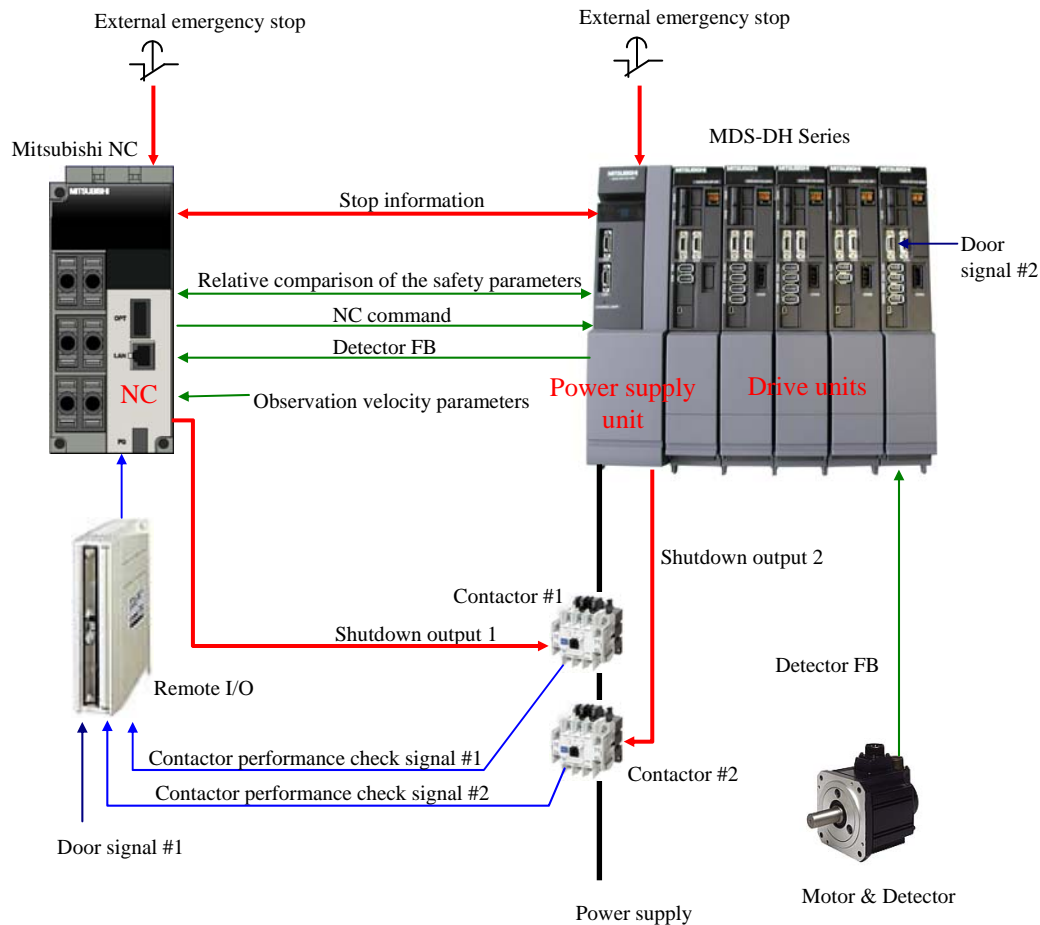


Outline of Safety Observing System for M700 and M70 CNC Systems

Configuration of Dual Observing System

Observes motors' velocity and position with the CPUs of the NC and drive unit doubly to ensure high safety. With our safety function the cost and space in the cabinet can be saved.



Each device's role in the safety function

1. Dual emergency stop

- 1) Emergency stop will be input in the NC and power supply unit.
- 2) The shutdown signal at an abnormality will be output from the NC and power supply unit.
- 3) Motor will decelerate and stop.

2. Velocity observation function

- 1) Velocity is observed by the CPUs of the NC and each drive unit.
- 2) All observation velocity parameters can be set by the NC.

Performance

- (1) Door signal state checks if the machining chamber is accessible with the door open.
- (2) NC command and motor FB velocity are observed not to exceed the velocity set by the observation velocity parameters.
- (3) If the velocity is exceeded, emergency stop will be immediately processed. (The rotating motor will decelerate and stop, then the contactors will be shut.)

Block chart of the Dual Observing System

Dual system configuration (NC control unit and drive unit) will prevent safety from being jeopardized due to failure of one system.

