



M.T.-----

Thermal Imaging

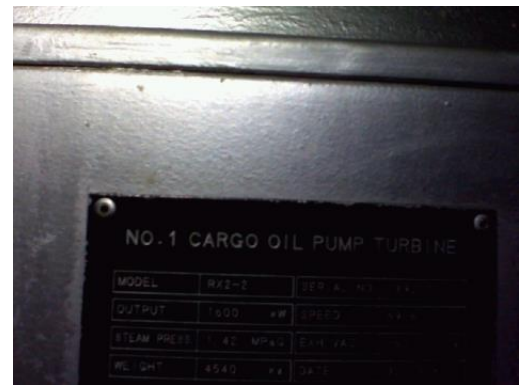
Cargo system, IG system & Boilers



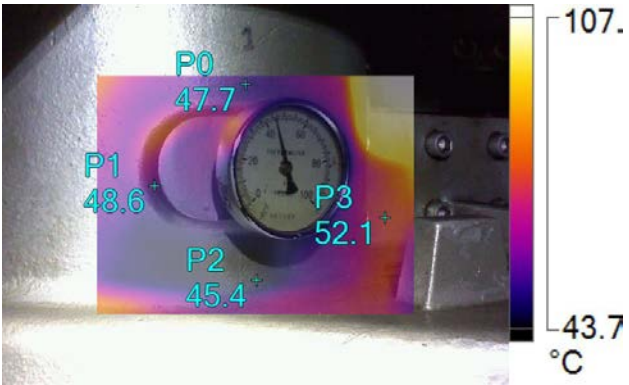
Prepared for



IR005789.IS2-No1 Cargo turbine
12/5/2016 11:22:39 AM



Visible Light Image



IR005790.IS2-No1 Cargo turbine



Visible Light Image

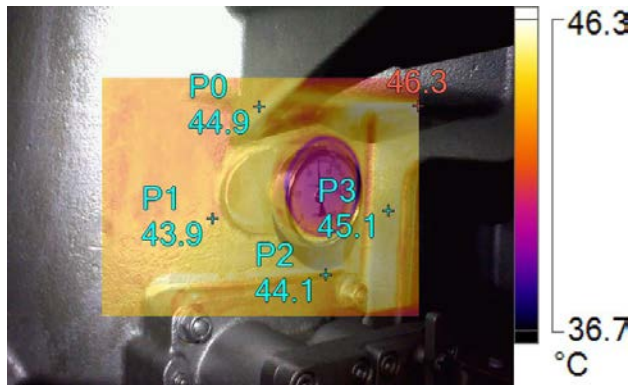
12/5/2016 11:23:06 AM

Main Image Markers

Name	Temperature	Emissivity
P0	47.7°C	0.95
P1	48.6°C	0.95
P2	45.4°C	0.95
P3	52.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005791.IS2-No1 Cargo turbine



Visible Light Image

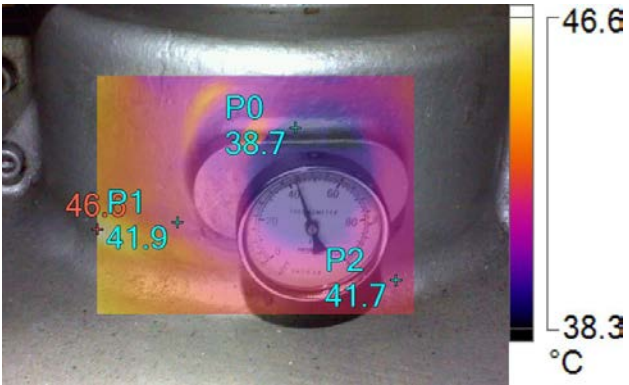
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Main Image Markers

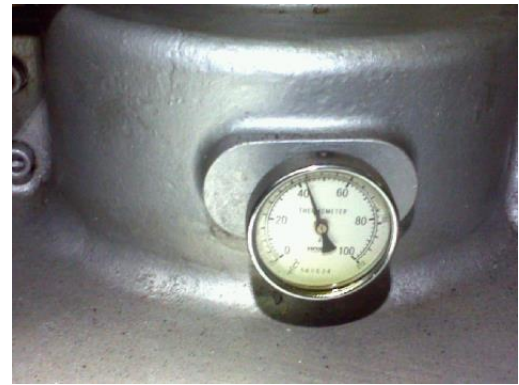
Name	Temperature	Emissivity
Hot	46.3°C	0.95
P0	44.9°C	0.95
P1	43.9°C	0.95
P2	44.1°C	0.95
P3	45.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005792.IS2-No1 Cargo turbine



