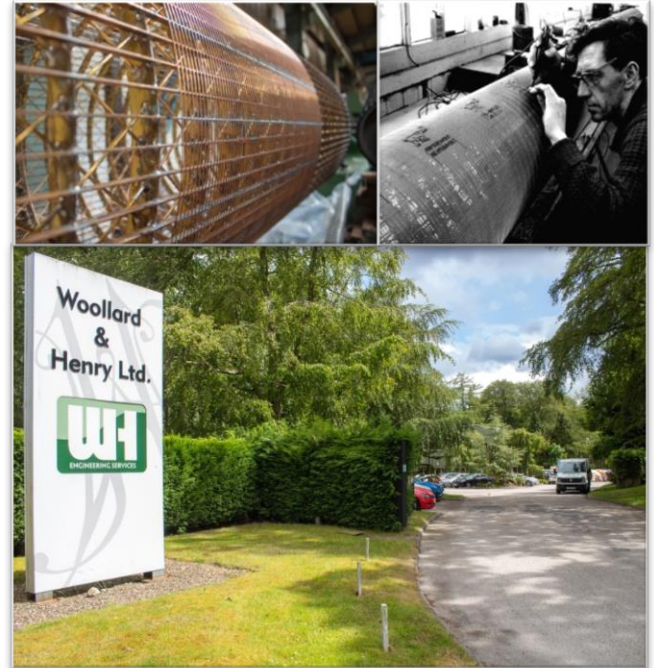




Presentation: Thread Insertion System
Date: 24th August 2020

About Woollard & Henry Ltd.

- Established in 1873 and have been manufacturing ever since
- Our wealth of experience and talent is unrivalled worldwide
- Always looking for innovation and development
- Employee owned since 2002
- With manufacturing sites across the UK and Europe.
- ISO 9001:2015 accredited
- Sectors: Pulp & Paper, Energy, Waste Water, Aerospace



Thread Insertion Systems

- Our thread insertion system is designed to run thread widths of between 0.5mm and 6mm, however wider thread widths can be accommodated if required.
- The system has been designed to allow a variety of bobbin sizes to be used, including the largest 250mm bobbins and 76mm cardboard centres.
- The system has been used at speeds up to 127m/min on a bank note machine. Design speed of 175m/min.
- Uses standard components like Siemens.



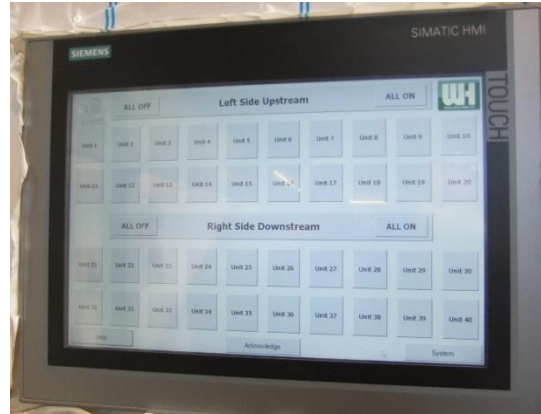
Thread Insertion Systems - Overviews

Unwind Systems.

Driven or Undriven



Thread Insertion Systems - Overviews



Thread Insertion Systems - Controls

15" Control Screen identifies progress and has live Thread monitoring locally and can also be integrated into a DCS System.

Has a 180 days memory capacity

Thread twist recognition from downstream QCS.

Tension control from 0.05N to 3.0N in 0,05N increments

Electronically controlled driven system.

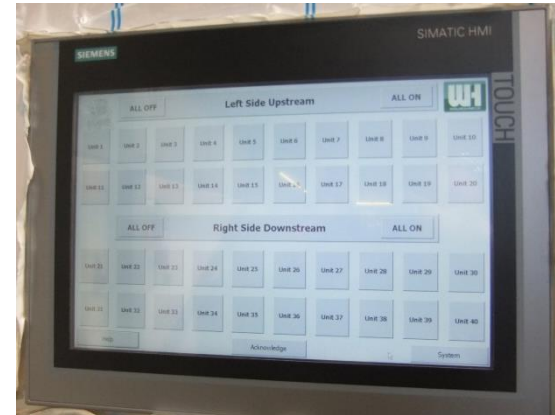
Hardware: Siemens brushless motors,

SMC electronic pressure regulators,

Pepperl + Fuchs angular encoders,

SMC frictionless cylinders.

