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X-OVERFEED\_PROTECT\_030502\_M10.DOC  
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DATE: 2003-05-02  
UPDATE:

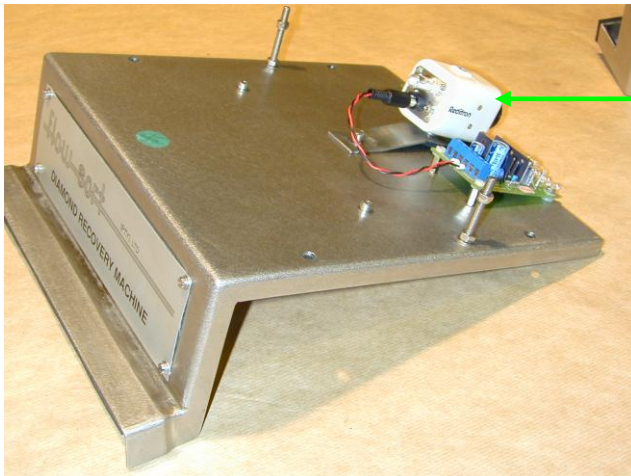
## **OVER-FEED-PROTECTION UNIT**

One of the most serious operating problems of any x-ray fluorescence based diamond recovery machine is the possibility of passing too much material “KILOGRAMS PER HOUR” through the sorter ... ‘Over feeding’ the sorter.

Even when the sorter is properly adjusted there are factors, essentially outside the machine operators control that can lead to over-feeding. For instance a change in material particle size distribution, a change in feed material loose water content, variations in material cleanliness (a problem very common with kimberlite) etc. The most common problem however is the deliberate increase of sorters feed rate beyond its maximum capacity in order to treat more material, end a shift more quickly or simply make up for production shortfall (usually caused by various plant breakdowns).

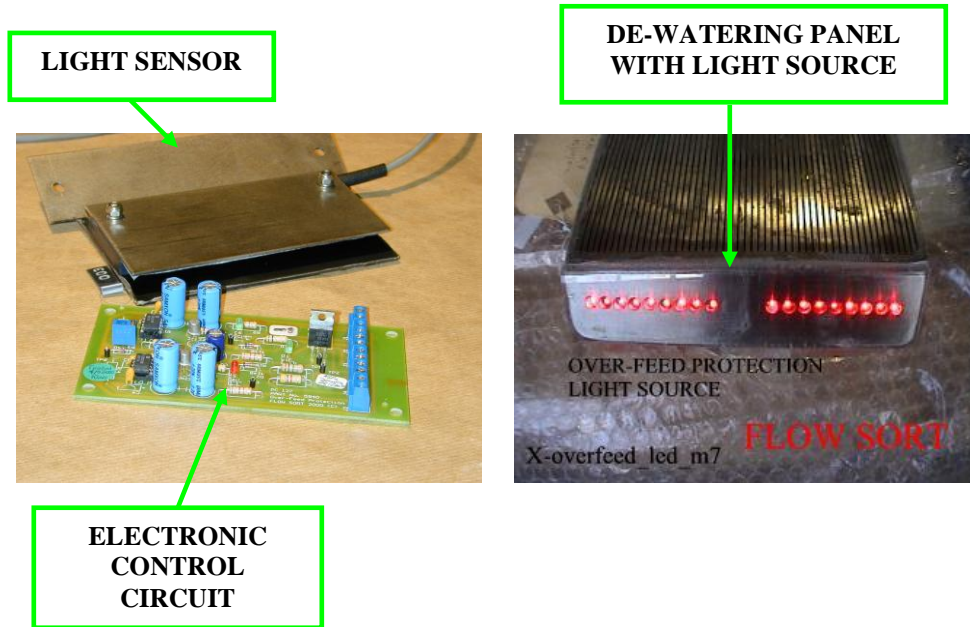
Whatever the reason may be, the bottom line is that overfeeding a sorter results in a drop of diamond recovery efficiency. ( Which is often blamed on the sorter not “working properly”!)

FLOW SORT offers a camera monitor system for better ‘remote’ feed rate monitoring which gives visual feedback to the machine operator at the sorters control panel or in a control room.



**FEED CAMERA  
MOUNTED ON THE FEED  
INLET CHUTE.**

To eliminate the ‘human-element’ from this most important final diamond recovery stage even further, FLOW SORT is proud to announce that it has now added a fully automatic sorter OVER-FEED PROTECTION UNIT to its product range.



This is now an optional extra as well as a retrofit for all FLOW SORT X-Ray diamond recovery machine models.

Installation of this system can be done on site. (The work involved is in essence the same as replacing a wedge wire panel in the vibrating feeder.)

Peter Wolf