Visible Light Image

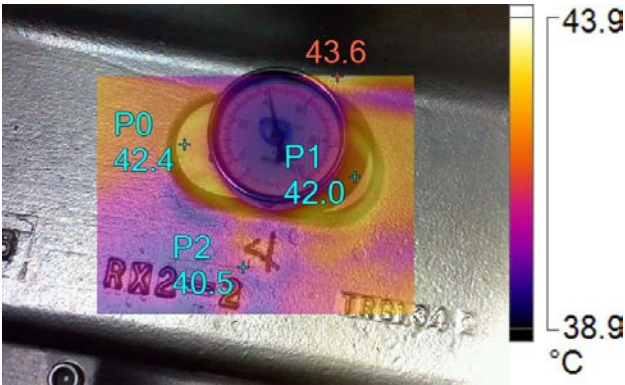
12/5/2016 11:24:34 AM

Main Image Markers

Name	Temperature	Emissivity
Hot	46.6°C	0.95
P0	38.7°C	0.95
P1	41.9°C	0.95
P2	41.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005793.IS2-No1 Cargo turbine



Visible Light Image

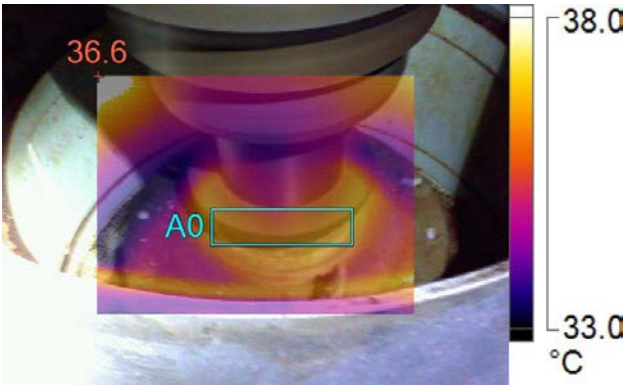
12/5/2016 11:25:04 AM

Main Image Markers

Name	Temperature	Emissivity
Hot	43.6°C	0.95
P0	42.4°C	0.95
P1	42.0°C	0.95
P2	40.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005794.IS2-No1 Cargo turbine



Visible Light Image

12/5/2016 11:26:52 AM

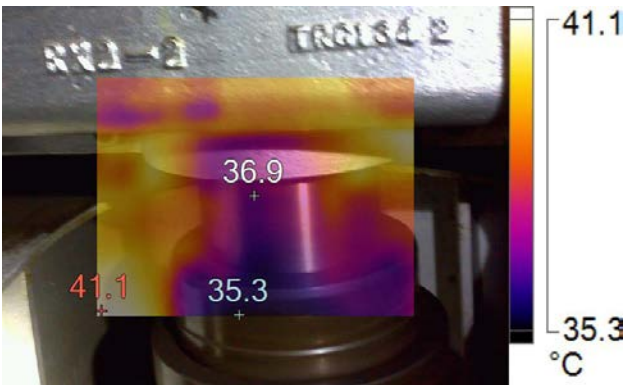
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.3°C	34.4°C	35.8°C	0.95

Name	Temperature	Emissivity
Hot	36.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005795.IS2-No1 Cargo turbine



Visible Light Image

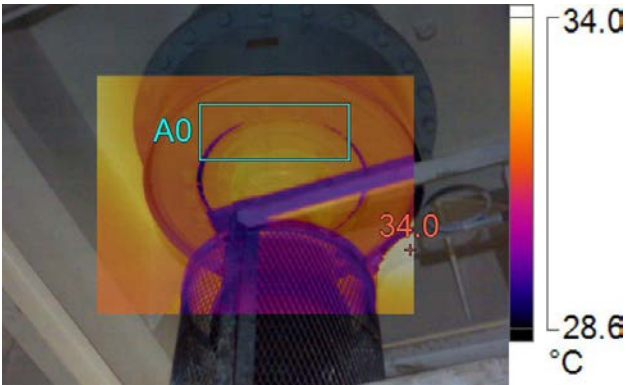
12/5/2016 11:27:09 AM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	36.9°C	0.95
Hot	41.1°C	0.95
Cold	35.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005796.IS2--No1 Cargo pump
12/5/2016 12:22:33 PM



Visible Light Image

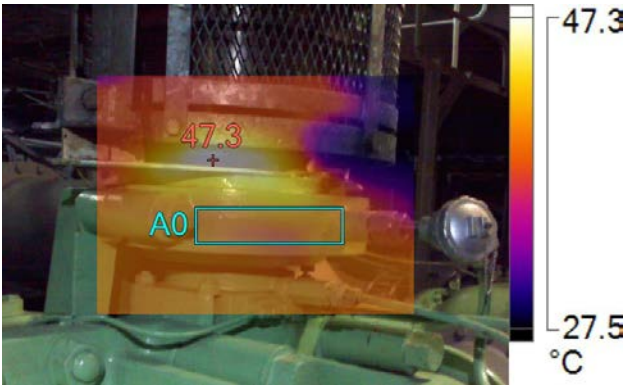
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	32.1°C	29.4°C	32.9°C	0.95

