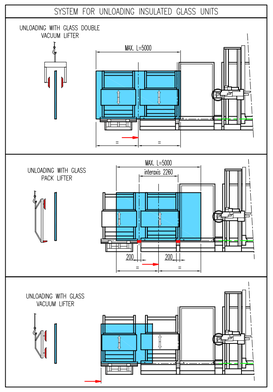
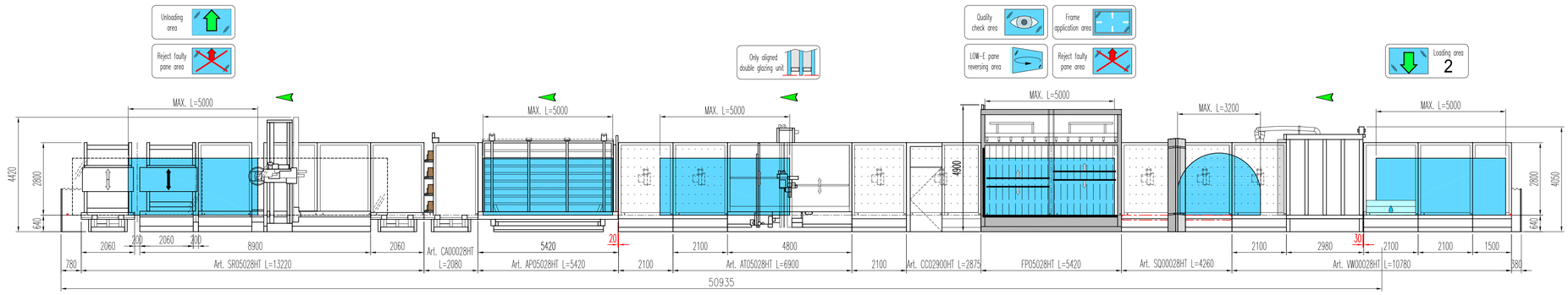
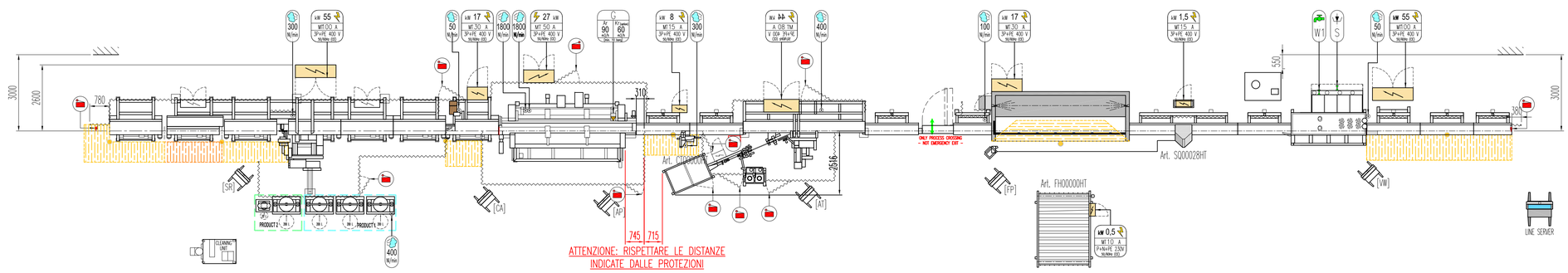


FROM RIGHT TO LEFT





Laser scanner		
Safety optical barrier		
Safety guards supplied by the manufacturer		
Safety limit switch		
Ethernet network supply (RJ-45 connector)		
Electrical supply (absorbed maximum: ~80%)		
Transformer supply		
Air supply (peak)		Ø1/2" 6÷8 bar
Water supply	W1	(Rp 1/2" Ø17 2,5 bar)
	W2	(Rp 1"1/4 Ø40 2,5 bar)
Water discharge	S	(Rp 1"1/4)
Gas supply (peak)		IN=UNI11144 OUT=3/8" Rp

Line Plant made up of:
- Vertical washing machine Art. VW00028HT
- Quality control scanner Art. SQ00028HT
- Flexible spacer applicator Art. AT05028HT
- Flat coupling press unit Art. AP05028HT
- Sealing robot Art. SR05028HT

(the conveying surfaces are inclined by 6° with respect to the vertical surface)

TECHNICAL FEATURES OF WORKING PANES ON LINE	
Minimum pane dimensions	320 x 180 mm
Minimum pane dimensions on "offset double-glazed unit" (optional)	400 x 260 mm
Maximum pane dimensions	5000 x 2800 mm
Single pane thickness	3 ÷ 25 mm
Minimum assembled pane thickness "aligned"	12 mm (3+6+3)
Minimum assembled pane thickness "offset" (optional)	20 mm (4+12+4)
Maximum assembled pane thickness	80 mm
Single pane weight (max.)	200 kg/m
Assembled pane weight (max.)	400 kg/m

Date and Place

Stamp and Signature

Ver.: 8 - 24/11/20 | AGGIORNATO POSIZIONE POMPANTI

FOREL

Cliente: RAVENSBY GLASS Co. Ltd

Cod.: RAVENSBY-36_QT2019000527 _QT2020000687 | Data: 30/09/2020 | Dis: Lorena S. | Scala: 1:100

Promac
PVC | ALI | GLASS

Our ref JH/jo/GSQ50899

19th July 2019

For the Attention of Mr Hamish Ogilvie

Ravensby Glass Co Ltd
Fowler Road
West Pitkerro Industrial Estate
Dundee
DD5 3RU

Email: HFO@densmetals.co.uk

Dear Hamish,

Re: Forel 2.8m High Speed TBB Line with Associated Options and Air Cushion Back Fence

Further to your recent visit to Forel, I am pleased to submit our revised supply proposal, together with respective specifications for your appraisal and consideration.

The machinery & equipment contained within this proposal is based upon the manufacturing criteria that you have initially provided but can be modified if required, to suit specific or alternative production processes.

Although Promac offers technical support for office based software links, we take no control or responsibility for the associated output files and hardware. The customer is entirely responsible for any charges that may be issued by your software supplier.

Preventative maintenance will increase the reliability of your machinery and from as little as £100 a month Promac will provide a service contract for the equipment we have installed after the warranty expires.

If you would like any further information, please do not hesitate to contact me directly on 07866 767371.

Yours sincerely

Joe Hague
Managing Director

FOREL 2.8M HIGH SPEED TBB LINE WITH ASSOCIATED OPTIONS AND AIR CUSHION BACK FENCE

LCHT-01 Air Cushion Conveying System
- Applied to each conveyor

GLHT LINE SERVER PLUS
- Line server with PC and visual display.
- Work order entry control via third party output file.
- Individual glass pane sequencing and ID
- Performance data output for post-production analysis.
- High speed line communication for improved output and control

VW28HT 2.8m Vertical Washing Machine
- Motorised In Feed Conveyor
- 6 x 200mm brushes
- Low 'E' Glass washing facility (automatic device)
- Reverse pane wash facility
- Variable washing speed 0 – 12m/min
- Glass thickness 3 – 40mm
- Hot wash & cold rinse with recycled water system
- Stainless steel tanks with filter system
- With stainless steel

Reverse Osmosis IDRO 130 Water Treatment Plant
- c/w 2 x 500L storage tank and appropriate staging
- Delivers 130 Litres of De-mineralised water per hour
- 2 x 500L tanks, can constantly maintain the line and the Atlantic washers with demineralised water every shift.

SQD28HT 2.8m Quality Control Scanner
- Independent double motorised conveyor
- Automatically detects Quality defects to both sides of a single sheet
- Scratches, finger prints, scorch marks, seeds etc.
- Defects displayed in order of severity via online monitor
- Defect image can be stored to hard drive and archived (server required)
- Easily adjusted for variable detection rate
- Capture rate is 8000 images per second

IN ADDITION TO SQD28HT

SQHT-01 2.8m Shape Recognition Option
- Automatically detects the peripheral edge of the glass pane
- Automatic data transfer of DXF shape info
- Shape capable robots receive the DXF info and process
- Complete with scanning hardware and onboard software
- Scanning operation is in real time, NO IMPACT ON CYCLE TIME
- Shaped glass can be run in any sequence
- Flat belt conveyor can be tailored to maximum length of glass
- On line diagnostic software

QUOTATION GSQ50899

My SQL Database for Data Storage and Statistics

- Archiving software (***archive PC not included)***
- Track each piece of glass in detail with quality scan details
- Standard statistics
- Store all data into an SQL database

FP5028H Quality Check and Frame Positioning Station

- Quality check and frame positioning station
- With adjustable contrast LED lighting
- Black structure, internal rooms with side door access for rear pane inspection
- Moveable sliding bars
- Power assisted system for positioning of large frame
- L: 5000mm x H: 2800mm

