

TB0393 Case Study M005 Microline Saw Blade Cutting Into Gripper

Saw blade has cut into gripper, despite the protection system with the sensors being fitted to prevent the saw valve output operating.

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Analysis

Cut prevention systems already in place:-

1. Software system will not put the gripper into a position under the saw blade under normal operating, therefore to fail, the actual gripper position must be different to the expected position – ie the datum position must be wrong.
2. Failsafe system will prevent the saw cut valve from operating through relays if the cut prevention sensors are active
The failure can only happen if both of the above fail together in a certain way

Attended on site by Martyn Vaughan 27/03/18. Job No #40231

- Position of failsafe sensors allowed an area between sensing when the gripper could be under the blade
- Sensor gap varying because of play in the journals – the carriage rocks up and down, changing the sensor gap and therefore making sensing unreliable
 - o Datum position was incorrect
 - o Failsafe sensor gap too far away and did not sense when pusher in a danger position

Further Action

- Microline Service checklist updated add compulsory check for this set of circumstances