

UniAXIS

Offline register control system



High accuracy

Low wastage

Quick set-up

UniAXIS is a single unit length and side register control system which can control various kinds of post printing processes. Project or customer specific software allows the exact adaptation of the register control system for different applications such as:

- Inline processes
- Offline processes (insetting)
- All kinds of printing processes

System Overview

UniAXIS is used to control customised as well as a combination of machines where dynamic length and side register control is required.

Some typical applications include:

- Single colour printing on pre-printed film
'Cut to print' applications on cross cutting machines and 'roll to sheet' machines 'selective/registered coating' on pre-printed film
- Register lamination
- Registered lamination of two webs
- Front to back registration

Central processing unit (PLC integrated in a 7" touch-screen)

The digital central processing unit consists of a maintenance-free power panel including a touch screen and an industrial grade CPU which ensures trouble-free working even in harsh production environments.

ATEX certified fibre optic 'intelligent sensor'

UniAXIS' ATEX certified fibre optic sensor can measure conventional triangular and rectangular register marks to compute errors. The specially designed lens system in combination with a low-power white light LED ensures the detection of low contrast marks on various printing materials. A double channel sensor is also available for special applications.

Salient Features

- User-friendly and intuitive touch-screen HMI
- Control of all in-line and offline processes (insetting); ensures consistent quality output
- Measures a variety of register marks such as triangles, wedges, rectangles, and mini marks. Also measures customised patterns for computing errors.
- Automatic Mark Recognition (AMR), with and without code marks
- Compatible with industrial ethernet and serial interfaces with machine control for optimised control and handling

Features

Online chart recording

The on-screen chart recorder displays the register performance in real-time, which helps maintain consistent print quality.

Oscilloscope function

The oscilloscope screen shows the amplitude of the detected register marks. It also has other useful features such as mark setting into the gate with one touch, changing gate parameters, zoom, specific alarm messages, direct manual motor commands and more.

Waste indication alarm (optional)

The UniAXIS allows users to set the register tolerance to the desired parameters. The waste indication alarm is an optional feature that alerts the operator if these limits are exceeded. At the same time, the waste material is tagged as such from the time the alarm begins to the time it ends (e.g. by a tabbing unit at the re-winder), allowing for easy identification of waste material. Both visible or audible alarms can be used.

ABOUT A.T.E.

With deep domain knowledge built over three decades in the print and packaging field, A.T.E. is known as a reliable source of quality products. A.T.E. has developed customised solutions for demanding and complex printing applications using measurement and control technologies. A.T.E.'s dedicated team is focused on continuously improving A.T.E.'s products and solutions with regular upgrades to algorithms and software.



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