CC02900HT Operative Walkthrough Conveyor

- Safety controlled access door
- Allows operative to walk through the operating line
- Gives shortest route to the rear of the quality check and frame positioning station
- Allows operative to address quality issue to the rear side of the pane

LC2100HT Single Drive Conveyor

- L: 2100mm

AT5028HT 2.8m Automatic 'T' Shaped Flexible Spacer Applicator

- Independent double motorised in feed conveyor
- Automatic glass thickness measuring device
- Automatic application of variable width 'T' Shaped and standard Super Spacer
- Automatic application of spacer to squares and rectangles
- Automatic Spacer Compensator which delivers continuous spacer flow for butyl application
- Automatic application of continuous butyl strip to both spacer edges
- Butyl is measured via digital syringe dozer
- Automatic 'V' notch tool for 90° corner symmetry
- Automatic film separation bobbins
- Automatic corner waste collection via suction device
- Triple Glazing is via special program (no charge)
- Multi Tooling Option for various angles (no charge)
- Four position climate controlled flexible spacer cabinet
- Pane support system with movable bars

ATHT-01 Self Diagnostic Software and Hardware

- Real time monitoring that diagnosis faults to the electrical and pneumatic operating system
- Manual interface to assist technical staff diagnose faults and identify replacement parts.
- Zone and picture recognition system with part number interface
- Modem link for remote technical support (dedicated com's line required)

ATHT-02 Shape Software and Hardware

- Full onboard parametric shape library
- X, Y and Z axis to accommodate rectilinear and arched shapes
- Minimum rake angle for rectilinear shapes is 18°
- Ideal for conservatory roofs and arched door panels

Domino A420i Inkjet Printer

- Including all transfer software and network link
- Automatic start up and shut down sequence
- Self-cleaning heads and guttering
- Special 45º print head
- Electrically powered traversing head

CT2000ES Automatic Tape Applicator

- Auto width detection of spacer
- Automatically applies Mylar tape to the final 90° corner of frame
- Independent double motorised conveyor

APG5028HT 2.8m Automatic Argon Gas Coupling Press

- Independent motorised conveyors
- Rear pane support by air cushion provided by fan unit
- Pane positioning by electronic & mechanical limit switches
- First pane is collected by suction cups & moved backwards
- Second pane is positioned directly in front of the first pane
- The press plates closes the two panes
- Automatic gases fill with Argon etc.
- Automatic pane coupling of up to 80mm thickness
- Double, triple & stepped pane coupling facility

APHT-01 Self Diagnostic Software and Hardware

- Real time monitoring that diagnosis faults to the electrical and pneumatic operating system
- Manual interface to assist technical staff diagnose faults and identify replacement parts.
- Zone and picture recognition system with part number interface
- Modem link for remote technical support (dedicated com's line required)

APHT-02 System for Stepped Units (4 sided)

- Stepped conveying system to support offset panes
- Maximum depth of step 100mm
- Precise alignment of both glass pieces via digital potentiometer
- All associated outfeed conveyors stepped to support offset pane
- Split conveyors driven by variable height motor gearboxes

QUOTATION GSQ50899

POLYSULPHIDE SEALING ROBOT

SR5028HT 2.8m High Performance Automatic Sealing Robot

- Anti-contamination in / out feed conveyors
- Automatic spacer width recognition & sealant dosage
- 4 unit simultaneous capacity
- (1 standby, 1 sealing & 2 completed)
- Removable spare dozer mixing head
- Automatic knife clean corner finishing system

SRHT-01 Self Diagnostic Software and Hardware

- Real time monitoring that diagnosis faults to the electrical and pneumatic operating system
- Manual interface to assist technical staff diagnose faults and identify replacement parts.
- Zone and picture recognition system with part number interface
- Modem link for remote technical support (dedicated com's line required)

SRHT-02 Shape Software and Hardware

- Full onboard parametric shape library
- X, Y and Z axis to accommodate rectilinear and arched shapes
- Minimum rake angle for rectilinear shapes is 18°
- Ideal for conservatory roofs and arched door panels

SRHT-03 Sealing Device for Triple Glazed Units

- Specifically designed flat conveyor to ensure total support for all three panes
- Maximum transportable sealed unit weight 400kg/m
- Automatically adjusts to variable cavity widths (double pass)
- Allows for the simultaneous extrusion of sealant into symmetrical cavities
- Automatic measurement of the spacer frame depth from the edge of the glass 20mm

SRHT-09 Double Dosing Unit (Manual Device)

- 2 fixed double dosing units for the extrusion of each sealing product
- All material pathways are fitted with easy to use quick release connections
- Fast disconnection and reassembly of the sealing head via speed fit connection and fittings
- This system is designed specifically for the quick changeover of products and the fast output of double and or triple glazed units
- Comes complete with a mobile head rinse system for local cleaning

4 x WPBG Pumping Unit

- (Base Product) 200 litre capacity

1 x WPSM Pumping Unit x 1

- (Catalyst) 20 litre capacity

QUOTATION GSQ50899

PRICING SUMMARY	
LCHT-01 Air Cushion Conveying System	
GLHT LINE SERVER PLUS	
VW28HT 2.8m Vertical Washing Machine	
Reverse Osmosis IDRO 130 Water Treatment Plant	
SQD28HT 2.8m Quality Control Scanner	
SQHT-01 Shape Recognition Scanner	
My SQL Database for Data Storage and Statistics	
FP5028H Quality Check and Frame Positioning Station	
CC02900HT Operative Walkthrough Conveyor	
LC2100HT Single Drive Conveyor	
AT5028HT 2.8m Automatic 'T' Shaped Flexible Spacer Applicator	
ATHT-01 Self Diagnostic Software and Hardware	
ATHT-02 Shape Software and Hardware	
Domino A420i Inkjet Printer	
CT2000ES Automatic Tape Applicator	
APG5028HT 2.8m Automatic Argon Gas Coupling Press	
APHT-01 Self Diagnostic Software and Hardware	
APHT-02 System for Stepped Units (4 sided)	
SR5028HT 2.8m High Performance Automatic Sealing Robot	
SRHT-01 Self Diagnostic Software and Hardware	
SRHT-02 Shape Software and Hardware	
SRHT-03 Sealing Device for Triple Glazed Units	
SRHT-09 Double Dosing Unit	
WPBG Pumping Unit 200L Base Product (x 4)	
WPSM Pumping Unit 20L Catalyst (x 1)	
Transport (7 x Mega Trailers @ £6,500ea)	
Consignment Stock	
Installation, Commissioning and Training	
Total Turnkey Package Price	

CONSIGNMENT STOCK

Promac Group Spares will supply Ravensby Glass Ltd with a definitive list of critical spares and consumable goods which will be supplied as consignment stock and held onsite Ravensby Glass. Promac holds a comprehensive stock of spare parts and consumables onsite at its headquarters in Rugby which are available for immediate despatch. However in the event that any required part is not in our stock then our machinery manufacturers offer next day delivery subject to availability. European next day parts orders should be with us for processing before 13:00 Hrs Mon-Thu and 12:00 Hrs Fri (*excluding European national holidays*).

Terms of Reference:
All consignment stock should be stored in a lockable area or flame proof cabinet that is of sufficient size and build quality, supplied, controlled and maintained by you.

Access to Promac's consignment stock along with its management and use is strictly controlled by your authorized personnel.

The administration of the consignment stock is critical to its efficient and effective use and once a part has been used Promac Group Spares must be notified immediately with an order number for the same item either via call, fax or email. This process is mandatory and allows for prompt, accurate invoicing with expedited replacement. Delay will lead to incorrect billing and late replacement of consignment parts and consumables.

Parts used from the consignment stock for machines in warranty are processed the same as above, once the faulty warranty part is returned to Promac HQ in Rugby it will be credited accordingly.

Moved, lost or stolen parts from the consignment stock are your full responsibility and if not found and identified will be invoiced in full and replaced where appropriate after the quarterly stock audit.

Only Promac authorized personal will be allowed to perform the quarterly stock audit and once completed we recommend that an authorized member of your team checks and verifies our count.

From time to time Promac may use stock from your consignment but this will only happen with your approval once given the appropriate amount of notice. Promac will administer and replace the item immediately.

After two years from the initial delivery of the consignment stock all or part of it can be purchased from Promac at a 10% discount from our price list at that time.

Any consignment stock that is surplus to requirement should be returned to Promac immediately.

SALES TERMS

Training:	Operation, machine settings & functions
Availability:	May 2020
Installation & commissioning:	Included in the above
Transport & Carriage:	Included in the above (7 trucks) Includes insurance

Warranty:

All new machinery is covered by our comprehensive **24 month warranty** which includes mechanical and electrical parts, super structure and labour based on a 40 hour working week.

