BASE DESIGNS

- AIR TO OPEN with PST
- AIR TO OPEN without PST
- Hydraulic or Pneumatic
- AIR TO CLOSE ESDV
- CONTROL VALVES

UNIVERSAL 2004D SOV DESIGN

RELIABILITY MEANS

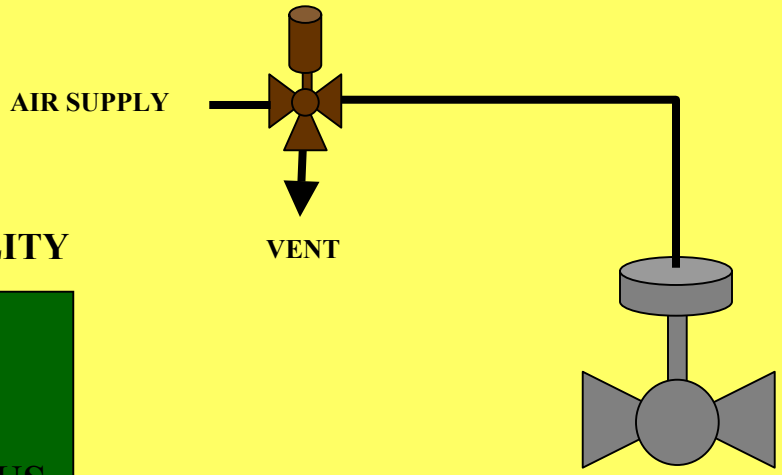
HIGH OPERATIONAL AVAILABILITY

MEANS: THE ABILITY TO KEEP THE VALVE OPEN

HIGH SAFETY AVAILABILITY

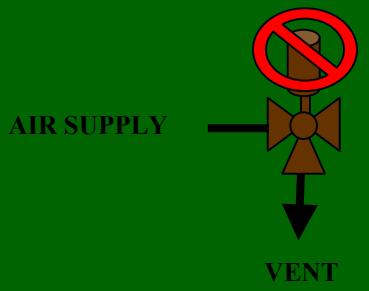
MEANS: THE ABILITY TO CLOSE THE VALVE

1oo1 SOV



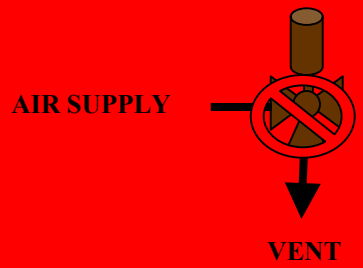
THE ISSUE IS:
LOW OPERATIONAL AVAILABILITY

