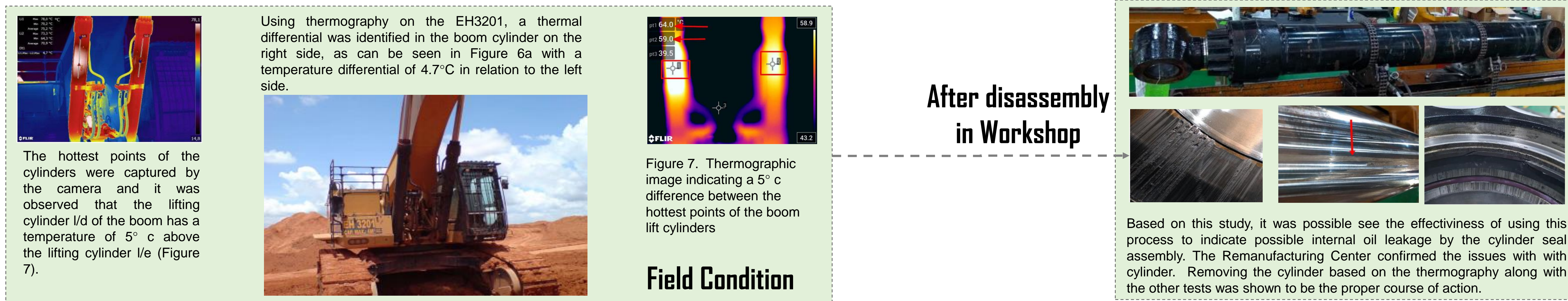


Component Life Projection for Mining Off-Highway Truck

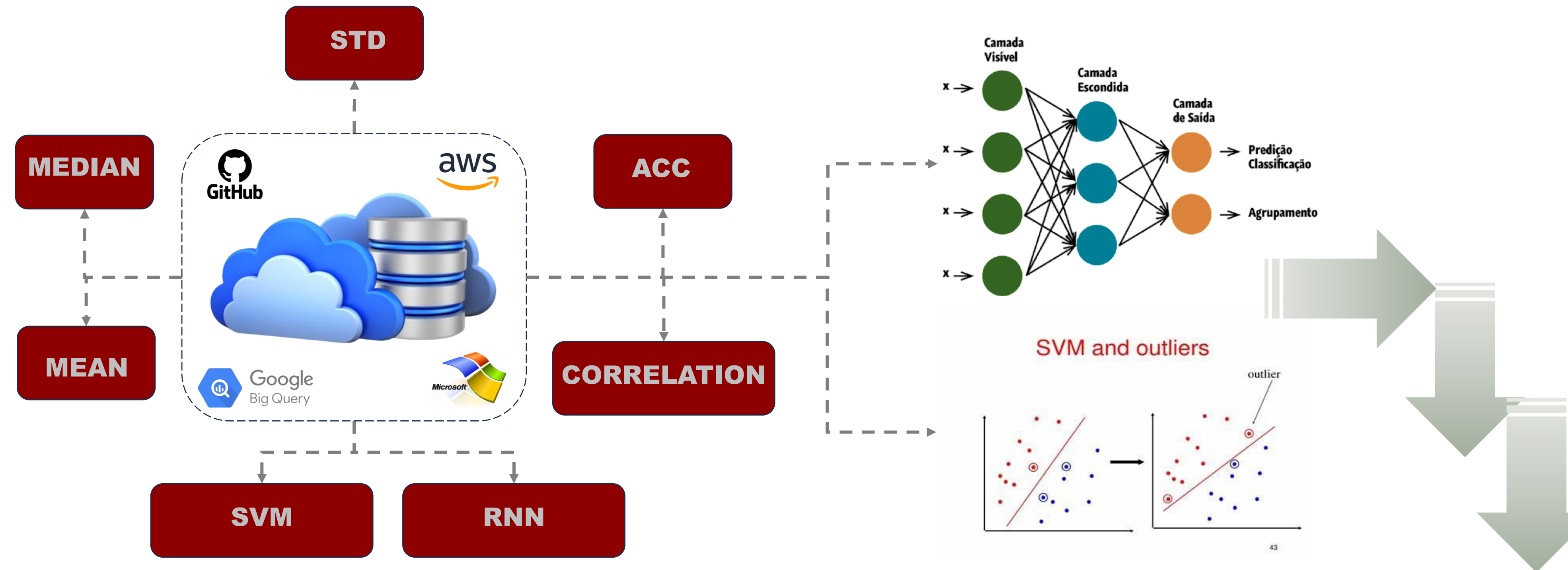
Based on a Deep Learning Model

Condition Monitoring Management Process for Lift Cylinder (Best Practices)