Warranty Exclusions:

Wearing parts, consumable items, tooling, calibration and programming.
Any damage caused as a result of wilful neglect, misuse or abuse and third party accessories or software connected or fitted without prior written authorisation from Promac Window Machinery Sales Ltd.

Customers Responsibilities and Provision

In advance of the machines arrival and where applicable the provision of electric, pneumatic, water and drainage service isolators to within two metres of the machinery terminals including any third party software or output files. All appropriate insurance and liability cover must be in place before the delivery of the equipment to its agreed destination. Where applicable the provision of the appropriate lifting equipment and manpower to offload and position the equipment.

Payment Terms

Unless otherwise agreed:-
25% Deposit with order
70% balance on delivery
5% upon installation and commissioning
(Please note that our payment terms are unaffected by any delay from other third party suppliers including utility services, software or output files)
If financed, 95% of the balance will be released on delivery.

Cont…

Sales Terms Cont…

Continuous Improvement Policy

We reserve the right to amend specifications without notification as part of our continuous improvement policy.

Liability Insurance

Liability Insurance is a legal requirement to do business and forms an essential part of any commercial agreement. To ensure that Promac and our customers are adequately protected our insurers have provided over £15,000,000 of Employers, Public and Product liability cover.

Currency

Due to any adverse fluctuation in the currency markets, Promac Window Machinery Sales Ltd reserves the right to recalculate this proposal if the euro rate of exchange drops below €1.10 before receipt of order and/or deposit.

The prices quoted are exclusive of VAT and are valid for thirty days

Vertical washing machine
VW_HT Series

TECHNOLOGICAL CHARACTERISTICS				
Dimensional characteristics	**VW00020HT**	**VW00025HT**	**VW00028HT**	**VW00033HT**
Maximum pane length	4000 mm	4500 mm	5000 mm	6000 mm
Maximum pane height	2000 mm	2500 mm	2800 mm	3300 mm
Minimum pane dimensions	320 mm x H=180 mm			
Processing pane thickness	3 ÷ 40 mm			
Maximum transportable pane weight	200 kg/m			
Process characteristics	**VW00020HT**	**VW00025HT**	**VW00028HT**	**VW00033HT**
Position of the "Low-emissivity" coating	operator side (rear side optional)			
Processing of shaped panes	✓			
Executable shapes	according to FOREL Catalogue			
Automatic thickness adjustment	✓			
Water heating	40°C (60°C optional)			
Constructional characteristics	**VW00020HT**	**VW00025HT**	**VW00028HT**	**VW00033HT**
Number of brushes	6 (8 optional)			
Brush diameter	ø200 mm	ø200 mm	ø200 mm	ø225 mm
Pre-wash	✓			
Number of washing sectors	4			
Pane transport height	640 mm (min. 520 mm) (VW00033HT min. 550 mm)			
Machine body weight	~ 2200 kg	~ 2400 kg	~ 2700 kg	~ 5700 kg

TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

OPTIONALS AVAILABLE ON REQUEST	
VWHT-01	Device for washing Low-e glasses, rear side
VWHT-02	8 brushes version
VWHT-03	Stainless steel entire manufacturing
VWHT-04	60° C water heating system
AB00000ES	Anti-static bar
SF00000ES	Sand filter
OS00000ES	REVERSE OSMOSIS WATER DEMINERALIZER

Quality control scanner
Series **SQ_HT**

TECHNOLOGICAL CHARACTERISTICS				
Dimensional characteristics	**SQ00020HT**	**SQ00025HT**	**SQ00028HT**	**SQ00033HT**
Maximum pane height	2000 mm	2500 mm	2800 mm	3300 mm
Minimum pane dimensions	320 mm x H=180 mm			
Processing pane thickness	3 ÷ 40 mm			
Process characteristics	**SQ00020HT**	**SQ00025HT**	**SQ00028HT**	**SQ00033HT**
Resolution (max.)	200 dpi			
Minimum defect size	0.1 mm			
Types of processable panes	- light float pane - coloured float pane - laminated unit - tempered pane - exclusions: frosted panes, sandblasted panes, printed panes, painted panes, screen-printed panes, etc. - min. transparency of 15% needed			
Detection type	- scratches - pockets, bubbles - fingerprints - low-emission coating defects - chipping on edges - removal check of low-emission coating - removal check of the low-emission coating (coating removal width); the system only signals if the removal area "exceeds" the application area of the spacer frame - system limits: very fine scratches, streaks			
Data and statistics storage database	optional			
Shape recognition (optional)				
Comparison of dimensions	± 0,5 mm per linear meter			
Comparison of dimensions with work list	✓			
Dimensional comparison of the panes comprising the same insulating glass unit	✓			
Automatic shape detection	✓			
Data and statistics storage database	optional			
Constructional characteristics	**SQ00020HT**	**SQ00025HT**	**SQ00028HT**	**SQ00033HT**
Sensors	detection system			
Pane conveyor system:				
- quality control	rollers			
- quality control and shape recognition	belts			
Defects display monitor	✓			
Machine body weight:				
- quality control	~ 160 kg	~ 170 kg	~ 180 kg	~ 190 kg
- quality control and shape recognition	~ 1500 kg	~ 1600 kg	~ 1700 kg	~ 1800 kg

Quality control scanner
Series **SQ_HT**

TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

OPTIONALS AVAILABLE ON REQUEST	
SQHT-01	Shape recognition function
SQHT-02	Database MySQL for storing data and statistics

PLUS frame positioning station
FP_HT

TECHNOLOGICAL CHARACTERISTICS				
Dimensional characteristics	**FP04020HT**	**FP04025HT**	**FP05028HT**	**FP06033HT**
Maximum pane length	4000 mm	4000 mm	5000 mm	6000 mm
Maximum pane height	2000 mm	2500 mm	2800 mm	3300 mm
Minimum pane dimensions	320 mm x H=180 mm			
Processing pane thickness	3 ÷ 25 mm			
Maximum transportable pane weight	200 kg/m			
Process characteristics	**FP04020HT**	**FP04025HT**	**FP05028HT**	**FP06033HT**
Processing of shaped panes	√			
Executable shape	according to FOREL Catalogue			
Spacer frame thickness	6 ÷ 27 mm			
Constructional characteristics	**FP04020HT**	**FP04025HT**	**FP05028HT**	**FP06033HT**
Pane mobile sliding bars	√			
LED back-lighting	√			
Positioning of horizontal references (pane lower edge)	5 ÷ 100 mm			
Positioning of vertical references (pane leading edge)	5 ÷ 100 mm			
Handling of horizontal and vertical references				
Processing of aligned insulating glass unit	manual			
Processing of offset insulating glass unit (optional)	automatic			
Spacer frame upper supports	–	–	√	√
Minimum height of upper supports intervention (from pane transport)	–	–	1700 mm	1700 mm
Rear chamber for pane inspection	√			
internal lifting platform	–	–	optional	optional
Panes transport height	640 mm (min. 620 mm)			
Machine body weight	~ 3000 kg	~ 3200 kg	~ 3800 kg	~ 4200 kg

TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

“T-SHAPE” Flexible spacer applicator
AT_HT Series

TECHNOLOGICAL CHARACTERISTICS				
Dimensional characteristics	**AT04020HT**	**AT04025HT**	**AT05028HT**	**AT06033HT**
Maximum pane length	4000 mm	4000 mm	5000 mm	6000 mm
Maximum pane height	2000 mm	2500 mm	2800 mm	3300 mm
Minimum pane dimensions	320 mm x H=180 mm			
Processing pane thickness	3 ÷ 25 mm			
Maximum transportable pane weight	200 kg/m			
Process characteristics	**AT04020HT**	**AT04025HT**	**AT05028HT**	**AT06033HT**
Number of operating heads	1			
Processing of rectangular panes	in self-learning mode			
Processing of shaped panes	optional			
Executable shapes	according to FOREL Catalogue			
Position of the "Low-emissivity" coating	operator side			
Spacer profile width	8 ÷ 27 mm			
Spacer profile height	7.3 mm (manual change kit 6.3 mm optional)			
Reel type	large (standard)			
Constructional characteristics	**AT04020HT**	**AT04025HT**	**AT05028HT**	**AT06033HT**
4-reel rotating storage unit	✓			
Butyl extrusion unit	tandem			
Butyl slug	7.5 kg (No. 2)			
Arrangement for automatic marking	optional			
Pane transport height	640 mm (min. 540 mm)			
Machine body weight	~ 2650 kg	~ 2900 kg	~ 2950 kg	~ 3000 kg

TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

OPTIONALS AVAILABLE ON REQUEST	
ATHT-01	Diagnostic supervisor system
ATHT-02	Processing of shaped panes
ATHT-03	Georgian bars processing including conveyor with visual references
ATHT-04	Set-up for printer/marker