COIL BURNOUT



SPURIOUS TRIP

STUCK SPOOL



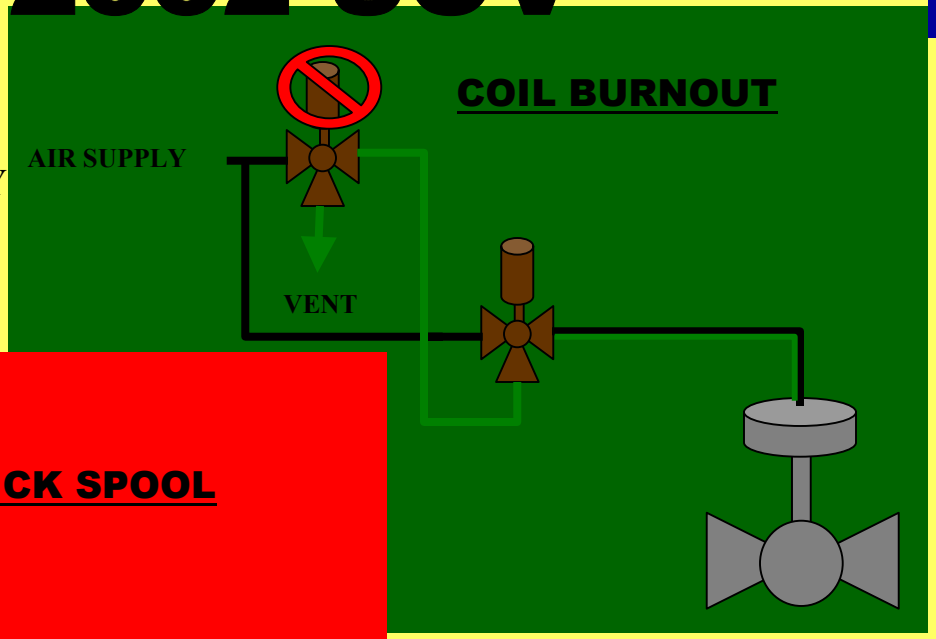
DANGEROUS FAILURE

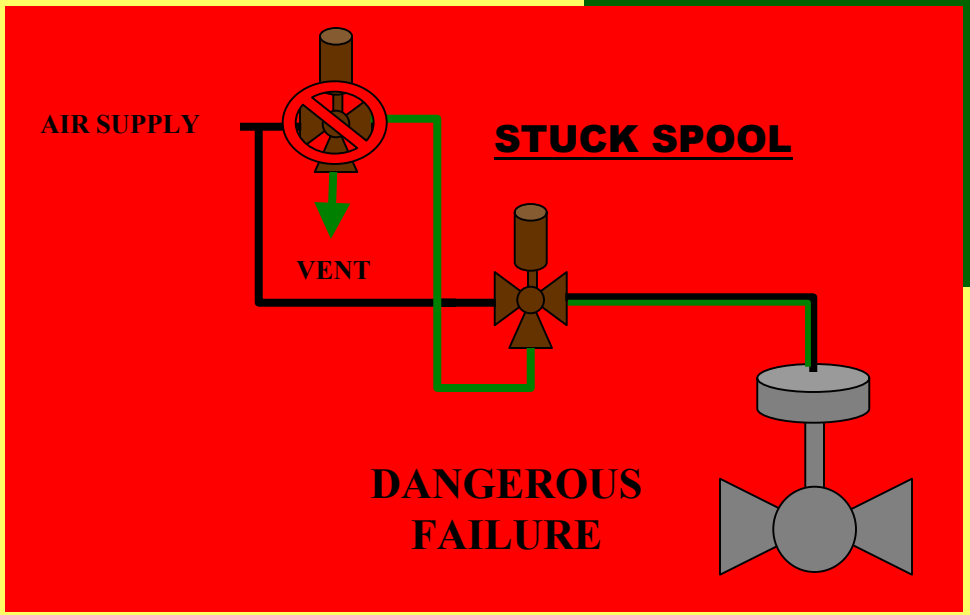
THE ISSUE IS:
LOW SAFETY AVAILABILITY

SPSI
•SERVICES
•PRODUCTS
•SYSTEMS
•INTEGRITY

GENERIC 2oo2 SOV

THE BENEFIT IS:
OPERATIONAL AVAILABILITY



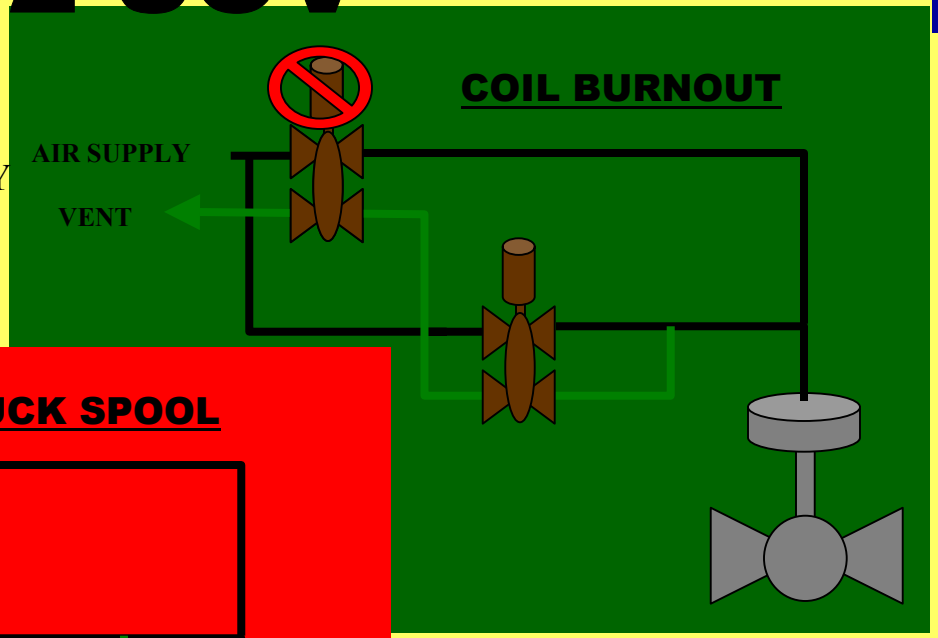


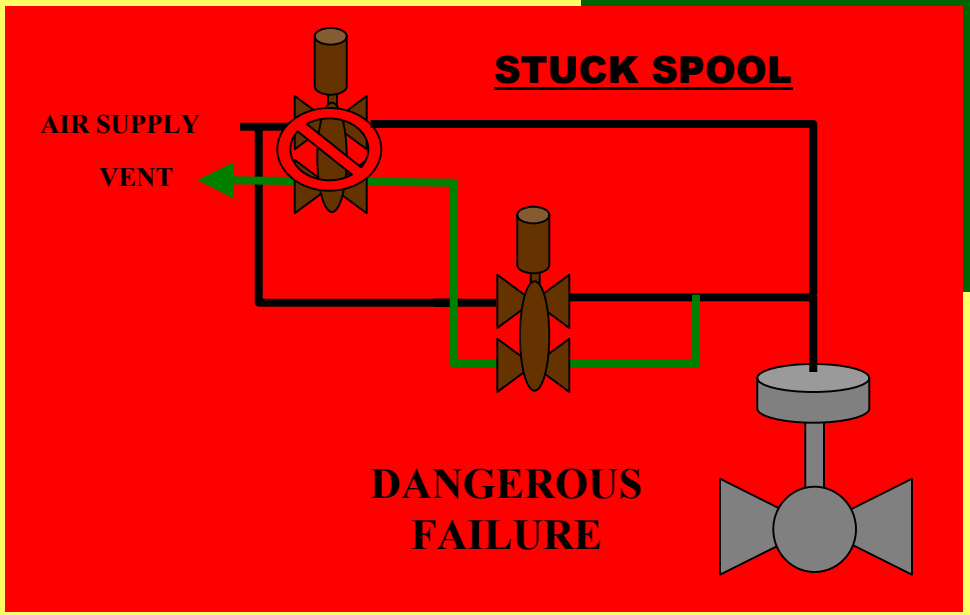
