



SK1100RC RECOMBINATION SYSTEM:

Maximum Image Area:
1100mm x 1100mm:

SK450RC RECOMBINATION SYSTEM:

Maximum Image Area:
305mm x 457mm:

The Principles of the Systems:

The principal use of these systems is to step and repeat individual hologram images or to step out patterns to make continuous or a varied design. The exceptional reproduction capabilities of the Eskay Recombiners make it ideal for security projects which demand no differential between images which normally occurs when the master hologram is originated in multiple up on the holographic plate. For this purpose the image is originated as a single image and then stepped out to suit the embossing layout using the recombination method. In the case of dot matrix imagery, a single image can be replicated in a short period of time by recombination whereas it would take days or even weeks to replicate the same image over a large area by the method of laser.

In the case of repeating patterns or designs, again these can be placed on the recombination plate to the chosen position. Because of the exceptional high fidelity reproduction from the original hologram and the smooth transition between recombined images the design can appear to be as if it was manufactured as an all over design in the first instance.

This system is crucial to the mass producers of embossed holography and allows them the versatility to step and repeat out countless patterns and designs from just a small holographic design or image. With the added bonus of being able to take a one up image and to step this out to multiples to the desired position for the embossing and finishing processes as required.

Description of the Recombining Process:

The recombination unit is a stand alone system. It uses complex computer controlled electrical energy to replicate the holographic image into a thermoplastic plate which can be repeated within a 30.5 x 45.7 cm area on the SK450RC standard and 100 cm square area on the SK1100RC system, and do individual images up to 50 cm square within its travel area.

A flat nickel shim containing the image or design is used for this process which is attached to a highly engineered die head. The unit is operated automatically after setting the parameters into the computer control unit. It has a memory of 49 different programs enabling a fast process time for future reference on recombination's.

It a user friendly system with a fast set up and process time in comparison to the standard heat and pressure systems. It is designed to be used by one operative and can be left to run automatically once the parameters are set.

The only basic requirement is that the unit is in a dust free room and has the relevant power supply available and it only needs a supply of clean air for plate cleaning prior to processing.

Each thermoplastic plate is inexpensive and after the step and repeat process is carried out the metallurgy process (electroforming) is carried out as normally processing a photo resist plate. Unlike photo resist, each plate can be copied many times if required or simply stored for future use.

The die head is adaptable to take a variance of recombination dies. It is also capable of being positioned through a + - rotation of 90 ° which can enable a different directional position of the recombined image. The height of the recombined image is determined by the recombination shim height and the width by the die width. A drawing is supplied to enable the client to supply their own dies to their requirements.