Tape applicator
CT_ES

TECHNOLOGICAL CHARACTERISTICS	
Dimensional characteristics	**CT00000ES**
Processing pane thickness	3 ÷ 25 mm
Process characteristics	**CT00000ES**
Spacer frame thickness	6 ÷ 27 mm
Spacer frame maximum depth (from pane edges)	10 mm
Application angle of the Mylar adhesive tape	90° (pane trailing edge)
Width of the Mylar adhesive tape	30 mm
Constructional characteristics	**CT00000ES**
Machine body weight	~ 50 kg

TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

Flat coupling press unit with gas filling
AP_HT Series

TECHNOLOGICAL CHARACTERISTICS				
Dimensional characteristics	**AP04020HT**	**AP04025HT**	**AP05028HT**	**AP06033HT**
Maximum insulating glass unit length	4000 mm	4000 mm	5000 mm	6000 mm
Maximum insulating glass unit height	2000 mm	2500 mm	2800 mm	3300 mm
Minimum insulating glass unit dimensions	320 mm x H=180 mm			
Maximum insulating glass unit thickness	80 mm (100 mm optional)			
Maximum transportable insulating glass unit weight	400 kg/m			
Process characteristics	**AP04020HT**	**AP04025HT**	**AP05028HT**	**AP06033HT**
Processing of shaped panes	✓			
Executable shapes	according to FOREL Catalogue			
Spacer frame type	all spacer frame types			
Dynamic support of central panes	✓			
Control and management of pane curvature	Max. 2.5 mm/m			
Argon gas filling	✓			
Krypton gas filling	optional			
Processing of aligned insulating glass unit				
Execution of multi-chamber	Max. 2 chambers			
Single pane thickness	3 ÷ 25 mm			
Spacer frame thickness	6 ÷ 27 mm			
Minimum insulating glass unit thickness	12 mm (3 + 6 + 3)			
"TANDEM" mode	–	–	–	✓*
	* Processing of 2 insulating glass units Max. 2500 mm x H=2500 mm (NO shaped – NO offsets – argon gas ONLY)			
Processing of offset insulating glass unit (optional) - smaller pane operator side) -				
Execution of multi-chamber	Max. 2 chambers the small panes must have the same dimensions and the same offset			
Single pane thickness	4 ÷ 25 mm			
Spacer frame thickness	12 ÷ 27 mm			
Minimum insulating glass unit thickness	20 mm (4 + 12 + 4)			
Minimum small pane dimensions	400 mm x H=260 mm			
Perimeter offset:				
- pane lower edge	5 ÷ 100 mm			
- pane leading edge	5 ÷ 100 mm			
- pane trailing edge	5 ÷ 100 mm			
- pane upper edge	5 ÷ 100 mm			
Differentiated offset on 1 or more edges	✓			
Gas utility (optional)	**AP04020HT**	**AP04025HT**	**AP05028HT**	**AP06033HT**
No. of gas Argon (**Ar**) utilities	1	1	1	2
No. of gas Krypton (**Kr**) utilities optional	1	1	1	2
Gas connection	IN=UNI4412, OUT=Rp 3/8"			
Minimum Argon (**Ar**) gas flowrate	90 m³/h (20 °C ±10 °C) (per gas utility)			
Minimum Krypton (**Kr**) gas flowrate optional	60 m³/h (20 °C ±10 °C) (per gas utility)			
Gas supply pressure	200÷10 barg			
Constructional characteristics	**AP04020HT**	**AP04025HT**	**AP05028HT**	**AP06033HT**
Pane transport height	640 mm (min. 620 mm)			
Machine body weight	~6250 kg	~6400 kg	~6700 kg	~6900 kg (x 2)

Flat coupling press unit with gas filling
AP_HT Series

TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

OPTIONALS AVAILABLE ON REQUEST	
FP04020HT	QUALITY CHECK AND FRAME POSITIONING STATION PLUS
FP04025HT	QUALITY CHECK AND FRAME POSITIONING STATION PLUS
FP05028HT	QUALITY CHECK AND FRAME POSITIONING STATION PLUS
FP06033HT	QUALITY CHECK AND FRAME POSITIONING STATION PLUS
APHT-01	Diagnostic supervisor system
APHT-02	Processing of stepped units 5÷100 mm
APHT-03	Additional circuit for Krypton gas filling
APHT-04	Gas mixing device (to be combined with article APG-10)
APHT-05	Processing of total thicknesses up to 100 mm
CC02900HT	CROSSING CONVEYOR

Sealing Robots
SR_HT Series

TECHNOLOGICAL CHARACTERISTICS				
Dimensional characteristics	**SR04020HT**	**SR04025HT**	**SR05028HT**	**SR06033HT**
Maximum insulating glass unit length	4000 mm	4000 mm	5000 mm	6000 mm
Maximum insulating glass unit height	2000 mm	2500 mm	2800 mm	3300 mm
Minimum insulating glass unit dimensions	320 mm x H=180 mm			
Maximum insulating glass unit thickness	80 mm (100 mm optional)			
Maximum transportable insulating glass unit weight	400 kg/m			
Process characteristics	**SR04020HT**	**SR04025HT**	**SR05028HT**	**SR06033HT**
Number of operating heads	1			
Processing of rectangular panes	in self-learning mode			
Automatic measurement of the spacer frame depth from the edge of the glass	20 mm			
Dynamic central panes support	√			
Processing of shaped panes	optional			
Executable shapes	according to FOREL Catalogue			
Control and management of pane curvature	Max. 2.5 mm/m			
Standard number of dosing units	1 (with “RECHARGE” operation)			
Additional dosing units with “RECHARGE” operation	Max. 1 optional (total 2 products overall)			
Dosing units with “CONTINUOUS” operation	Max. 3 optional (total 3 products overall)			
Semi-automatic dosing unit change	from the 2nd dosing unit with “CONTINUOUS” operation			
Processing of aligned insulating glass unit				
Execution of multi-chamber	optional (Max. 2 chambers)			
Pane thickness	3 ÷ 25 mm			
Spacer frame thickness	6 ÷ 27 mm			
Minimum insulating glass unit thickness	12 mm (3 + 6 + 3)			
Processing of offset insulating glass unit (optional) - **smaller pane operator side** -				
Execution of multi-chamber	optional (Max. 2 chambers) the small panes must have the same dimensions and the same offset			
Pane thickness	4 ÷ 25 mm			
Spacer frame thickness	12 ÷ 27 mm			
Minimum insulating glass unit thickness	20 mm (4 + 12 + 4)			
Minimum small pane dimensions	400 mm x H=260 mm			
Perimeter offset:				
- pane lower edge	5 ÷ 100 mm			
- pane leading edge	5 ÷ 100 mm			
- pane trailing edge	5 ÷ 100 mm			
- pane upper edge	5 ÷ 100 mm			
Differentiated offset on 1 or more edges	√			
Constructional characteristics	**SR04020HT**	**SR04025HT**	**SR05028HT**	**SR06033HT**
Simplified unloading of large sized units	√			
Mixer maintenance and assembly bench	√			
Pane transport height	640 mm (min. 620 mm)			
Machine body weight	~ 6900 kg	~ 7000 kg	~ 7200 kg	~ 7400 kg

Sealing Robots
SR_HT Series

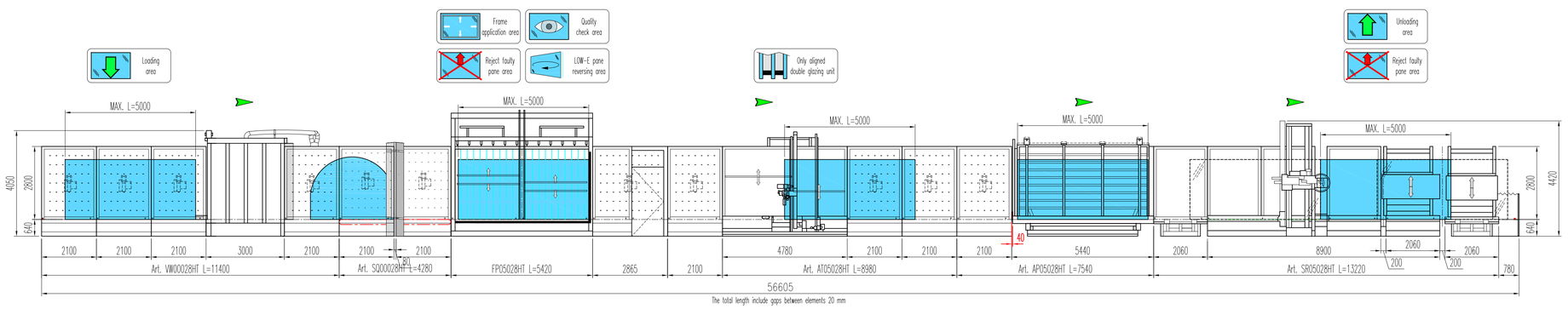
TECHNICAL CHARACTERISTICS	
Applied standard	CEI EN 60204-1
Power supply	400 V ±10% Freq. 50/60 Hz ±1% 3P+PE
Environmental conditions	min. +5°C, max. +40°C temperature
	humidity < 80%
	altitude < 1000 m a.s.l.
Type of grounding system	TT (ground isolated from neutral)

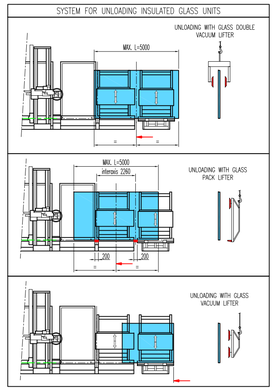
(data concerning the technological/electrical characteristics of the article treated in this data sheet are not binding since they are subject to change).

