

[To visit our website, www.flow.co.za, click here](http://www.flow.co.za)

What you should know about the use of Feed Optic Window Frames in FLOW diamond recovery machines?

The secret in the design of the Optic Window frame (Flow part number 4960) in a Flow Sort machine is the correct combination of components that will give the required optical clarity, a minimum of “self-luminescence”, produce the correct bonding to the stainless steel frame to ensure 100% waterproofing and at the same time have the same wear characteristics as the surrounding stainless steel feed-slide.

This may sound simpler than it is! Flow has developed and improved this critical sorter part over several years. Feed optic window frames manufactured by Flow are designed to meet these requirements. The polyurethane used by us has been specifically formulated for Flow, there is no such substitute product on the market.

It has come to our attention that our window frames are being copied to Flow Sort machine users who are made to believe that these are identical to Flow Sort parts.

We have received several complaints about poor diamond recovery as well as short service life of such pirate parts.

Please consider the following when buying new or have existing window frames refurbished.

1. If the incorrect type of Polyurethane is used it will turn yellow, this increases the risk of losing weakly luminescent diamonds as they generally emit light in the blue spectrum and a yellow window filters out most of blue light.
2. If the polyurethane is too soft, the polyurethane will wear away faster than the surrounding Stainless Steel, resulting in reduced window frame operating life, causing feed instability and increased operating cost.
3. If the Polyurethane is incorrectly mixed or incorrectly applied it loses its bonding to the stainless steel frame and / or the X-ray absorbing lead glass causing “blindness” and water leaks. Note that the presence of X-Rays accelerates the effect of Polyurethane degrading and yellowing. The components used in our Feed Optic Window frame design have minimised these effects.
4. Further take note that the lead glass used by FLOW prevents X-rays from entering the Optic box were they would damage the sorters “eyes” (PM Tubes), resulting in noisy signals which in turn result in poor recovery of low luminescent diamond!

Also consider that using “pirate-parts” may invalidate your licence to operate Flow machines. All Flow products are made to stringent radiation safety requirements. Any change or modification to our products is considered unlawful unless it is approved by the relevant authorities.

Your FLOW team