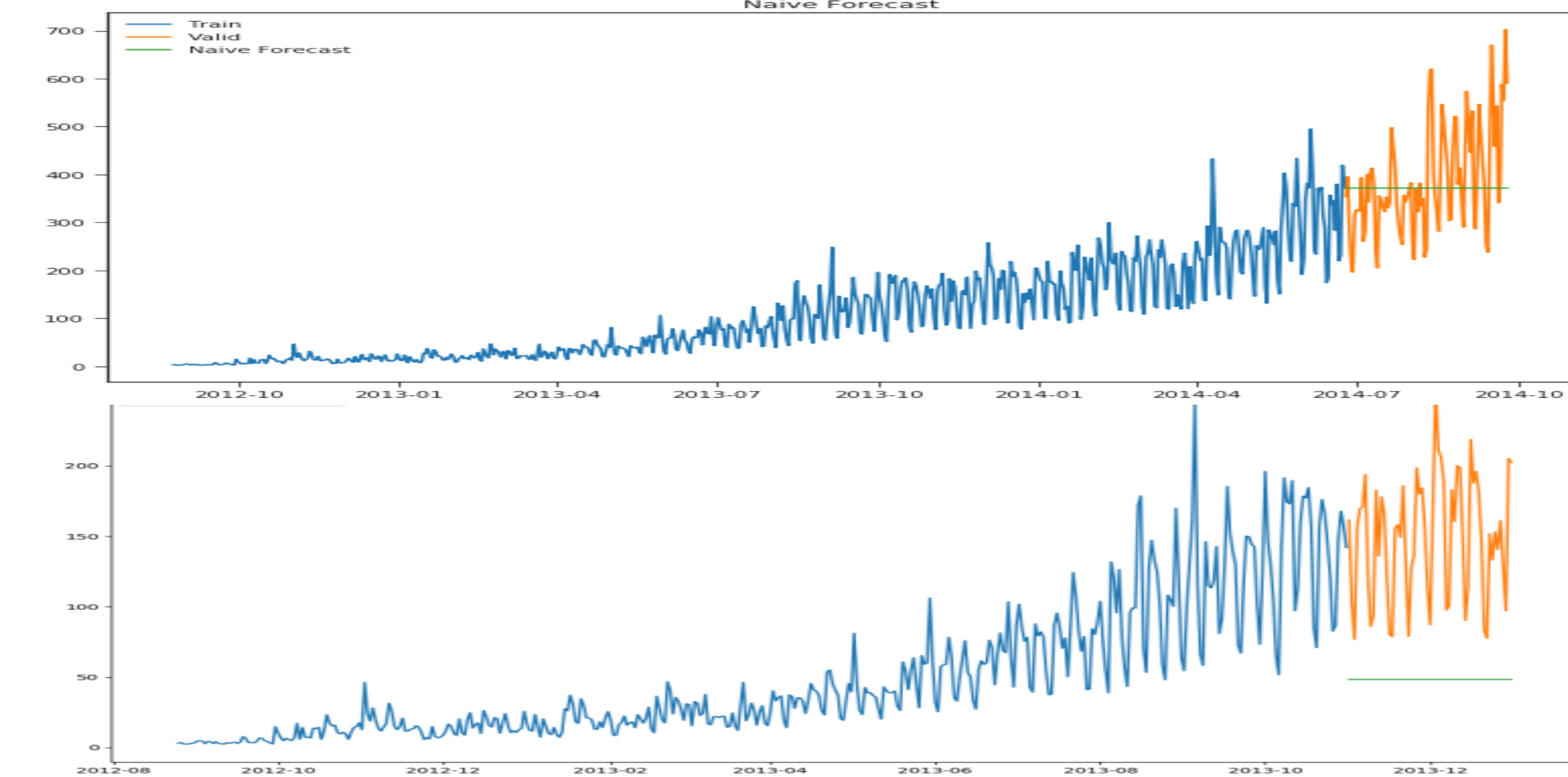


Tag	Timestamp	Value			
Temperature	11-Apr-2022 12:19:51	27,721604			
Temperature	11-Apr-2022 12:22:51	27,62507813			
Temperature	11-Apr-2022 12:25:51	27,56072754			
Temperature	Tag	Timestamp	Value		
Temperature	AccelerationZ	11-Apr-2022 23:53:52	0,1875		
Temperature	AccelerationZ	12-Apr-2022 02:02:52	0,5		
Temperature	AccelerationZ	Tag	Timestamp	Value	
Temperature	AccelerationZ	AccelerationY	11-Apr-2022 23:53:52	0,25	
Temperature	AccelerationZ	AccelerationY	12-Apr-2022 02:02:52	0,4375	
Temperature	AccelerationZ	AccelerationY	Tag	Timestamp	Value
Temperature	AccelerationZ	AccelerationY	AccelerationX	11-Apr-2022 23:53:52	0,1875
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:02:52	0,625
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:05:52	0,5625
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:08:52	0,5625
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:11:52	0,5625
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:20:52	0,4375
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:23:52	0,4375
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:26:52	0,4375
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:29:52	0,4375
