SCANNING WITH FALCON: YOU JUST CAN'T ESCAPE ITS CLUTCHES

OPEX Corporation's universal document scanning workstation, Falcon™, has received the 2015 Document Manager Editor's Choice Award

The Falcon™ scanner

Searching for a document among 1000s of important paper files stored in boxes on warehouse shelves is a thing of the past. The Falcon™ scanner by OPEX Corporation allows companies to reduce their costs of storage space and minimize the time and effort to search for and retrieve documents by efficiently and economically digitizing those important records. Falcon is designed to attack the most difficult and daunting workflow challenges with the least amount of document prep possible making it the only universal document scanning workstation on the market.

Falcon can scan almost any document regardless of size, condition, or thickness: from business cards and manilla folders to onion skin paper and overnight envelopes. Since Falcon allows the operator to combine document prep and scanning in one step, it reduces the overall cost of the entire scanning process. Many labor components are eliminated by the unique capabilities of Falcon's four versatile feeder options. Falcon scans up to 220 images per minute at 300 dpi.

Ogura OPL clutches

To prevent double feeds, or having two sheets of paper run through the scanner simultaneously, the Falcon uses two OPL slip clutches from Ogura. The rollers that pull the paper through have the main drive roller and an opposing rubber roller running in the opposite direction. The OPL is mounted in the second rubber roller. For single sheets fed into the scanner, the main roller simply pulls it through. However, when scanning stacks of paper, the friction of the rubber roller is greater than the friction between the top two sheets of paper, resulting in a separation of the pages. The second sheet is held by the OPL until the first page has passed by and is scanned.

The slip function of the OPL clutches operates magnetically. There are a series of permanent magnets attached to the plastic rotor in the OPL. The shell of the OPL is steel. Between the steel shell and the magnets there is magnetic particle powder. The magnetic particle powder follows the lines of flux from the magnet to the steel shell. This causes a magnetic drag between the input and output of the clutch.

The OPL's are sealed so they cannot contaminate the machine; but also, paper dust can't get into the OPL and cause a problem with slip torque. The OPLs do not require any outside power to operate, nor do they require any adjustments like mechanical slip clutches. These units have extremely long life.

Ogura MIC clutch

Falcon scanners use a series of Ogura MIC-3.5T clutches. These clutches drive the paper advance rollers. These are on/off type clutches that only engage when the system logic says they need to be engaged. Clutch engagement is controlled by the length of the document going through the scanner.

Ogura manufactures the MIC-3.5T high volume micro clutches for the business machine industry. These clutches are primarily used in office automation machinery that handles paper (copiers, printers, fax machines). The MIC-T clutch consists of a powered 24v coil, rotor armature, and output hub. These clutches use a multi-pole design that increases the torque for a given size coil. This multi-pole design reduces the weight, length and cost when compared to other clutch models.

Thanks to the five Ogura clutches used by OPEX, the Falcon keeps documents flowing smoothly through their universal document scanning workstation, helping businesses worldwide digitize their documents in the most effective, secure and economical way possible.●

For more information, visit www.opex.com