Name	Temperature	Emissivity
Hot	34.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005797.IS2-No1 Cargo pump



Visible Light Image

12/5/2016 12:23:07 PM

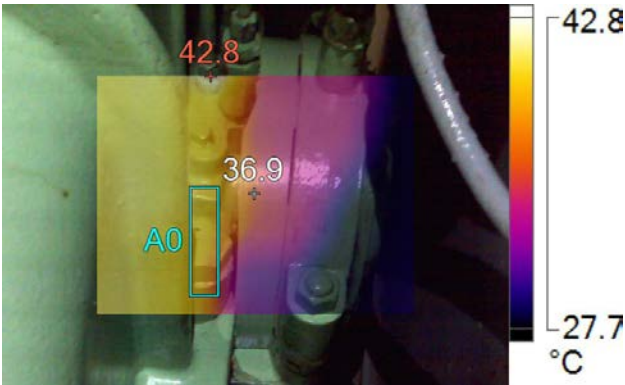
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.3°C	39.9°C	43.0°C	0.95

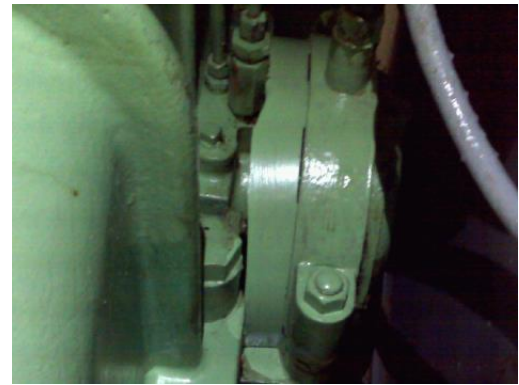
Name	Temperature	Emissivity
Hot	47.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005798.IS2-No1 Cargo pump
12/5/2016 12:23:43 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	39.6°C	36.2°C	41.0°C	0.95

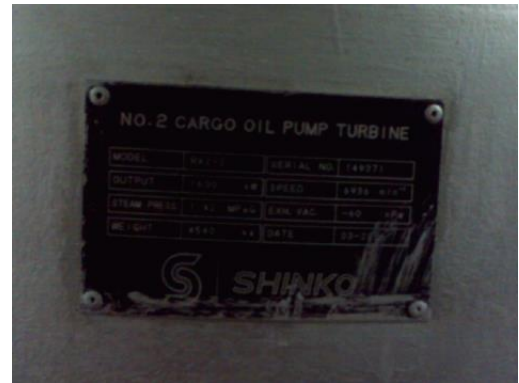
Name	Temperature	Emissivity
Centerpoint	36.9°C	0.95
Hot	42.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

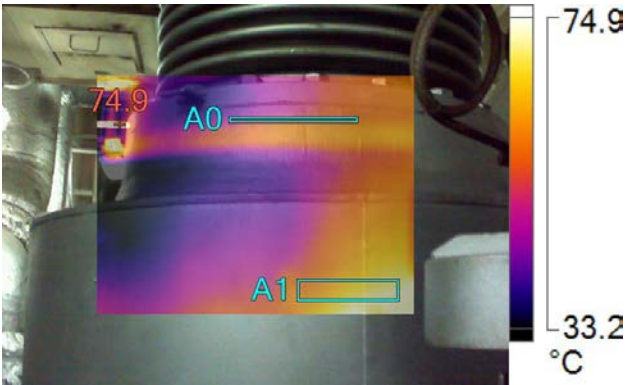
All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005799.IS2-No2 Cargo Turbine
12/5/2016 1:26:39 PM



Visible Light Image



IR005800.IS2-No2 Cargo Turbine



Visible Light Image

12/5/2016 1:27:38 PM

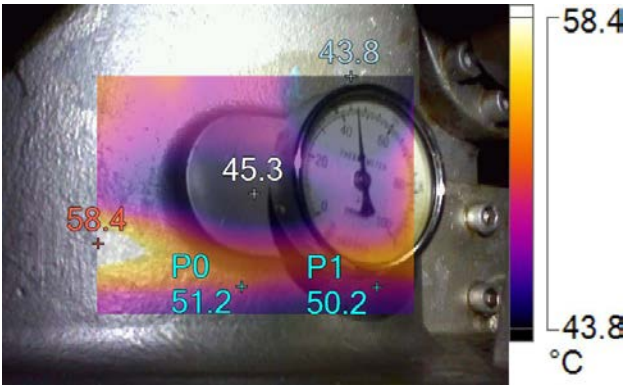
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.8°C	39.5°C	43.3°C	0.95
A1	45.2°C	42.4°C	47.5°C	0.95