Software: Supervision Scada



Thread Insertion Systems - Threads

Thread Range

0.5mm to 6mm Widths (wider is possible)

Thread Thickness 0.015 and 0.045mm

Tension control from 0.05N to 3N



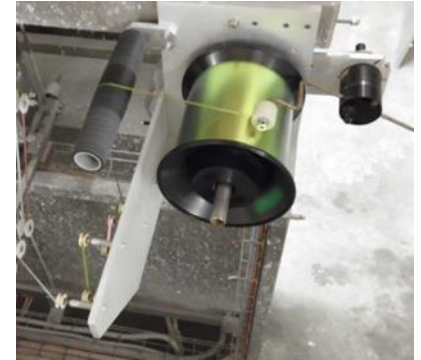
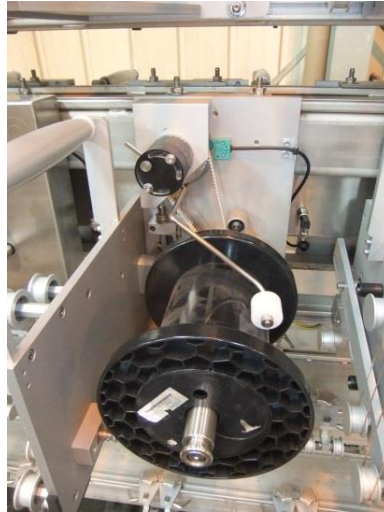
Thread Insertion Systems - Bobbins

Bobbin Types: HKV Spools

HKV 160
MeFo160
HKV 200
HKV 250

Max. weight 25kg

Cardboard Core also available



Thread Insertion Systems – Siting of Unwind Units

POSITION AHEAD OF THE FORMING SECTION

Designed to suit existing or available space.
Unwind units 50mm offset for the passage of thread.
Threads can be positioned over a length of 3100mm.



Thread Insertion Systems – Feed Control

POSITION ON THE FORMING SECTION

Headbox Area

Insertion Oscillation.
Programmable Control.

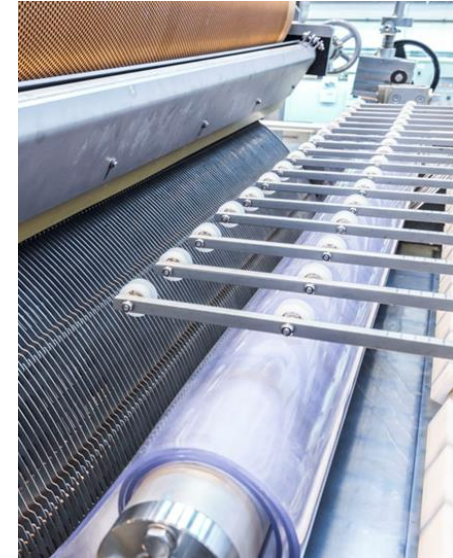


Thread Insertion Systems

INSERTION POSITION IN THE VAT

Headbox Area
Adjustable position.
Pre or Post VAT Curtain.

Feed System
Pulleys
Material
Pulley widths
Tubes
Good for space
Controlled feed



Thread Insertion Systems

OUR SYSTEM CAN OFFER

- Simultaneous Insertion of Dual Threads
- Control of progress on the run
- Identification and alert of any Thread break
- Individually controllable tensioning
- Controllable oscillation
- Secured hierarchy for management levels

Bespoke designed with the latest technology for your needs today and tomorrow.



Thank you

WOOLLARD & HENRY LTD

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