

- m) 1 - Longitudinal register monitoring and control system. Length register is monitored just before the emboss nip by scanning a rectangular or triangular print mark, and is controlled via the Elder computer.
- n) 1 - Oven exit guider to give fine trim of lateral register into the emboss nip. Lateral position is monitored just before the nip by scanning either a triangular register mark or the web edge. Lateral adjustment of the web is achieved via the Elder computer, by micro-slewing of the oven exit roller.
- o) 1 - Synchronous Elder computer drive system and controls. This has an interface for Customer's Modem and telephone connection, for remote fault diagnosis by our technicians in England.

(3) Additional Equipment

- p) 1 - Automatic temperature speed link. This facility allows the operator to pre-set the web temperature immediately prior to the embossing nip. The computer drive automatically adjusts the paper speed to maintain this pre-set temperature.
- q) 1 - Cooling water manifold with valves and flow indicators, for emboss rolls and cooling rollers.
- r) 1 - External air cooling system for emboss backing roll, including supply and extract fans and high velocity nozzle box.
- s) 2 - Spare emboss backing rollers in addition to one roller supplied with the basic machine in 1 (f) above.
- t) 1 - Electrical supply for hoist, roll winder, shrink wrapper, trim removal, recirc air and trim drive.
- u) 2 - Sets gears etc to suit Wetzel rollers.

(4) Integration

Included in this offer is the full integration of this equipment with the existing gravure press and a site visit to take relevant dimensions and have technical discussions.

**Machine Description (See Drawing 80622-A)**

- (1)
- a) 1 - Unwind - not included.
  - b) 1 - Infeed tension control.
  - c) 1 - See (l) below.
  - d) 1 - Three zone arch-back oven unit - gas heated - 3 x 5 metre modules - single pass - damper control of nozzle velocity/re-circulated air - independent temperature sensing and control to each zone - motorised thread-up mechanism - exhaust manifold duct and fan. Maxon gas burners. Extended height support legs included.
  - e) 1 - Infra-red heating section with zoned switching - pneumatic retraction to allow emboss/backing roll removal - auto retraction on line stop - fume extraction linked in to oven exhaust system.
  - f) 1 - Embossing section - hydraulic intensifier power unit - independent pressure control with up to 4.0 tonnes per side - one rubber covered back roller, water cooled.
  - g) 3 - 760 mm diameter water cooled rollers, complete with rotary union connections.
  - h) Trimmers (Helios) , E&R to provide speed reference and mounting pads.
  - i) 1 - Outfeed storage conveyor with adjustable guides (sloping board and two rollers) and photo-electric control - storage conveyor has sufficient capacity for 30 seconds production at maximum speed. Sand-blasted steel draw roll, rubber nip rolls. The conveyor is positioned underneath the oven with the web being transported back to the conveyor and additional drive nip.
  - j) 1 - Overhead gantry (hoist , for change of emboss and backing rollers.
  - k) 1 - Complete drive and control system, fully pre-wired to main control panel and tested before delivery.
- (2) Equipment to give embossing in-register with off-line printed design, including in register know-how.
- l) 1 - Automatic edge guiding unit - register draw nip assembly - tension sensing transducer roller (all positioned at oven entry).

ONE HIGH SPEED HOT EMBOSSING MACHINE. 53 & 70 CM  
(Gas Heating)

Production Criteria

Nominal Web Width:	53 and 70 cm trimmed widths.
Emboss Circumferences:	525 to 1070 mm, random and in-register
Typical Paper/PVC Weights:	90/90 to 100/220 gm/sq.m
Typical Production Speed:	150 m/min
Typical Production Speeds Depending on Emboss Design etc:	Up to 150 m/min for 90/90 gm/sq.m substrate Up to 80 m/min for 100/220 gm/sq.m