THE ISSUE IS:
LOW SAFETY AVAILABILITY

SPSI
•SERVICES
•PRODUCTS
•SYSTEMS
•INTEGRITY

ASCO 2oo2 SOV

THE BENEFIT IS:
OPERATIONAL AVAILABILITY





THE ISSUE IS:
LOW SAFETY AVAILABILITY

SPSI
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SUPPLY & VENTING INTEGRITY

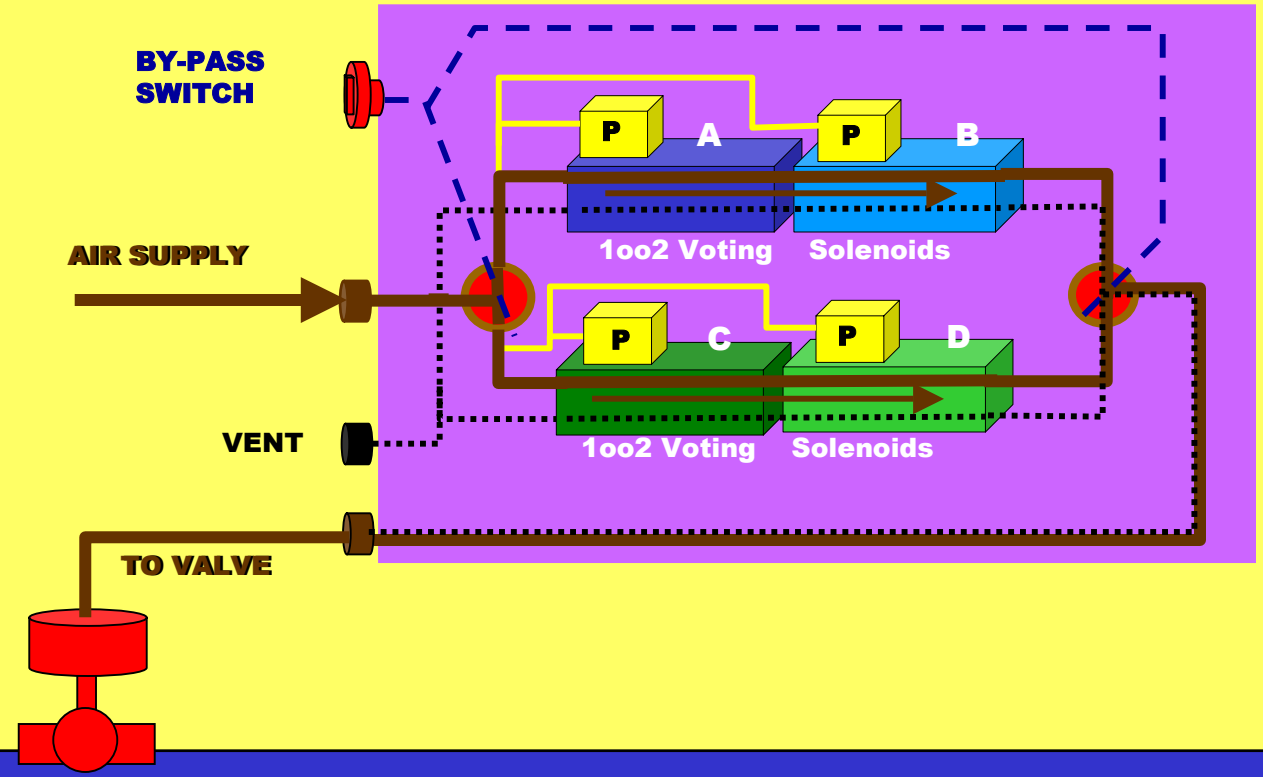
SPSI
•SERVICES
•PRODUCTS
•SYSTEMS
•INTEGRITY