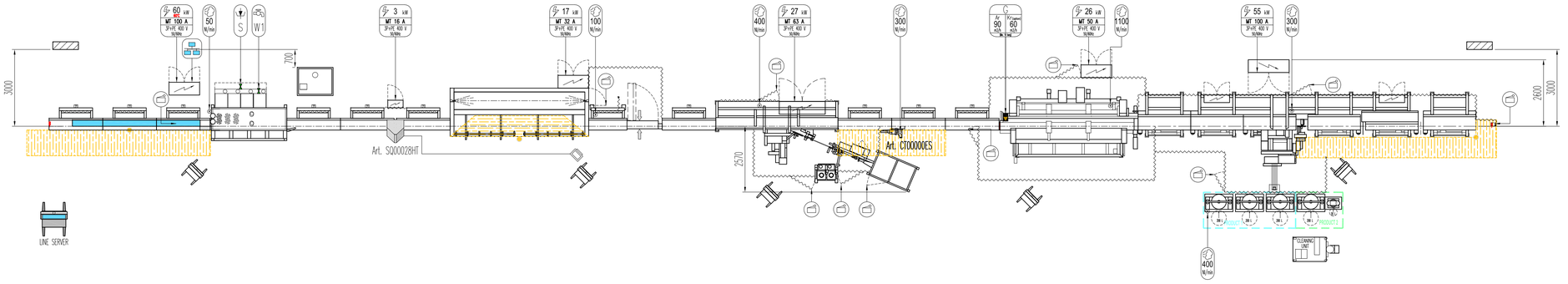
OPTIONALS AVAILABLE ON REQUEST	
SRHT-01	Diagnostic supervisor system
SRHT-02	Processing of shaped panes
SRHT-03	Sealing of triple insulating glass units
SRHT-04	Processing of stepped units 5÷100 mm
SRHT-05	Processing of total thicknesses up to 100 mm
SRHT-06	Sealing insulating glass units with Schüco profiles
TC02100HT	CONVEYOR with single caterpillar drive - L=2100 mm
SRHT-08	Single dosing unit
SRHT-09	Double dosing unit
WP00000BG	200 l pumping unit
WP00000SM	20 l pumping unit
SRHT-10	Double continuous dosing unit with semi-automatic switch over
SRHT-11	Triple continuous dosing unit with semi-automatic switch over
GP00000BG	Pumping unit 200 l for continuous dosing unit
GP00000SM	Pumping unit 20 l for continuous dosing unit

– Electric protection devices (machine power supply) against: Overloads, Short circuit, Undirect contacts, are customer supply and installation. For TT systems, the level of insulation of FOREL machines is such that it accepts a 0,030A differential protection switch not only in mandatory cases (wet environments) but in practically all installations. should EMC filters be installed, the differential protection can be increased to 0,5A (in any case adjust to the minimum parameters).
– Conveying planes are 8° inclined towards the main planes.

The layout only includes the main configurations, thus for further details consult the technical department.
The data concerning the technical features of the items included in this layout is not binding, as it is liable to change without prior notice.







	safety electrosensitive mat	
	laser scanner	
	safety optical barrier	
	safety guards supplied by the manufacturer	
	Ethernet port RJ45	
	safety limit switch	
	pneumatic supply (peak)	
	electrical supply (absorbed maximum: ~80%)	
water supply	W1	(Rp 1/2"–Ø17–2,5 bar)
	W2	(Rp 1"1/4–Ø40–2,5 bar)
water discharge	S	(Rp 1"1/4)
G gas supply	IN=UNI4412 OUT=3/8" Rp	

Line Plant made up of:

- Vertical washing machine Art. VW00028HT
- Shape recognition and Quality control scanner Art. SQ00028HT
- Automatic "T-Shape" flexible spacer applicator Art. AT05028HT
- Coupling-flat press unit Art. AP05028HT
- Automatic sealing robot Art. SR05028HT

TECHNICAL FEATURES OF WORKING PANES ON LINE	
Minimum pane dimensions	320 x 180 mm
Minimum pane dimensions on "offset double-glazed unit" (optional)	400 x 260 mm
Maximum pane dimensions	5000 x 2800 mm
Single pane thickness	3 ÷ 25 mm
Minimum assembled pane thickness "aligned"	12 mm (3+6+3)
Minimum assembled pane thickness "offset" (optional)	20 mm (4+12+4)
Maximum assembled pane thickness	80 mm
Single pane weight (max.)	200 kg/m
Assembled pane weight (max.)	400 kg/m

Preliminary Layout

Date and Place — Stamp and Signature

Ver.	Data	Descrizione
Ver_4	15/7/19	AGGIUNTO SOFFIO ERIA ENTRATA LAVATRICE

Cliente: RAVENSBY GLASS Co. Ltd
Cod.: LY2019000527_00 | Data: 15/07/2019 | Dis: Loreno S. | Scala: 1:100

TERMS AND CONDITIONS OF SALE – HOME MARKET

1. INTERPRETATION

Additional Services: any Maintenance performed by the Company under this agreement.

Additional Services Fees: the fees payable in consideration of the provision of any Additional Services, which shall be calculated at the Additional Services Rates.

Additional Services Rates: the rates as notified by the Company as appropriate in accordance with the terms of this agreement.

Business Day: a day (other than a Saturday, Sunday or a public holiday) when banks in London are open for business.

Company: means Window Machinery Sales Limited registered in England and Wales (company number 02616659) and whose registered office address is Unit 3C, Hadrians Way, Glebe Farm Industrial Estate, Rugby, Warwickshire, CV21 1ST (trading as "Promac")

Contract: the contract between the Company and the Customer for the supply of Goods and/or Services in accordance with these Conditions.

Customer: means the person, firm or company to whom the quotation offer or tender is addressed.

Company Materials: has the meaning set out in clause 17.1(g).

Company's Premises: Unit 3C, Hadrians Way, Glebe Farm Industrial Estate, Rugby, Warwickshire, CV21 1ST

Conditions: these terms and conditions as amended from time to time in accordance with clause 23.8.

Deliverables: the deliverables set out in the Order.

Delivery Location: has the meaning set out in clause 4.2.

Force Majeure Event: has the meaning given to it in clause 23.1(a).

Goods: the goods (or any part of them) set out in the Order.

Good Working Order: the Goods operate in accordance with the Operating Manuals.

Location: means the location of the Goods at the Customer's premises as specified in the Order or any other location as may be agreed by the parties in writing from time to time.

Maintenance Services: Preventative Maintenance, Corrective Maintenance and Emergency Maintenance of the Goods.

Normal Business Hours: means 8:30am to 5:30pm Monday to Friday

Operating Manuals: all operating manuals, specifications and other manufacturer documentation relating to the Goods.

Order: the Customer's order for the supply of Goods and/or Services, as set out in the Customer's purchase order form or the Customer's written acceptance of the Company's quotation, as the case may be.

Preventative Maintenance: means:

(a) testing that the Goods are functional; and

(b) making any adjustments as may be required to ensure the Goods remain in Good Working Order,

in accordance with clause 16.2.

Services: the installation and Maintenance of the Goods, including the Deliverables, supplied by the Company to the Customer as set out in the Service Specification.

Service Specification: the description or specification for the Goods and Services provided in writing by the Company to the Customer.

Standard Maintenance Fees: the fees payable by the Customer for the provision of Preventative Maintenance and the Maintenance Services, as agreed between the parties, as these fees are varied from time to time in accordance with the terms of this agreement.

2. GENERAL

2.1 The Order constitutes an offer by the Customer to purchase Goods and/or Services in accordance with these Conditions.

2.2 No Order placed by you shall be deemed to be accepted by us until a written acknowledgement of the Order is issued by us or (if earlier) the Goods and/or Services are delivered by us to you.