Temperature	AccelerationZ	AccelerationY	AccelerationX	12-Apr-2022 02:32:52	0,375
	AccelerationY	AccelerationX	12-Apr-2022 02:35:52	0,375	
	AccelerationY	AccelerationX	12-Apr-2022 02:38:52	0,3125	
	AccelerationY	AccelerationX	12-Apr-2022 04:02:52	0,4375	
	AccelerationY	AccelerationX	12-Apr-2022 04:05:52	0,3125	
	AccelerationY	AccelerationX	12-Apr-2022 04:08:52	0,375	
		AccelerationX	12-Apr-2022 04:11:52	0,5	
		AccelerationX	12-Apr-2022 04:14:52	0,8125	
		AccelerationX	12-Apr-2022 04:17:52	0,375	
		AccelerationX	12-Apr-2022 04:20:52	1,25	

Exploratory Data Analysis



Component Life Projection



Componente	SMR Atual	SMR Projected	% Acc
Stick Cylinder LD	8450	12000 +500	85%
Stick Cylinder LE	8450	12000 +500	85%
Boom Cylinder LD	8450	12000 +500	85%
Boom Cylinder LE	8450	12000 +500	85%
Bucket Cylinder LD	8450	12000 +500	85%
Bucket Cylinder LE	8450	12000 +500	85%
Swing Drive LD	8450	12000 +500	85%
Swing Drive LE	8450	12000 +500	85%
Final Drive LD	8450	12000 +500	85%
Final Drive LE	8450	12000 +500	85%
Swing Gear LD	8450	12000 +500	85%
Swing Gear LE	8450	12000 +500	85%
Hydraulic Pump 1	8450	12000 +500	85%
Hydraulic Pump 2	8450	12000 +500	85%
Hydraulic Pump 3	8450	12000 +500	85%
Hydraulic Pump 4	8450	12000 +500	85%