NO SINGLE POINT OF FAILURE

TWO PARALLEL PATHS

- REDUNDANT PATHS – A & B (or) C & D
  A & B and C & D

FAULT TOLERANT AIR SUPPLY



SPSI
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•PRODUCTS
•SYSTEMS
•INTEGRITY

SILstroke-3 --A FAULT TOLERANT "PST" SOLUTION

SUPPLY & VENTING INTEGRITY

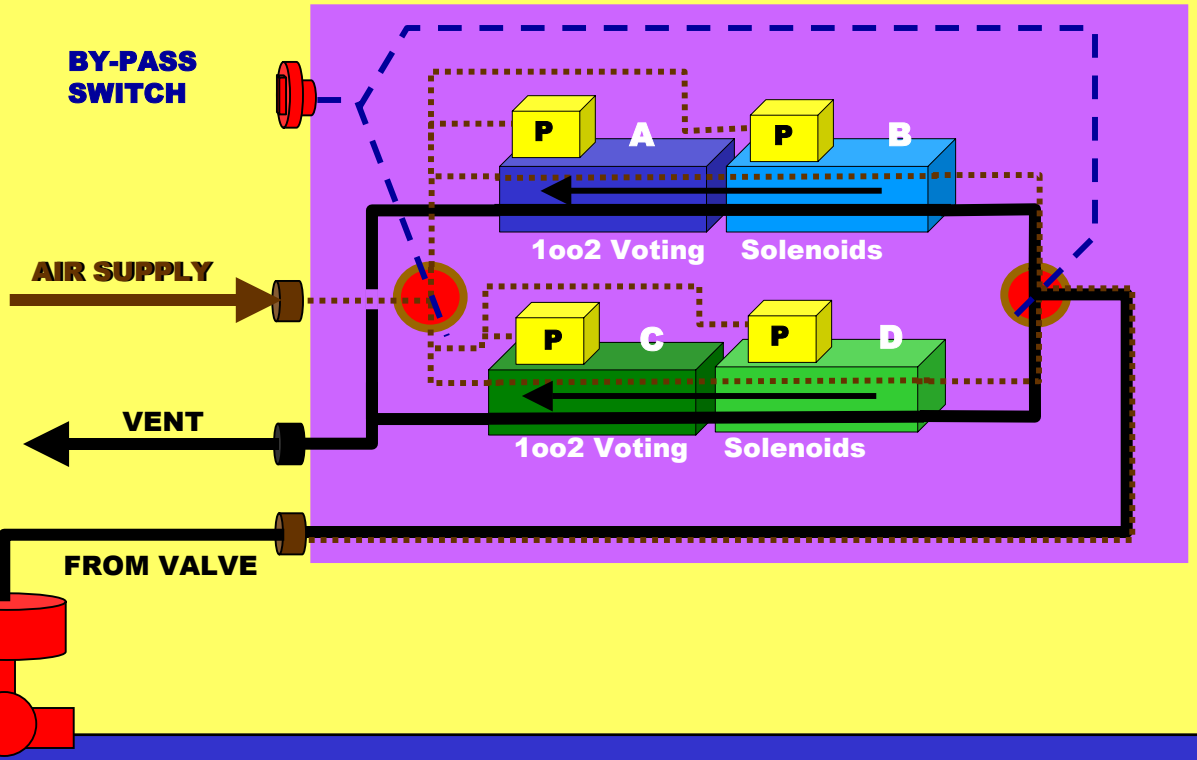
SPSI
•SERVICES
•PRODUCTS
•SYSTEMS
•INTEGRITY