Name	Temperature	Emissivity
Hot	74.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005801.IS2-No2 Cargo Turbine



Visible Light Image

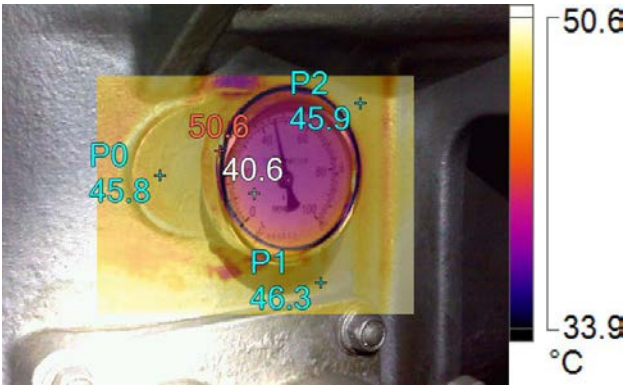
12/5/2016 1:28:16 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	45.3°C	0.95
Hot	58.4°C	0.95
Cold	43.8°C	0.95
P0	51.2°C	0.95
P1	50.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005802.IS2-No2 Cargo Turbine



Visible Light Image

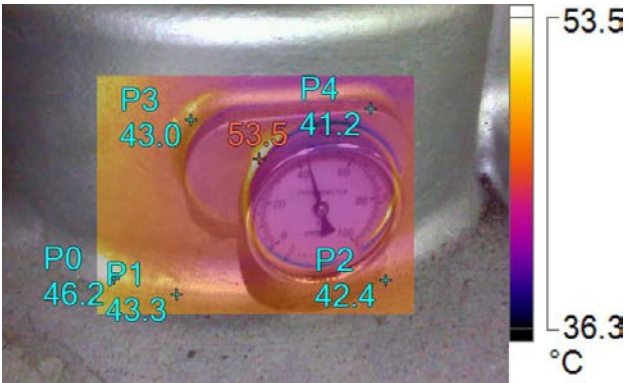
12/5/2016 1:28:33 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	40.6°C	0.95
Hot	50.6°C	0.95
P0	45.8°C	0.95
P1	46.3°C	0.95
P2	45.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005803.IS2-No2 Cargo Turbine



Visible Light Image

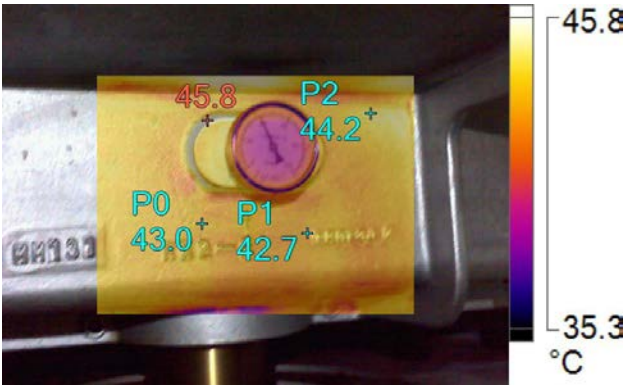
12/5/2016 1:28:53 PM

Main Image Markers

Name	Temperature	Emissivity
Hot	53.5°C	0.95
P0	46.2°C	0.95
P1	43.3°C	0.95
P2	42.4°C	0.95
P3	43.0°C	0.95
P4	41.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005804.IS2-No2 Cargo Turbine



Visible Light Image

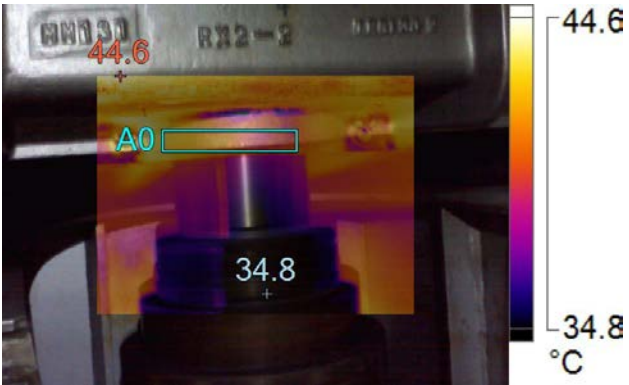
12/5/2016 1:29:31 PM

Main Image Markers

Name	Temperature	Emissivity
Hot	45.8°C	0.95
P0	43.0°C	0.95
P1	42.7°C	0.95
P2	44.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005805.IS2-No2 Cargo Turbine



