

## Process Potential Failure Modes and Effect(s) Analysis



<b>Part Name:</b> Boiler asay	<b>Prepared by:</b> _____	<b>PFMEA nr.:</b> 3	<b>Revision Nr.:</b> 1
<b>Baltrani PN:</b> 54514001	<b>Approved by:</b> _____	<b>Issue Date:</b> 6/4/15	<b>Revision Date:</b> 7/13/15
	<b>Core team:</b> _____	<b>Average risk</b> <span style="color: green;">■</span>	<b>High risk</b> <span style="color: red;">■</span>
		<b>Low risk</b> <span style="color: green;">■</span>	



Process ID	Process description	Potential Failure mode	Potential Effect (S) of Failure	SEV of Failure	Potential Cause(s) of Failure	OCC Current Controls	DET	RPN	Recommended Actions	Target Date / Responsible	Action Results					
											Completion Date / Action	SEV/OCC/DET/Fina				
<b>VOGOGNA PLANT</b>																
PRC34514001-01	DEEP DRAWING BOILER BOTTOM pn. 535140	Boiler bottom Height outside of tolerance limits	NC part	8	Machine set-up not correctly executed	2	Statistical check with P/NP gauge	1	16	no action						
					Top holes missing	NC part	8	Tool breaking	2	Statistical check with P/NP gauge	1	16	no action			
					Welding diameter outside of tolerance limit	NC part	8	Tool breaking	4	Assured by following step of deep drawing	1	32	no action			
					Excess of Burs	NC part	4	Wear on the mould	4	Visual check / Preventive maintenance	4	64	Monitoring status to verify if preventive maintenance			
<b>PEDIMULERA PLANT</b>																
PRC34514001-03	DEEP DRAWING BOILER TOP pn. 535245	Boiler top Height outside of tolerance limits	NC part	8	Machine set-up not correctly executed	2	Statistical check with P/NP gauge	1	16	no action						
					Top holes missing	NC part	8	Tool breaking	2	Statistical check with P/NP gauge	1	16	no action			
					Welding diameter outside of tolerance limit	NC part	8	Tool breaking	4	Assured by following step of deep drawing	1	32	no action			
					Excess of Burs	NC part	4	Wear on the mould	4	Visual check / Preventive maintenance	4	64	Monitoring status to verify if preventive maintenance			
<b>PICKLING OF: - BOILER TOP pn. 535244 - BOILER BOTTOM pn. 535240</b>																
PRC34514001-04-02	PICKLING OF: - BOILER TOP pn. 535244 - BOILER BOTTOM pn. 535240	Pickling not executed	Parts not in compliance with Phillips food contact rules	8	Human error	5	Visual / Tactile in production	1	40	Monitoring status to verify if preventive maintenance						
					Pickling cycle time not correct	Parts not in compliance with Phillips food contact rules	8	Human error	4	Visual / Tactile / white tissue paper at pickling cycle end	1	32	no action			
					Pickling concentration not correct	Parts not in compliance with Phillips food contact rules	8	Human error	4	Visual / Tactile / white tissue paper at pickling cycle end	1	32	no action			
<b>TUBE EDGEBANDING - PEDIMULERA</b>																
PRC34514001-05	TUBE EDGEBANDING 530338	Edgebanding diameter size smaller than lower limit of edgebanding diameter size bigger than upper limit of	NC part / Silicone tube tightness not assured	9	Tube length before edgebanding lower than	4	Scrapped by automatic assembling line	1	36	no action						
					Tool breaking	2	Statistical check with P/NP gauge	1	18	no action						
<b>WELDING LINE - PEDIMULERA</b>																
PRC34514001-07-06	TUBE LASER WELDING	Not welded	Tubes lost during boiler top/ bottom transfer	8	Laser breaking	1	Alarm from laser welding station	1	8	no action						
					Air leakage during test	5	Laser station power loss	2	Leakage test	1	10	no action				