

Failure mode and effects analysis (FMEA) for Screw driver

The current state																	The resulting state			
Part	Defect location	possible failure mode	A possible consequence of failure	Possible causes disorders	Conventional control	Occurrence	Severity	Detection	RPN	Recommended Actions	Deadline	Date of action taken completion	Occurrence	Severity	Detection	RPN				
The connecting plate between the base frame machines and 3D linear system	screw connections	loosening the screws	loss of precision equipment	poorly designed connection	calculating a screw connection	4	4	4	64							0				
			damage of the product	poorly designed connection	calculating a screw connection	4	3	3	36						0					
			damage screwdriver	poorly designed connection	calculating a screw connection	4	5	4	80						0					
	supports linear (holder) boards	rupture of desk	damage of the 3D linear system	defects in materials	quality material supplied	2	6	6	72							0				
		desk deformation	loss of precision equipment	Overload back desk	calculation boards and maximum forces	4	3	4	48							0				
The connecting plate between the screwdriver and 3D linear system	screw connections	loosening the screws	loss of precision equipment	poorly designed connection	calculating a screw connection	4	5	4	80							0				
			damage to the product	poorly designed connection	calculating a screw connection	5	4	4	80							0				
			damage screwdriver	poorly designed connection	calculating a screw connection	4	5	4	80							0				
		damage the bolts	damage of the product	poorly designed connection	damage control screws	3	3	5	45								0			
			damage screwdriver	bad choice of screws	damage control screws	3	6	4	72								0			
				defects in materials	Best quality material supplied	3	6	4	72								0			
	connecting plate	rupture of desk	damage screwdriver	defects in materials	garance jakosti dodaného materiálu	2	7	5	70							0				
				wrong calculations / material through the construction	calculation of desk and maximum forces	2	7	4	56							0				
		deformation of desk	loss of precision equipment	Overload desk plate	calculation desk and maximum forces	5	4	2	40							0				
	Power Supply	supply cables	power failure	malfunctioning machine	cable break	visual inspection of cabling	3	5	3	45							0			
	Central stop button	broken button	damage button	inability emergency shutdown equipment	Using excessive force control	functional test	4	7	2	56							0			
Controls of control panel	hanging panel	possible damage of the spontaneous movement of the panel	damage of the panel	permit connections	visual inspection of joints	5	6	3	90							0				
			injury of the operator	permit connections	visual inspection of joints	4	6	3	72							0				
		rupture shoulders	damage of the panel	overload shoulders	load calculations shoulders	2	6	6	72							0				