NO SINGLE POINT OF FAILURE

TWO PARALLEL PATHS

- REDUNDANT PATHS – A & B (or) C & D
  A & B and C & D

FAULT TOLERANT VENTING



SPSI
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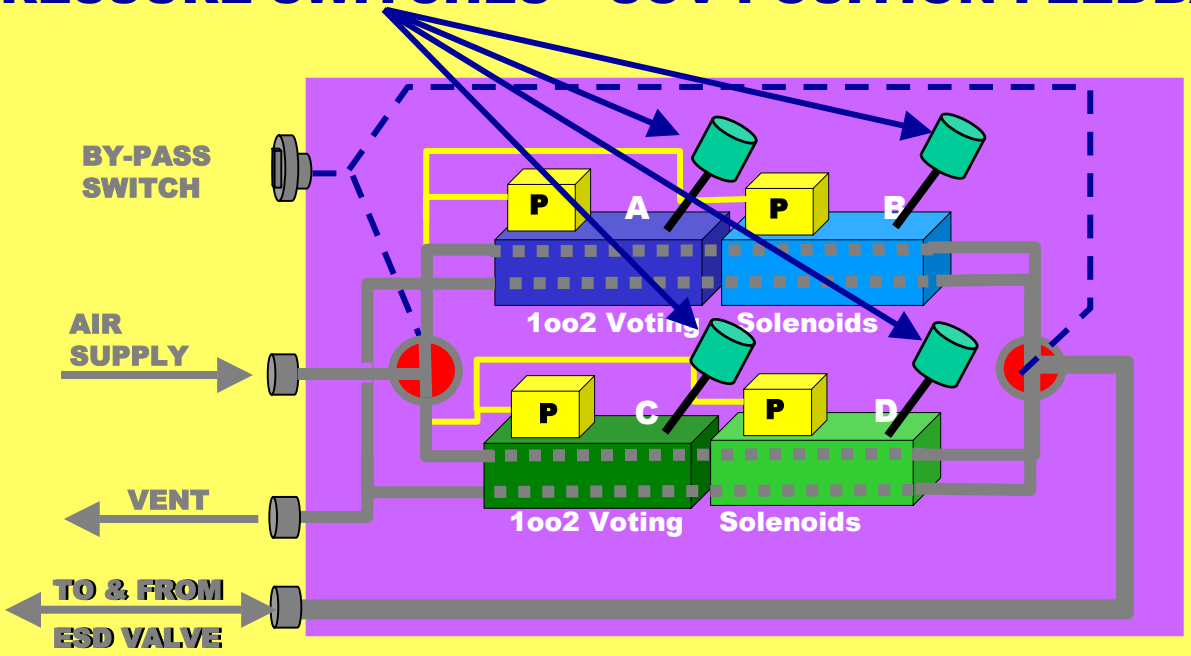
SILstroke-3 --A FAULT TOLERANT "PST" SOLUTION

SPOOL FAILURE

DETECTING SPOOL FAILURES

- EACH SOV HAS A ***PRESSURE SWITCH*** PLACED WITHIN ITS BODY TO DETECT ACTUAL SPOOL MOVEMENT WHEN DE-ENERGIZED.

PRESSURE SWITCHES – SOV POSITION FEEDBACK



SPSI
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•PRODUCTS
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•INTEGRITY

SIF RELIABILITY NUMBERS

SPSI
•SERVICES
•PRODUCTS
•SYSTEMS
•INTEGRITY

ANSI/ISA S84 – SAFETY LOOP

TECHNOLOGY COMPARISONS

	POSITIONERS	ASCO 2oo2D	SILstroke-3
PLUGGED NOZZLE	☹☹☹☹	☺	☺
FAIL SOV - CLOSE	☹	☺	☺
FAIL SOV - OPEN	☹☹	☹☹☹☹	☺
<1.0 Cv RATING	☹☹	☹	☺☺☺☺
FAULT TOLERANT	☹☹	☹☹	☺☺☺☺
ON-LINE REPAIR	☹☹	☹☹	☺☺☺☺
LOCAL TESTING	😐	😐	☺☺☺☺
LOCAL LIGHTS	😐	😐	☺☺
TEST 1ST – PST 2ND	☹	☹	☺☺☺☺

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SILstroke-3 --A FAULT TOLERANT "PST" SOLUTION