Visible Light Image

12/5/2016 1:29:37 PM

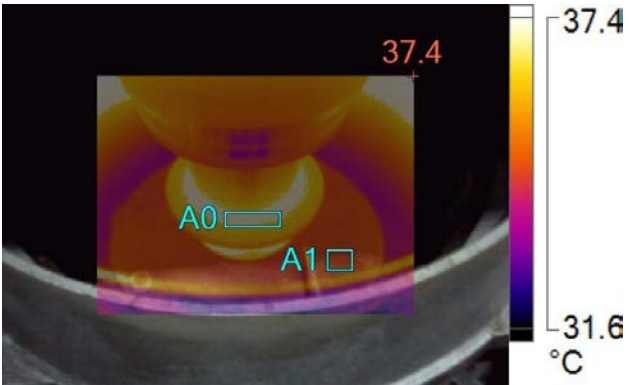
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.5°C	39.8°C	43.5°C	0.95

Name	Temperature	Emissivity
Hot	44.6°C	0.95
Cold	34.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005806.IS2-No2 Cargo Turbine



Visible Light Image

12/5/2016 1:29:58 PM

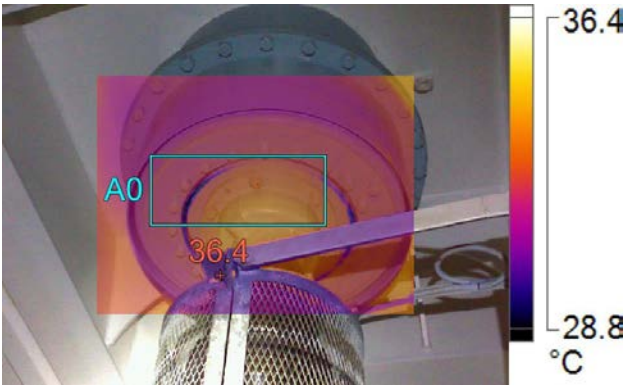
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.0°C	35.5°C	36.2°C	0.95
A1	34.2°C	34.0°C	34.5°C	0.95

Name	Temperature	Emissivity
Hot	37.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005807.IS2-No2 Cargo Pump
12/5/2016 2:04:10 PM

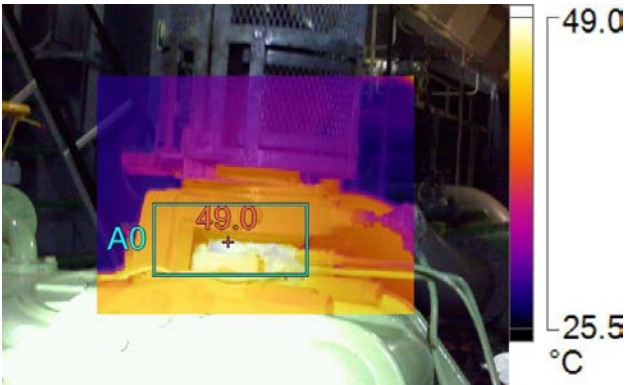


Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	32.7°C	28.8°C	33.9°C	0.95

Name	Temperature	Emissivity
Hot	36.4°C	0.95



IR005808.IS2-No2 Cargo Pump
12/5/2016 2:04:22 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.1°C	34.3°C	49.0°C	0.95

Name	Temperature	Emissivity
Hot	49.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005809.IS2-No2 Cargo Pump
12/5/2016 2:04:51 PM



Visible Light Image

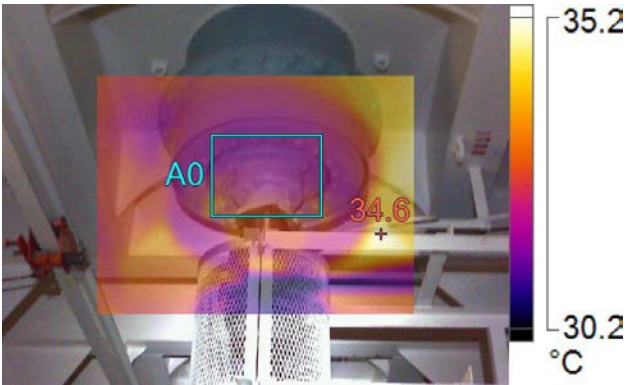
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	38.0°C	34.0°C	39.4°C	0.95
A1	43.2°C	38.9°C	45.2°C	0.95

Name	Temperature	Emissivity
Hot	45.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005810.IS2-No2 Cargo Pump
12/5/2016 2:35:00 PM