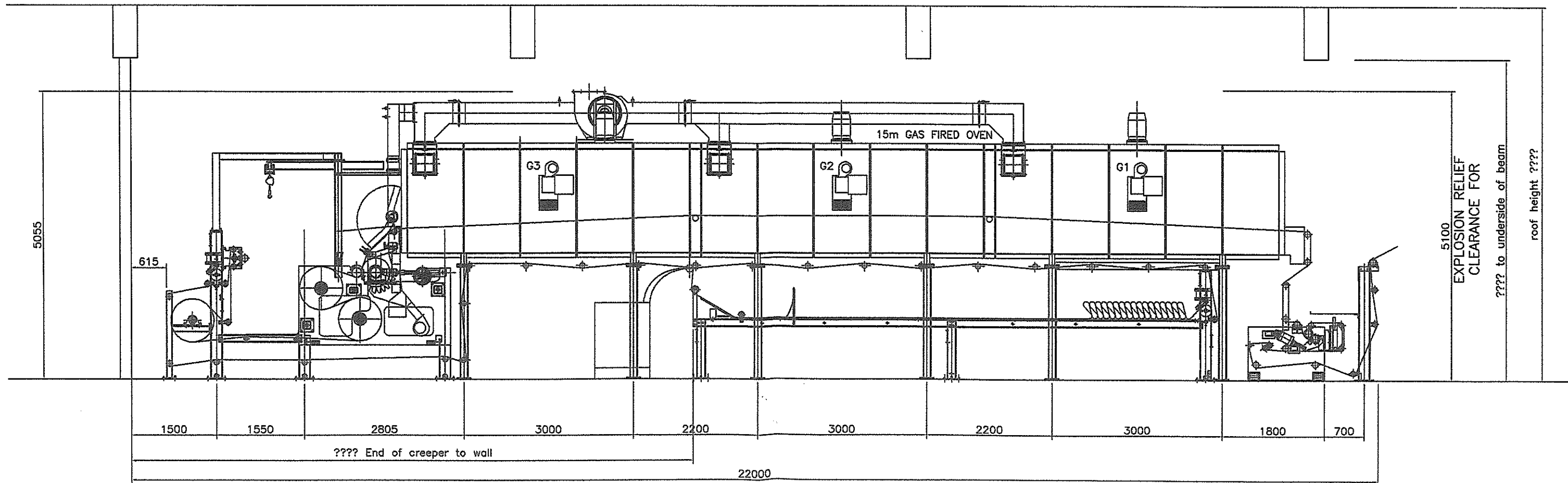
Note the Hot Embossing machine with oven heating can also be used with semi-expandible PVC base to give deep emboss effects with reduced PVC weight, also for chemical (inhibitor) embossing by missing out the emboss nip.

A longer oven will give increased speeds with high PVC weights; we have installed oven at up to 25 metres long.

One High Speed Hot Embossing  
Machine, 53 & 70 cm  
Integrated with Existing  
Gravure Press

Quotation No: SC/GW/969/2

Quotation



2) Retrofit per installazione di un gruppo di ventilazione consistente in:

- camere di asciugamento lunghezza 2,2 mt (colore camera RAL 9002)
- sistema di riscaldamento a gas
- completo di ventilazione
- predisposizione per futura installazione di un controllo LEL

3) Retrofit per installazione freno elettromagnetico su svolgitore in sostituzione di quello attualmente in uso.

1) Retrofit per sostituzione armadi elettrici e controllo in asse elettrico degli elementi Rotoscreen, comprensivo di:

- N. 1 armadio relematica, completo di:
  - Interruttore generale
  - N°2 Trasformatori
  - Alimentatore
  - N°22 Automatici di differente amperaggio
  - N°2 Soft start per ventilatori
  - N°19 teleruttori
  - N°17 Relè Omron
  - N°3 Relè Telemecanique
  - Cablaggio armadio relematica
  
- N. 1 armadio automazione comprensivo di
  - PLC ( N°1 micro memoria card, N°1 cpu siemens S7 315 2DP, N°4 schede digitali input, N°4 schede digitali output, N°8 connettori per schede PLC, N°1 touch panel TP170), guida PLC
  - SYNCRHO ( N°1 CPU mod. 7000, N°2 schede Input/Output, N°1 scheda card base, N°1 tastiera Synrho, N°1 trasformatore, N°1 Automatico)
  - Cablaggio armadio automazione
  
- N. 1 armadio azionamenti comprensivo di:
  - N. 5 azionamenti SIMOVERT MC DC 510650V 6,1A PLUS
  - N. 1 azionamento SIMOVERT VC DC 510650V 25,5A PLUS.
  - N. 1 azionamento SIMOVERT VC DC 510650V 17,5A PLUS.
  - N. 1 SIMOVERT MC 3AC 380-480V 120° PLUS 50 KW
  - N°1 bobina di commutazione
  - N°1 filtro
  - Cablaggio armadio azionamenti
  
- N°5 servomotori sincroni 1fk7 compact 11nm 100K 3000giri/min e relative trasmissioni meccaniche complete di supporto
- N°1 motore asincrono compatto 15kw 1500giri/min
- N°1 motore asincrono compatto 7kw 2000giri/min
- N°1 serie di cavi nuovi Siemens ai motori
- N°1 serie di canaline passa cavi