Autoflow Safety Circuit Fault Finding

This tutorial will guide you through how to find a fault on a safety circuit on all revisions of the Autoflow machine.

| ⊞ Difficulty **Very Hard** | ⏱ Duration **60 minute(s)** |

Contents

Introduction

Link to technical documentation Monday.com board:

https://stugaltd.monday.com/boards/3338864598

Step 1 - Autoflow 2 A2001-A2004

Step 2 - Autoflow 2 A2005-A2016

Step 3 - Autoflow 2 A2017-A2022

Step 4 - Autoflow 2 A2023-A2025 (and A2031)

Step 5 - Autoflow Mk4 A2026-A2030

Step 6 - Autoflow Mk4.1 A2032+

- Dual channel safety circuit controlled by an E0001613 Pilz PNOZs3 safety relay.
- Feedback circuit goes through 2x 24Vdc contactors.
- Picture reference 1 shows where the safety terminals are in the cabinet.
- Safety loop order from safety relay:
  1. Cabinet Estop Button
  2. Infeed Table Console Estop Button
  3. Infeed Table Safety Gate Guardswitch
  4. Infeed Table End Estop Button
  5. Machining Centre Front Door Interlock Switch
  6. Machining Centre Rear Door Interlock Switch
  7. Sawing Centre Front Door Interlock Switch
  8. Sawing Centre Rear Door Interlock Switch
  9. Sawing Centre Outfeed Table Estop Button
  10. Sawing Centre Outfeed Table Safety Gate Guardswitch

Notes:
To allow the door unlock signal to work, the safety circuit must be inactive (dumped).