2.3 All Orders and contracts between the Company and the Customer shall be evidenced in writing.

2.4 The Contract constitutes the entire agreement between the parties. The Customer acknowledges that it has not relied on any statement, promise or representation made or given by or on behalf of the Company which is not set out in the Contract.

2.5 Any samples, drawings, descriptive matter or advertising issued by the Company and any descriptions of the Goods or illustrations or descriptions of the Services contained in the Company's catalogues or brochures are issued or published for the sole purpose of giving an approximate idea of the Services and/or Goods described in them. They shall not form part of the Contract or have any contractual force.

2.6 These Conditions apply to the Contract to the exclusion of any other terms that the Customer seeks to impose or incorporate, or which are implied by trade, custom, practice or course of dealing.

2.7 Any quotation given by the Company shall not constitute an offer, and is only valid for a period of 21 Business Days from its date of issue.

2.8 Quotations, offers and tenders are for the whole of the Goods or Services to which the tender relates, or for which the Company has quoted, and the Company expressly reserves the right to refuse to accept any Order which constitutes part only of the Goods or Services forming the subject of such quotation offer or tender.

2.9 Any additional Programming or Re-Programming to quoted levels will be chargeable to the Customer based on the hours worked and traveled, at the applicable rates.

2.10 All of these Conditions shall apply to the supply of both Goods and/or Services except where application to one or the other is specified and unless varied by express agreement in writing as hereinafter provided.

3. DRAWINGS, DESCRIPTIVE DOCUMENTS AND BROCHURES

3.1 The weights, dimensions, capacities, prices and performance ratings and any other data or information contained in the Company's catalogues, prospectuses, circulars, advertisements, illustrated matter, drawings, price lists and those displayed on the Company's website are not intended to be representations of facts or opinion and are an approximate guide for information only and do not involve the Company in any liability where any specific installation fails to obtain equivalent results. No statement, description, condition or representation contained in such catalogue or other material shall be constructed so as to enlarge, vary or over-ride the tender set out overleaf or these conditions.

3.2 The Company expressly reserves the right at their sole option to include any uncatalogued improvements or alterations to its Goods and/or Services.

4. DELIVERY

4.1 Delivery terms are subject to confirmation after receipt of any Order. The delivery date given in the quotation, offer or tender is the Company's best estimate that time of tender, and is subject to delays occasioned by sale prior to receipt of firm order. A firm estimate of delivery will be made with confirmation of Order.

4.2 The Company shall deliver and if agreed, install the Goods to the location set out in the Order or such other location as the parties may agree (**Delivery Location**) at any time after the Company notifies the Customer that the Goods are ready for delivery.

4.3 Delivery of the Goods shall be completed on the delivery of the Goods and installation at the Delivery Location. Delivery shall mean the arrival of the Goods at the Delivery Location notwithstanding the Customer may not have accepted such delivery.

4.4 Any dates and times quoted for delivery and installation of the Goods are approximate only, and the time of delivery and installation is not of the essence. The Company shall not be liable for any delay in delivery of the Goods that is caused by a Force Majeure Event or the Customer's failure to provide the Company with adequate delivery or installation instructions or any other instructions that are relevant to the supply of the Goods.

4.5 The Company shall have no liability for any failure to deliver the Goods to the extent that such failure is caused by a Force Majeure Event the Customer's failure to provide the Company with adequate delivery instructions for the Goods or any relevant instruction related to the supply of the Goods.

4.6 If the Customer fails to accept or take delivery of the Goods within 10 Business Days of the Company notifying the Customer that the Goods are ready, then except where such failure or delay is caused by a Force Majeure Event or by the Company's failure to comply with its obligations under the Contract in respect of the Goods:

4.6.1 delivery of the Goods shall be deemed to have been completed at 9.00 am on the 11th Business Day following the day on which the Company notified the Customer that the Goods were ready; and

4.6.2 the Company shall store the Goods until delivery takes place, and charge the Customer for all related costs and expenses (including insurance).

4.7 If 15 Business Days after the Company notified the Customer that the Goods were ready for delivery the Customer has not accepted or taken delivery of them, the Company may resell or otherwise dispose of part or all of the Goods and, after deducting reasonable storage and selling costs, account to the Customer for any excess over the price of the Goods or charge the Customer for any shortfall below the price of the Goods.

4.8 The Customer shall not be entitled to reject the Goods.

4.9 The Company may deliver and install the Goods by installments, which shall be invoiced and paid for separately. Any delay in delivery or defect in an installment shall not entitle the Customer to cancel any other installment.

5. PAYMENT

5.1 Unless otherwise agreed by the Company in writing, payment shall be due immediately following the delivery and installation of the goods on all goods supplied on a cash sale basis. Goods supplied on a hire purchase, lease-purchase or lease basis shall be subject to settlement in full on advice to the Customer of their availability.

5.2 The time of payment of the price for the Goods shall be of the essence of the contract. Receipts for payment will be issued only upon request.

5.3 If you fail to make any payment on the due date then, without prejudice to any other right or remedy available to us, we shall be entitled to:

5.3.1 suspend further deliveries under any other contract with you whether made before or after this contract;

5.3.2 cancel the contract or suspend any further deliveries to you;

5.3.3 appropriate any payment made by you to such of the Goods (or the goods supplied under any other contract between you and us) as we may think fit (notwithstanding any purported appropriation by you); and

5.3.4 charge you interest (both before and after any judgment) on the amount unpaid, at the rate 3% above the base rate of HSBC Bank plc, calculated (on a daily basis) from the date of our invoice until payment in full is made (a part of a month being treated as a full month for the purpose of calculating interest). Interest accrued and payable shall be compounded on the first day of each calendar month and added to the principal amount outstanding.

5.3.5 recover costs, including legal costs, court costs and any other cost of collection incurred by us in the recovery of the unpaid amounts from you (including accrued and all outstanding interest). The Company also reserves the right to impose an administration fee in the amount of £500 on you with regard to the recovery of costs.

5.4 Interest will be charged in the event of late payment, the Company reserves the right to charge interest at the rate equivalent to that set for the purpose of Section 6 if the Late Payment of Commercial Debts (Interest) Act 1998;

5.5 Title of goods does not pass to the Customer until full payment for goods is received. Goods remain the property of the Company until such time as payment is received.

The above Conditions apply to all Customers, whether the party responsible for payment is a Limited Company, Personal Guarantor or Individual.

6. PAYMENT TERMS

6.1 Unless otherwise agreed in writing payment terms are 30 Days from the end of month of the invoice date.

7. PRICES

7.1 All prices which are quoted or which are terms of contract, are subject to variation in the event of the increase or decrease in any of the following: wages or cost of materials in the country of origin of the goods or the United Kingdom; the imposition of import surcharges; fluctuations in exchange rates; transportation costs or any additional charges or costs arising from government legislation. A certificate issued by the Company and signed by a Director stating the amount of the increase or decrease in the price shall be deemed to be conclusive.

7.2 The prices tendered are for the delivery date shown in the tender. In the event that the Customer's order is received too late for delivery to be made by that date, and if by the date that the goods are ready for delivery a new price for the goods has been issued by the Company, then the price prevailing at the date of delivery shall be deemed to have been substituted for the tender price.

7.3 The prices tendered are ex works prices and if the Company shall agree to deliver to a place in the United Kingdom, designated by the Customer, the Customer shall in addition to the price of the goods, pay any costs or charges incurred by the Company in effecting such delivery. In addition the Customer shall pay all costs of installing the goods, including such costs or charges incurred by the Company.

8. WARRANTY

8.1 Unless specifically varied by the contract, the warranty will be 12 months only on manufactured Goods and Services provided. All labour will be chargeable at the rate applicable at that time. All Materials and Goods (including parts) sold under warranty will be invoiced and it is the responsibility of the Customer to return the replaced part to the Company within 14 day of the part being sent.

9. TITLE AND RISK

If notwithstanding that the property in the Goods has not passed to the Customer, the Customer shall sell the goods in such manner as to pass to a third party a valid title to the Goods the Customer shall hold the proceeds of such sale on trust for the Company. The Customer agrees that prior to the payment of the whole price of the Goods the Company may at any time enter upon the Customer's premises and remove the Goods therefrom and that prior to such payment the customer shall keep the Goods separate and identifiable for this purpose.

9.1 Nothing herein shall constitute the Customer the agent of the Company for the purpose of any such sub-sale.

9.2 The Goods shall be at the risk of the Customer from the time of collection by or delivery to him of the Goods or after the expiration of any agreed rent free period whichever is the earlier.

