

## Human Factors and Safety Checklist

		Yes	N/A	No
<b>Controls/Displays</b>				
1	Is operation of tool/equipment intuitive?			
2	Is there standardization across different models and brands so action is consistent?			
3	Is the control compliant with force guidelines?			
4	Is the control compliant with space for hand, fingers, wrists?			
5	Are hearing impaired operators going to use equipment?			
6	Is control designed to prevent inadvertent actuation?			
7	Are controls clearly labeled?			
8	Are controls accessible?			
9	Are controls simple to use/activate?			
10	Are controls integrated into a preventive maintenance and calibration plan?			
11	Are controls/displays properly lit for readability?			
12	Are auditory displays easily heard?			
13	Are displays visible from point of operation? Clearly labeled?			
14	Are displays accessible from point of operation/task?			
15	Are displays static?			
16	Are displays dynamic (scrolling)?			
17	Are text sizes appropriate for operator viewing distance?			
18	For audio controls, does the operator have to distinguish between different tones?			
<b>Physical</b>				
19	Does operator have to maintain an awkward posture (hands, fingers, arms, shoulders, neck, back, legs)?			
20	Does the task require the operator to exert excessive force?			
21	Are tasks designed where operator reaction time or speed of motion is critical?			
22	Does job require a great amount of balance or coordination to accomplish task?			
<b>Environment</b>				
27	Moderately bright light (1200 lux) increases alertness.			
28	Is the temperature above 80 F (above 80F affects attention, perception and mathematical intensive tasks)			
29	Is the temperature below 50 F? (below 50F effects reasoning, learning and memory)			
30	Any environmental distractions (in addition to temperature, light, noise)?			
<b>Written Instructions</b>				
31	Are instructions in native language of the operator?			
32	Is information organized in a manner that is consistent with the person's goals?			
33	Are automated equipment responses listed relative to operator action? (Providing operator with information on what should happen).			
34	Are instructions written in a level appropriate for the audience? Using common names for equipment?			
35	Are operator instructions written with sufficient information? Too much information?			
36	Is operator procedure written so each instruction is observable?			
37	Is operator procedure written so each instruction is measurable?			
38	Is each instruction sentence starting with an action word or signal word e.g. danger, caution.			
39	Are action items on a list formatted (bulleted, bold, etc.) in such a way that the user minimizes "losing their place" while reading.			

## Human Factors and Safety Checklist

Cognitive				
40	Is operator's workload overloaded/under loaded?			
41	Is operator under excessive work pressure/deadlines?			
42	Does operator work on night shift or rotating shift?			
43	Does operator have control over tasks that are performed?			
44	Is a system in place to prevent the installation of incorrect parts (seals, gaskets, etc.)?			
45	Are audio or visual cues provided to capture attention during critical events?			
46	Can the operator see or hear what is going on?			
47	Can the operator figure out what will happen next?			
48	Is operator required to memorize more than 5 bits of information to perform task?			
49	Is job of dangerous nature by where a person who is fatigued, ill, or stressed should not perform task?			
50	Is procedural error readily and properly recognized by operator?			
51	Is there potential for an error to misdiagnose and the wrong procedure is followed?			
Social/Organizational				
52	Did the operator receive sufficient training?			
53	Did the operator have adequate resources to perform task?			
54	Does operator have properly designed tools for the task?			
55	After maintenance or repair of equipment, is there a check in place to verify the 'fix' worked?			
56	Is the safety culture in plant one in which an operator would respond correctly when an error or alarm was set?			
57	Is a process in place for an operator to communicate/feedback information relative to improving design of controls, displays, equipment for future designs?			
58	Is there a breakdown in the group dynamics or interpersonal communications?			
59	Is the management culture in the plant reflective of safety values?			