



St Regis chose Helios knife system

Following several successful projects carried out within the mill, St Regis Paper Company, Higher Kings Mill asked Webtek UK Ltd to put forward a proposal to improve the cut reel quality and reduce the knife setup time on their main Jagenberg mill winder.

The Jagenberg primary mill winder receives reels up to 2450mm wide from the paper machine for slitting down to customers orders.

The winder was fitted with the original knife units supplied with the machine.

These knife units were nearing the end of their working life. They were becoming increasingly difficult to move & set accurately.

The solution proposed by Webtek UK was the retrofit of a complete new Helios top knife slitting section with the existing bottom multi knife block knife system being retained.

The Helios knife system retrofit incorporated a new beam fitted with two precision ground linear slides, 15 of the latest model S4-75C Plus pneumatic knife units and a 'visualised' Helios knife position display and control system.

The S4-75C Plus pneumatic knife units supplied to St Regis incorporate a precision micrometer knife depth adjustment system which allows the top knife / bottom knife overlap to be set precisely.

The S4 Plus also incorporates the finger guard operator protection system.

This proven safety system has been available for a number of years on Helios knife units.

The finger guard completely covers the bottom of the knife until air is applied. When air is applied the finger guard retracts as the knife descends allowing the top knife to safely engage with the bottom knife.

The knife cant angle on the S4 Plus can be adjusted and set with the knife unit on the machine so the optimum cut quality can easily be achieved.

The retrofit included the Helios 'Visualised' knife position display system which utilises several components from Helios's automatic knife setting system.

These include the touch screen operator interface, PLC based slit calculation with job memory system and knife position sensor system.

The 'Visualised' system can be used in several different ways, these include.

1. To confirm slit configuration after the knives have been set.

Each knife unit in use is displayed on the operator screen. The system displays the knife unit distance from a datum point and the distance between knife units.

[Webtek UK Ltd](#)

Unit 2, Premier Business Park, Huntspill Road, Highbridge, Somerset. TA9 3DE

Tel 0044 1278 765877 Fax 0044 1278 765889 www.webtekdesignsuk.com sales@webtekuk.com

2. To calculate a slit pattern, indicate knives to be used and confirm when the selected knives are in the correct position.

The operator inputs the parent reel width, size and quantity of slits.

The system will then select which knife units are to be used.

The S4 Plus knife units are mounted on individual carriages.

The selected knife unit's carriage LED's will flash if the knife unit needs to be re-positioned.

Three LED's are located on each carriage plate.

The left hand LED flashes to indicate the knife unit should be moved to the left, the right hand LED flashes to indicate the knife unit should be moved right.

The centre red LED will only be illuminated when the correct position has been reached.

The bottom knives can then be positioned, knife holders switched on and the correct side load pressure applied.

The slit pattern configuration can then be saved in the memory and recalled at a later date.

Each knife unit carriage incorporates sealed bearings which run on two precision ground linear slides.

Each knife unit is moved easily by a hand wheel connected to a rack and pinion system.

Although the knife units are currently positioned manually, this can be upgraded to semi automatic or automatic positioning at a later date.

The new Helios knife system has now been in use for several months.

Setup time for the top knife units has been halved with the new system.

Webtek UK Ltd have exclusively represented Helios, Elio Cavagna s.r.l in the UK and Ireland since 2004 and can therefore guarantee the best price and delivery for any Helios knife system, knife unit or spare part purchased within the UK and Ireland.

Webtek UK also provide an approved repair and refurbishment service for Helios products either purchased directly from us or through any other third party intermediary.

For further information please contact:

Webtek UK Ltd, Mr Stuart Grantham Tel 0044 (0)1278 765877 email: sales@webtekuk.com

Helios,Elio Cavagna s.r.l. Mr Attilio Cavagna Tel 00390371 68099 www.helioscavagna.com

Webtek UK Ltd

Unit 2, Premier Business Park, Huntspill Road, Highbridge, Somerset. TA9 3DE

Tel 0044 1278 765877 Fax 0044 1278 765889 www.webtekdesignsuk.com sales@webtekuk.com