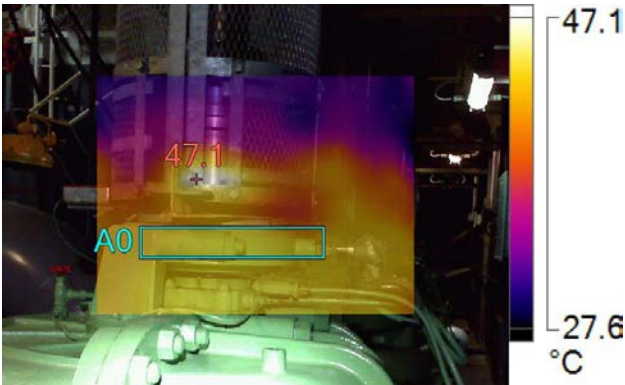


Visible Light Image

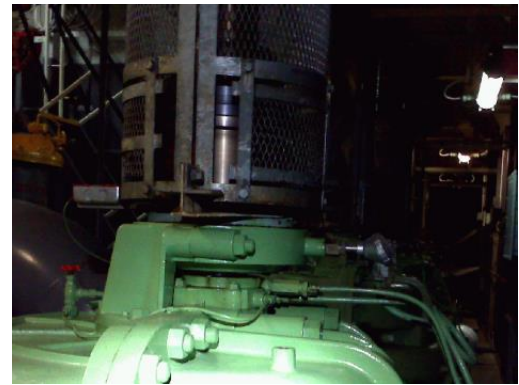
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	31.9°C	31.4°C	33.0°C	0.95

Name	Temperature	Emissivity
Hot	34.6°C	0.95



IR005811.IS2-No2 Cargo Pump
12/5/2016 2:35:18 PM



Visible Light Image

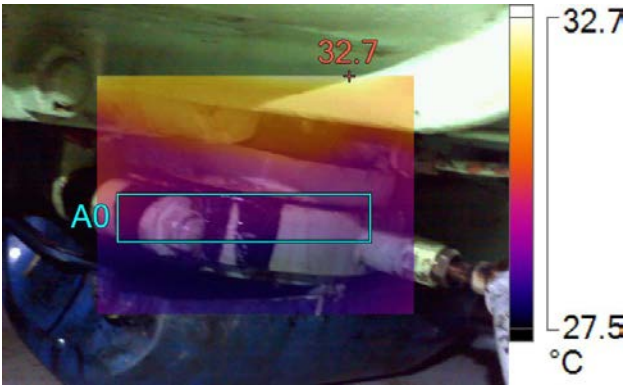
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.7°C	40.2°C	43.6°C	0.95

Name	Temperature	Emissivity
Hot	47.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005812.IS2
12/5/2016 2:35:41 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	28.8°C	28.1°C	29.8°C	0.95

Name	Temperature	Emissivity
Hot	32.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

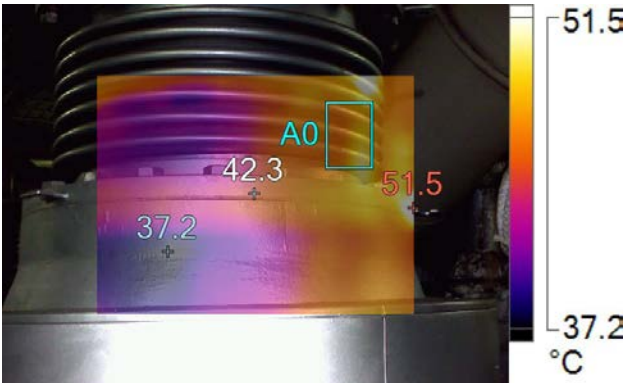
All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005813.IS2-No 3 Cargo Turbine
12/5/2016 2:43:18 PM



Visible Light Image



IR005814.IS2-No 3 Cargo Turbine
12/5/2016 2:43:43 PM



Visible Light Image

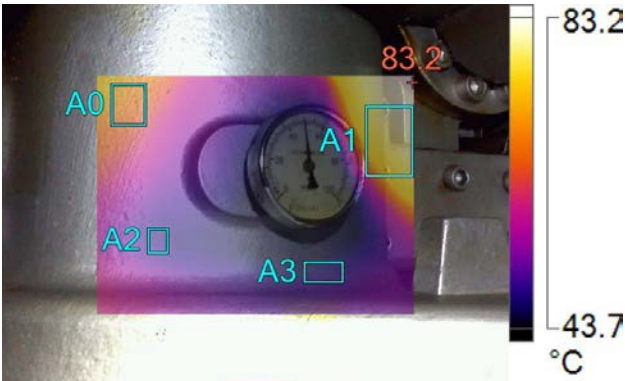
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	44.2°C	43.0°C	46.4°C	0.95

Name	Temperature	Emissivity
Centerpoint	42.3°C	0.95
Hot	51.5°C	0.95
Cold	37.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005815.IS2-No 3 Cargo Turbine
12/5/2016 2:45:07 PM



