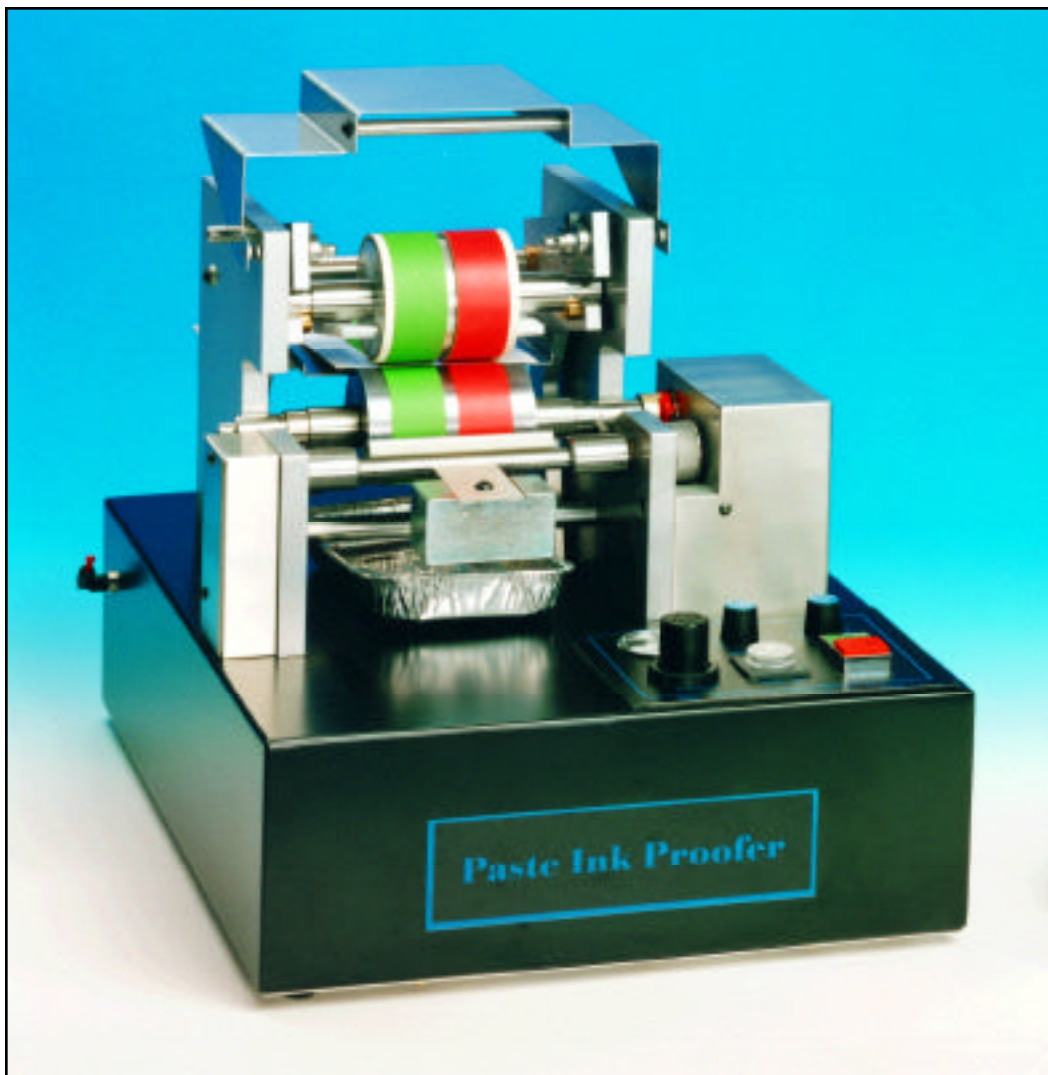


PASTE INK PROOFER-PIp

The RK instrument for quick, repeatable and highly accurate proofing and colour-matching of all types of litho, web-offset, letterpress inks and varnishes. The Paste Ink Proofer is unique in featuring automated operation, eliminating the need to weigh or measure ink samples.



- Accurate proofs produced in a single operation
- No messy weighing or measuring of inks, unlike other proofers
- Two inks may be proofed simultaneously for comparison
- Complete inking/proofing/cleaning cycle only 2-3 minutes
- Multiple proofs easily obtained using any substrate
- Reduces press down-time

PRINCIPAL USES

The Paste Ink Proofer has many applications. It is an essential tool for both ink makers and printers, providing the simplest method of producing high quality proofs. These proofs may be used for computer colour matching data, customer samples, or to test for colour, gloss, opacity, penetration, drying, set off, rub and abrasion resistance. Pigment and other raw material suppliers will find the PIP invaluable for assessing their products.

AUTOMATIC OPERATION

Most conventional systems have a separate inking unit consisting of a number of rollers with a known area. Ink must then be either weighed very accurately, typically 0.3gm, or measured by volume. This necessitates carefully filling a pipette with ink and measuring about 0.3cm³ onto the rollers. These methods require the use of a skilled operator and involve more time, more cleaning and more apparatus.

The operation of the Paste Ink Proofer could not be easier. The operator simply takes a spatula of ink and applies it across the laser engraved ceramic roller and presses a button to start the automatic inking and printing process. The ink is distributed between the ceramic and blanket rollers at a controlled speed. After a pre-set time the doctor blade removes all the excess ink from the engraved roller, leaving behind a known film thickness on the blanket roller. Printing speed and pressure are automatically adjusted and a proof is then made using paper, board, tinfoil or most other flexible or rigid substrates. Multiple proofs are easily obtained by the addition of more ink. For users wishing to print two inks simultaneously for comparison purposes, a split blanket roller is available, or alternatively when it is required to print all three standard ink densities simultaneously a triple bank engraved roller (ref. PIP.13) can be used.

During the entire inking and proofing cycle only three parts - the two rollers and doctor blade - come into contact with the ink. These simply lift out for cleaning. Thus, the entire inking, proofing, cleaning cycle takes only 2-3 minutes. Anilox offset inking has been well-proven over the last 7 years on over 300 production machines.

INK FILM

The ink film on the blanket roller is accurately metered by a screen engraved on the inking roller. The inking roller has a polished ceramic surface that is covered in uniform cells that have been engraved using a laser. The number and depth of these cells are accurately controlled and contain a constant volume of ink. The following table gives the ink density applied when using a typical offset ink.

Roller Ref	Ink Density
PIP.10	Light
PIP.11	Medium
PIP.12	Dark
PIP.13	3 bands - light/medium/dark

All inking rollers are supplied with a proof and a record of the actual film applied using a typical offset ink. Inking rollers to give other ink films may be made to order. The ceramic surface is virtually indestructible in normal use and is therefore ideal for use as a "standard" for quality control purposes.

PASTE INK PROOFER SPECIFICATION

Substrate size	124mm wide x 300mm long
Print size	75mm x 245mm
Speed range	5 - 40m/min
Printing pressure	0 - 150 Newtons/cm
Blanket roller	70° shore hardness, suitable for all types of paste inks
Services required	110/120 or 230/250 volts
Machine dimensions	400mm x 400mm
Weight	40kg