9.3 Notwithstanding delivery and passing of risk in the Goods, or any other provisions of these Conditions, the property in the Goods shall not pass to the Customer until the Company has received in full (in cash or cleared funds) all sums due to it in respect of:

9.3.1 the Goods and/or Services; and

9.3.2 all other sums which are or which become due to the Company from the Customer on any account whatsoever.

9.4 Until title to the Goods has passed to the Customer in accordance with clause 9.4 above, the Customer shall keep the Goods insured against all risks for their full price from the date of delivery.

10. REPLACEMENTS OF FAULTY MATERIALS

10.1 The Company warrants that the Goods supplied are manufactured free from defects in materials, parts will be replaced free of charge and ex works Rugby, within the warranty period of 12 months provided the customer gives the Company immediate notice of such alleged defects and returns the defective Goods to the Company's factory prepared by the Customer for the Company. The warranty has effect from the date of delivery.

10.2 The Company's liability to the Customer is limited to such adjustment as the manufacturer makes to the Company. The Company shall not in any event be liable for consequential damage or any indirect losses howsoever caused.

10.3 This warranty shall not apply to any Goods that shall have been damaged by misuse, neglect or failure to perform maintenance as directed.

10.4 This warranty shall be null and void either if the Goods are used in a manner contrary to instructions or after malfunction if notified or if the Customer does not honour the terms of payment hereof or if the Goods are modified or altered without the agreement of the Company.

11. ACCEPTANCE

11.1 The Customer shall inspect the Goods immediately on the arrival thereof at the agreed point of delivery, and shall within 24 hours from such inspection, give notice in writing to the Company of any matter or thing by reason whereof he alleges that the Goods are not in accordance with the contract. The Customer shall not be entitled to reject the Goods until the Company has had a reasonable opportunity to investigate and perform such further work upon the Goods as the Company may consider necessary. If the Customer fails to give such notice the said Goods shall be deemed to be in all respects in accordance with the Contract, and the Customer shall be bound to accept and pay for the same.

12. PAYMENTS MADE TO THIRD PARTIES

12.1 In any case where the Company passes on any payment made by the Customer to a Supplier to the Company, and the goods for any reason are not supplied, then the obligation of the Company to return any such payments to the Customer shall be limited to the amount (if any) which the Company is able to recover from the relevant Supplier.

13. SALE BY DESCRIPTION OR WITH REFERENCE TO SAMPLE (where applicable)

13.1 Any Goods described in any tender shall be deemed to correspond with their description if they correspond with the sample which has been produced to and examined by the Customer, and further such description is given by way of identification thereof only, and the use of such description shall not constitute a sale by description.

13.2 Notwithstanding that a sample of the said goods has been exhibited to and inspected by the Customer, such sample shall be deemed to have been exhibited and inspected solely to enable the Customer to judge the quality of the product and not so as to constitute a sale by sample. The Customer shall take the goods at his own risk as to their corresponding with the said sample or as to their quality condition or sufficiently for any purpose.

14. SUPPLY OF SERVICES

14.1 The Company shall provide the Services to the Customer in accordance with the Service Specification in all material respects.

14.2 The Company shall use all reasonable endeavours to meet any performance dates for the Services specified in the Order or any acceptance of any Order, but any such dates shall be estimates only and time shall not be of the essence for the performance of the Services.

14.3 The Company shall have the right to make any changes to the Services which are necessary to comply with any applicable law or safety requirement, or which do not materially affect the nature or quality of the Services, and the Company shall notify the Customer in any such event.

15. INSTALLATION

15.1 The Company shall supply to the Customer, within a reasonable time before any installation of the Goods, such information and assistance as may be necessary to enable the Customer to prepare the Location for the installation of the Goods.

15.2 The Customer shall, at its own expense, prepare the Location in accordance with the information provided by the Company in advance of each Delivery Date.

15.3 The Company shall be responsible for ensuring that the Goods are installed and are in Good Working Order.

16. MAINTENANCE SERVICES

16.1 Subject to prior written agreement between the Company and the Customer the Company shall provide the Customer with the Maintenance Services for the Goods at the Location.

16.2 The Company shall attend at the Location during Normal Business Hours at a frequency as is reasonably determined by the Company to perform Preventative Maintenance of the Goods.

16.3 In performing the Maintenance Services, the Company shall use all reasonable endeavours to restore any malfunctioning or failed Goods to Good Working Order while in attendance at the Location. Where this is not reasonably practicable, or not reasonably practicable within Normal Business Hours (in the case of Preventative Maintenance and Corrective Maintenance), the Company shall either arrange for a further visit to the Location within Normal Business Hours to complete the repair, or remove the Goods or part of the Goods for repair off-site.

16.4 In performing the Preventative Maintenance, Corrective Maintenance and the Additional Services, the Company shall use all reasonable endeavours to source spare parts required to restore the Goods to Good Working Order.

16.5 All spare parts and/or replacements provided by the Company to the Customer shall become part of the Goods and the property of the Customer. The Company will assign to the Customer, with full title guarantee and free from all third-party rights, all spare parts and/or replacements provided by the Company. All parts and components removed from the Goods by the Company in the course of performing the Preventative Maintenance, Corrective

Maintenance and/or the Additional Services shall no longer constitute part of the Goods and will be the property of the Company. The Customer will assign to the Company, with full title guarantee and free from all third-party rights, all parts and components removed from the Goods by the Company in accordance with this clause.

16.6 For the performance of Corrective Maintenance and Preventative Maintenance, the Customer shall pay to the Company the Standard Maintenance Fees.

16.7 For the performance of any Additional Services, the Customer shall pay to the Company the Additional Services Fees.

16.8 The Standard Maintenance Fees shall be due and payable in full to the Company, within 30 days of receipt of a valid invoice from the Company. Any Additional Services Fees shall be due and payable monthly, within 30 days of receipt of a valid invoice from the Company.

16.9 The Company reserves the right to charge interest at an annual rate of 3% above the base rate of HSBC Bank Plc, calculated on a daily basis in respect of any sum which is due and unpaid, that interest to run from the date on which that sum is due and payable until receipt by the Company of the full amount, whether before or after judgment.

CUSTOMER'S OBLIGATIONS

17.1 The Customer shall:

a) ensure that the terms of the Order and (if submitted by the Customer) any installation specifications are complete and accurate;

b) co-operate with the Company in all matters relating to the Services;

c) provide the Company, its employees, agents, consultants and subcontractors, with full and free access to the Customer's premises, office accommodation and other facilities as reasonably required by the Company to provide the Services;

d) provide the Company with such information and materials as the Company may reasonably require to supply the Services, and ensure that such information is accurate in all material respects;

e) prepare the Location for delivery of the Goods and the supply of the Services;

f) obtain and maintain all necessary licences, permissions and consents which may be required for the Services before the date on which the Services are to start;

g) keep and maintain all materials, equipment, documents and other property of the Company (**Company Materials**) at the Customer's premises in safe custody at its own risk, maintain the Company Materials in good condition until returned to the Company, and not dispose of or use the Company Materials other than in accordance with the Company's written instructions or authorisation; and

h) notify the Company promptly if the Goods is discovered to be operating incorrectly;

i) provide the Company with any information that is reasonably requested in the performance of the Maintenance Services and the Additional Services;

j) not allow any person other than the Company to maintain, alter, modify or adjust the Goods without the prior written approval of the Company; and

k) not move the Goods from the Location without the prior written approval of the Company (approval not to be unreasonably withheld or delayed);

17. LIMITATION OF LIABILITY: THE CUSTOMER'S ATTENTION IS PARTICULARLY DRAWN TO THIS CLAUSE

18.1.1Nothing in these Conditions shall limit or exclude the Company's liability for:death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors;

18.1.2fraud or fraudulent misrepresentation;

18.1.3breach of the terms implied by section 2 of the Supply of Goods and Services Act 1982 (title and quiet possession);

18.1.4breach of the terms implied by section 12 of the Sale of Goods Act 1979 (title and quiet possession); or

18.1.5defective products under the Consumer Protection Act 1987.

18.2 Subject to clause 18.1:

18.2.1the Company shall under no circumstances whatever be liable to the Customer, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any loss of profit, or any indirect or consequential loss arising under or in connection with the Contract or the provision of the Services; and

18.2.2the Company's total liability to the Customer in respect of all other losses arising under or in connection with the Contract, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, shall in no circumstances exceed the maximum value of the relevant Order for supply of the Goods and Services.

18.3 The terms implied by sections 13 to 15 of the Sale of Goods Act 1979 and the terms implied by sections 3 to 5 of the Supply of Goods and Services Act 1982 are, to the fullest extent permitted by law, excluded from the Contract.