Visible Light Image

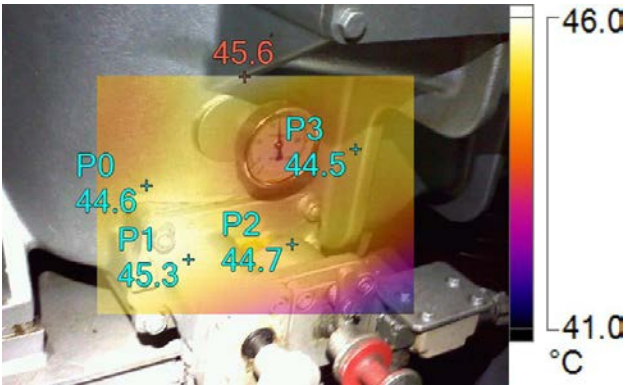
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	54.5°C	52.4°C	57.0°C	0.95
A1	66.7°C	51.9°C	81.9°C	0.95
A2	48.1°C	47.5°C	48.9°C	0.95
A3	47.8°C	46.8°C	48.9°C	0.95

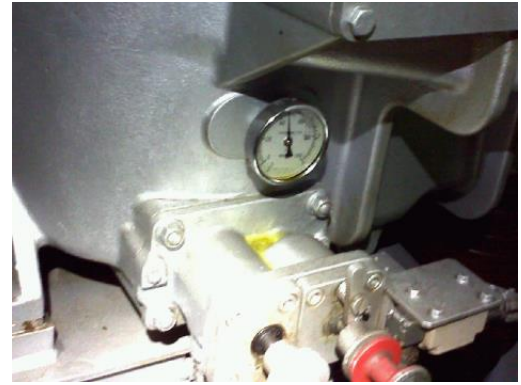
Name	Temperature	Emissivity
Hot	83.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



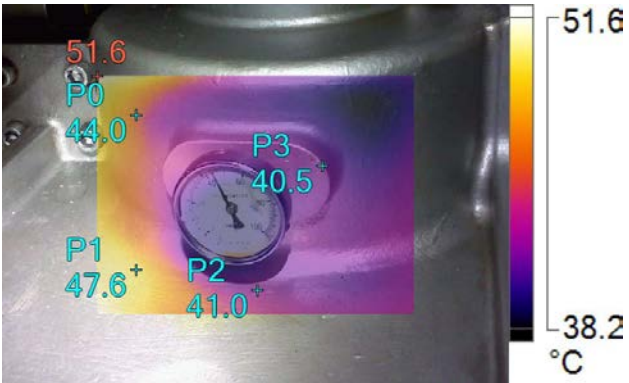
IR005816.IS2-No 3 Cargo Turbine
12/5/2016 2:45:20 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Hot	45.6°C	0.95
P0	44.6°C	0.95
P1	45.3°C	0.95
P2	44.7°C	0.95
P3	44.5°C	0.95



IR005817.IS2-No 3 Cargo Turbine
12/5/2016 2:45:56 PM



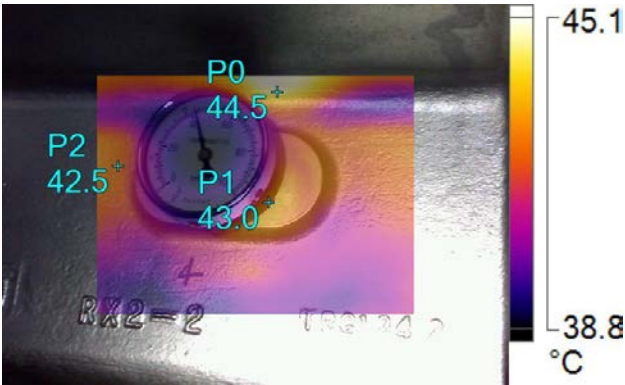
Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Hot	51.6°C	0.95
P0	44.0°C	0.95
P1	47.6°C	0.95
P2	41.0°C	0.95
P3	40.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005818.IS2-No 3 Cargo Turbine
12/5/2016 2:46:24 PM



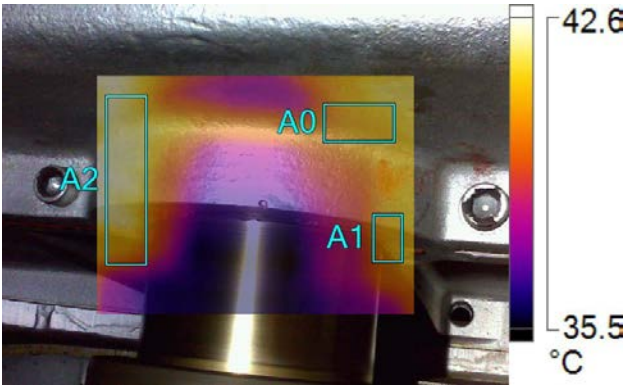
Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
P0	44.5°C	0.95
P1	43.0°C	0.95
P2	42.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005819.IS2-No 3 Cargo Turbine
12/5/2016 2:46:46 PM



