer upon request by the Buyer the benefit of any warranty or entitlement to the Goods that the manufacturer has granted to the Company to the extent that such is assignable.

Warranty – Consumables

The warranty for Consumables is restricted to replacement only, provided the goods are returned to the Company, carriage paid, for the purpose of assessment (see Warranty Claim Procedures). The goods must be in an "as new" state within original wrapping or accompanied by the original wrapping. The Company (or its agents) will replace or repair, free of charge (ex-works) any consumables found to be defective or provided incorrectly. The Company's liability under these Terms is expressly limited to replacement of defective or incorrectly supplied parts or a liability to pay the Buyer an amount equal to which ever is the lowest amount of:

- a) Cost of replacement Goods;
- b) Cost of obtaining equivalent Goods; or
- c) Cost of having the Goods repaired,

Consumables failure due to incorrect storage, handling, installation or operation by the Buyer or anyone other than the Company or an approved agent will automatically void the consumables warranty.

All freight, local import taxes, duties, levies and the like incurred in replacement or repair of consumables are to be borne by the Buyer. Any decision to waive these costs (in part or in full) remains at the sole discretion of the Company. No precedence for future waiving of any costs is implied nor intended and the normal terms and conditions of warranty apply unless otherwise stated (in writing) by the Company.

If the goods are not manufactured by The Company, the guarantee of the manufacturer of those Goods is accepted by the Buyer and is the only guarantee given to the Buyer with respect to those Goods. The Company agrees to assign to the Buyer upon request by the Buyer the benefit of any warranty or entitlement to the Goods that the manufacturer has granted to the Company to the extent that such is assignable.

Warranty Claim Procedures

In instances where a claim for defective parts is made, the following procedure will apply.

- i. The Buyer to supply the Company with a valid Purchase Order Number clearly identifying the parts numbers, description and price of the claimed parts;
- ii. Upon receiving the Buyer Purchase Order and prior to despatch of the parts in question, the Company will require full payment from the Buyer for all parts identified;
- iii. Upon receiving full payment, the Company will despatch the required parts (via nominated carrier and method) complete with an appropriate number of "Reject or Rework" labels clearly identifying the relevant "Warranty Claim Number";
- iv. Upon receiving the required parts, the Buyer is to ensure the "Reject or Rework" labels are retrieved and securely fastened to the various alleged faulty parts then return those goods to the Company for assessment;
- v. Upon carrying out a full assessment of the parts, the Company will make determinations as to the validity of the claim and if accepted, credit back the Buyer the full purchase price amount.

Limitation of Remedy

The Buyer's sole remedy under the above warranties is limited to the repair or replacement at the Company's discretion, of any defective parts or equipment. The Buyer will remain responsible for all freight, taxes, duties and shipping charges, travel, accommodation and out of pocket expenses (if applicable). THE COMPANY SHALL IN NO EVENT, BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES TO BUYER, INCLUDING, WITHOUT LIMITATION, LOST PROFIT, LOSS OF BUSINESS OPPORTUNITY, LOSS OF PROPERTY OTHER THAN THE GOODS, OTHER ECONOMIC LOSSES, OR LOSSES ASSOCIATED WITH PERSONAL INJURY OR STATUTORY OR EXEMPLARY DAMAGES, WHETHER IN NEGLIGENCE, WARRANT, STRICT LIABILITY OR OTHERWISE.

Force Majeure

The Company shall not incur any liability in the event that it is delayed in its performance of its obligations by force majeure.

Risk and Passing of Property (Retention of Title)

Risk in the Goods will pass to the Buyer when the Goods leave the Company's premises. Notwithstanding the above, property of the Goods shall remain with the Company until full and final payment has been received by the Company. If the Buyer fails to make full payment for any Goods supplied by the Company, the Company is

entitled to possession of those Goods and may recover them and sell them. The Buyer must place those Goods at the disposal of the Company and the Company is entitled to enter upon any premises of the Buyer and remove those Goods. The Company reserves the right to recover legal expenses and any other expense incurred in exercising our rights.

Scope of Supply

The Company scope of supply is solely limited to the Goods, Options and Services detailed on the Accepted Order. No other supply of Goods, Options or Services is expressed nor implied. The Buyer must supply all additional products, services, utilities and support needed to receive and install the Goods to a level that ensures the ongoing safe, reliable and sound operation of the Goods. This will include but is not limited to such products, services, and support as the provision of an ample flat, level and stable mounting surface, supply of clean, dry and fully regulated air supply (if applicable – minimum 6Bar), ample regulated and protected power supply (+/-6% 50/60Hz - 3 Phase + Earth), logistical equipment and support for unloading of Goods and locating/fixing of Goods etc

Responsibility for determining the full scope of Buyer supply resides solely with the Buyer and must be determined before the Buyer pays the deposit. Failure to do so does not void an Accepted Order unless agreed to by the Company.

Whole of Agreement

These Terms and anything contained in an Accepted Order supersedes and replaces any other agreement, arrangement or understanding between the Company and the Buyer. These Terms can only be amended in writing by the Company.

For all disputes arising from the contract, including actions on a bill of exchange, court in the district of the principal office of the Company shall have exclusive jurisdiction. The Company will also be entitled to institute action at the principal place of the business of the Buyer. The Buyer cannot pass his contractual rights to third parties without formal written authorisation of the Company.

The contract shall remain binding on the parties even if any of its clauses should be held ineffective. This contract is governed by the laws of Western Australia. The parties submit to the jurisdiction of its courts and all disputes, related arbitration or legal proceedings carried out in relation to this contract shall be conducted in Perth, Western Australia.

Special Conditions

The attached APPENDIX A details any Special Conditions of Sale ("Special Conditions") if applicable. These are to be read in conjunction with the standard Terms. Where conflict arises between the two (Terms and Special Conditions), the latter will prevail in all instances. Special Conditions detail additional requirements or considerations of a specific Accepted Order not adequately covered in the Terms.

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