18.4 This clause 18 shall survive termination of the Contract.

19. DISPUTE RESOLUTION

19.1 If a dispute arises out of or in connection with these Conditions or the performance, validity or enforceability of it (Dispute) then, except as expressly provided in these Conditions, the parties shall follow the dispute resolution procedure set out in this clause:

19.1.1either party shall give to the other written notice of the dispute, setting out its nature and full particulars, together with relevant supporting documentation. On service of the dispute notice both you and us shall attempt in good faith to resolve the dispute.

19.1.2if the Customer and Company for any reason unable to resolve the dispute within 30 days of it being referred to them, the parties will attempt to settle it by mediation in accordance with the CEDR Model Mediation Procedure. Unless otherwise agreed between the parties, the mediator shall be nominated by CEDR Solve. To initiate the mediation, a party must serve notice in writing (ADR notice) to the other party requesting a mediation. A copy of the ADR notice should be sent to CEDR Solve. The mediation will start not later than 14 days after the date of the ADR notice. Unless otherwise agreed by the parties, the place of mediation shall be nominated by the mediator.

20. HEALTH & SAFETY

The Company unconditionally warrants that:-

20.1 The Company will comply with the duties imposed on it by the Health and Safety at Work Act 1974 or any amendment thereto or re-enactment thereof and of all other relevant statutory provisions, bye-laws, rules and regulations so far as they are applicable to the site or Goods or the Services: and

20.2 That all Goods supplied will be supplied with all necessary information sheets and registrations sufficient to comply with current statutory requirements. The Customer should contact the Company immediately if he is not in possession of such data.

21. Termination

21.1 Without limiting its other rights or remedies, each party may terminate the Contract with immediate effect by giving written notice to the other party if:

a) the other party commits a material breach of its obligations under this Contract and (if such breach is remediable) fails to remedy that breach within 14 days after receipt of notice in writing of the breach;

b) the other party suspends, or threatens to suspend, payment of its debts or is unable to pay its debts as they fall due or admits inability to pay its debts or (being a company) is deemed unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 or (being an individual) is deemed either unable to pay its debts or as having no reasonable prospect of so doing, in either case, within the meaning of section 268 of the Insolvency Act 1986 or (being a partnership) has any partner to whom any of the foregoing apply;

c) the other party commences negotiations with all or any class of its creditors with a view to rescheduling any of its debts, or makes a proposal for or enters into any compromise or arrangement with its creditors;

d) a petition is filed, a notice is given, a resolution is passed, or an order is made, for or in connection with the winding up of the other party (being a company) other than for the sole purpose of a scheme for a solvent amalgamation of the other party with one or more other companies or the solvent reconstruction of that other party;

e) the other party (being an individual) is the subject of a bankruptcy petition or order;

f) a creditor or encumbrance of the other party attaches or takes possession of, or a distress, execution, sequestration or other such process is levied or enforced on or sued against, the whole or any part of its assets and such attachment or process is not discharged within 14 days;

g) an application is made to court, or an order is made, for the appointment of an administrator or if a notice of intention to appoint an administrator is given or if an administrator is appointed over the other party (being a company);

h) a floating charge holder over the assets of the other party (being a company) has become entitled to appoint or has appointed an administrative receiver;

i) a person becomes entitled to appoint a receiver over the assets of the other party or a receiver is appointed over the assets of the other party;

j) any event occurs, or proceeding is taken, with respect to the other party in any jurisdiction to which it is subject that has an effect equivalent or similar to any of the events mentioned in clause 21.1(a) to clause 21.1(i) (inclusive);

k) the other party suspends, threatens to suspend, ceases or threatens to cease to carry on, all or substantially the whole of its business; or

l) the other party (being an individual) dies or, by reason of illness or incapacity (whether mental or physical), is incapable of managing his own affairs or becomes a patient under any mental health legislation.

21.2 Without limiting its other rights or remedies, the Company may terminate the Contract:

a) by giving the Customer 14 days written notice;

b) with immediate effect by giving written notice to the Customer if the Customer fails to pay any amount due under this Contract on the due date for payment.

c) The Customer may terminate the Contract by giving the Company not less than 3 months' written notice.

21.3 Without limiting its other rights or remedies, the Company shall have the right to suspend the supply of Services or all further deliveries of Goods under the Contract or any other contract between the Customer and the Company if:

a) the Customer fails to make pay any amount due under this Contract on the due date for payment; or

b) the Customer becomes subject to any of the events listed in clause 21.1(a) to clause 21.1(l), or the Company reasonably believes that the Customer is about to become subject to any of them.

22. Consequences of termination

22.1 On termination of the Contract for any reason:

a) the Customer shall immediately pay to the Company all of the Company's outstanding unpaid invoices and interest and, in respect of Services supplied but for which no invoice has yet been submitted, the Company shall submit an invoice, which shall be payable by the Customer immediately on receipt;

b) the Customer shall return all of the Company Materials and any Deliverables which have not been fully paid for. If the Customer fails to do so, then the Company may enter the Customer's premises and take possession of them. Until they have been returned, the Customer shall be solely responsible for their safe keeping and will not use them for any purpose not connected with this Contract;

c) the accrued rights and remedies of the parties as at termination shall not be affected, including the right to claim damages in respect of any breach of the Contract which existed at or before the date of termination or expiry; and

clauses which expressly or by implication have effect after termination shall continue in full force and effect

23. General

23.1 Force majeure:

a) For the purposes of this Contract, Force Majeure Event means an event beyond the reasonable control of the Company including but not limited to strikes, lock-outs or other industrial disputes (whether involving the workforce of the party or any other party), failure of a utility service or transport network, act of God, war, riot, civil commotion, malicious damage, compliance with any law or governmental order, rule, regulation or direction, accident, breakdown of plant or machinery, fire, flood, storm or default of suppliers or subcontractors.

b) The Company shall not be liable to the Customer as a result of any delay or failure to perform its obligations under this Contract as a result of a Force Majeure Event.

c) If the Force Majeure Event prevents the Company from providing any of the Services and/or Goods for more than 4 weeks, the Company shall, without limiting its other rights or remedies, have the right to terminate this Contract immediately by giving written notice to the Customer.

23.2 Assignment and subcontracting:

a) The Company may at any time assign, transfer, charge, subcontract or deal in any other manner with all or any of its rights under the Contract and may subcontract or delegate in any manner any or all of its obligations under the Contract to any third party.

b) The Customer shall not, without the prior written consent of the Company, assign, transfer, charge, subcontract or deal in any other manner with all or any of its rights or obligations under the Contract.

23.3 Notices:

a) Any notice or other communication required to be given to a party under or in connection with this Contract shall be in writing and shall be delivered to the other party personally or sent by prepaid first-class post, recorded delivery or by commercial courier, at its registered office (if a company) or (in any other case) its principal place of business, or sent by fax to the other party's main fax number.

b) Any notice or other communication shall be deemed to have been duly received if delivered personally, when left at such addressor, if sent by prepaid first-class post or recorded delivery, at 9.00 am on the second Business Day after posting, or if delivered by commercial courier, on the date and at the time that the courier's delivery receipt is signed, or if sent by fax, on the next Business Day after transmission.

c) This clause c) shall not apply to the service of any proceedings or other documents in any legal action. For the purposes of this clause, "writing" shall not include e-mails and for the avoidance of doubt notice given under this Contract shall not be validly served if sent by e-mail.

23.4 Waiver and cumulative remedies:

a) A waiver of any right under the Contract is only effective if it is in writing and shall not be deemed to be a waiver of any subsequent breach or default. No failure or delay by a party in exercising any right or remedy under the Contract or by law shall constitute a waiver of that or any other right or remedy, nor preclude or restrict its further exercise. No single or partial exercise of such right or remedy shall preclude or restrict the further exercise of that or any other right or remedy.

b) Unless specifically provided otherwise, rights arising under the Contract are cumulative and to not exclude rights provided by law.

23.5 Severance:

a) If a court or any other competent authority finds that any provision of the Contract (or part of any provision) is invalid, illegal or unenforceable, that provision or part-provision shall, to the extent required, be deemed deleted, and the validity and enforceability of the other provisions of the Contract shall not be affected.

b) If any invalid, unenforceable or illegal provision of the Contract would be valid, enforceable and legal if some part of it were deleted, the provision shall apply with the minimum modification necessary to make it legal, valid and enforceable.

23.6 No partnership: Nothing in the Contract is intended to, or shall be deemed to, constitute a partnership or joint venture of any kind between any of the parties, nor constitute any party the agent of another party for any purpose. No party shall have authority to act as agent for, or to bind, the other party in any way.

23.7 Third parties: A person who is not a party to the Contract shall not have any rights under or in connection with it.

23.8 Variation: Except as set out in these Conditions, any variation, including the introduction of any additional terms and conditions, to the Contract shall only be binding when agreed in writing and signed by the Company.

23.9 Governing law and jurisdiction: This Contract, and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims), shall be governed by, and construed in accordance with, English law, and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.