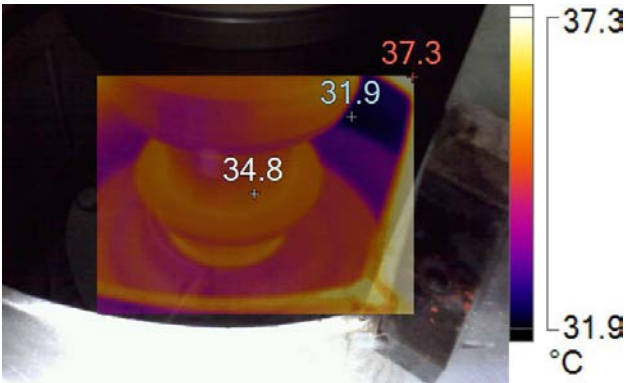
Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.7°C	39.7°C	41.6°C	0.95
A1	40.5°C	39.4°C	41.2°C	0.95
A2	41.5°C	38.4°C	42.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005820.IS2-No 3 Cargo Turbine
12/5/2016 2:47:14 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	34.8°C	0.95
Hot	37.3°C	0.95
Cold	31.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005821.IS2-No1 IG fan
12/5/2016 3:39:01 PM



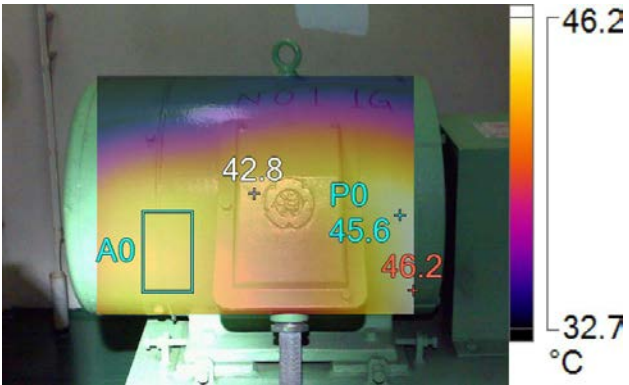
Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	48.4°C	47.7°C	48.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005822.IS2-No1 IG fan



Visible Light Image

12/5/2016 3:39:09 PM

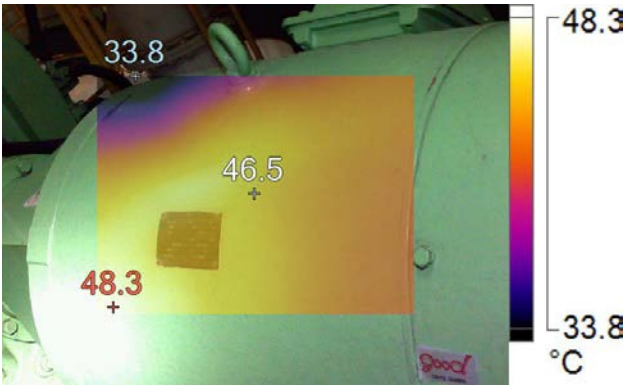
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	43.6°C	42.9°C	44.0°C	0.95

Name	Temperature	Emissivity
Centerpoint	42.8°C	0.95
Hot	46.2°C	0.95
P0	45.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005823.IS2-No1 IG fan



Visible Light Image

12/5/2016 3:39:28 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	46.5°C	0.95
Hot	48.3°C	0.95
Cold	33.8°C	0.95



IR005824.IS2-No1 IG fan



Visible Light Image

12/5/2016 3:39:46 PM

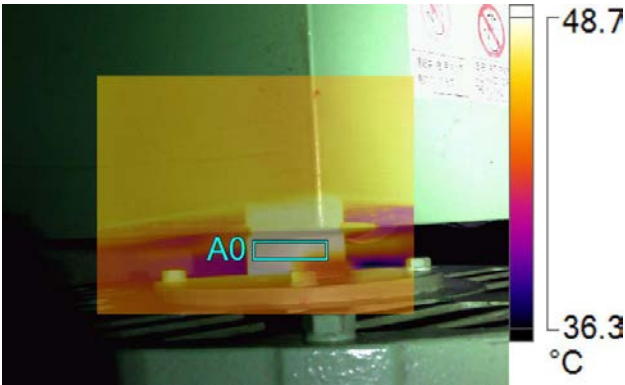
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.5°C	47.0°C	47.8°C	0.95
A1	47.4°C	47.0°C	47.6°C	0.95

Name	Temperature	Emissivity
Centerpoint	46.7°C	0.95
Hot	47.9°C	0.95
Cold	43.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005825.IS2-No1 IG fan

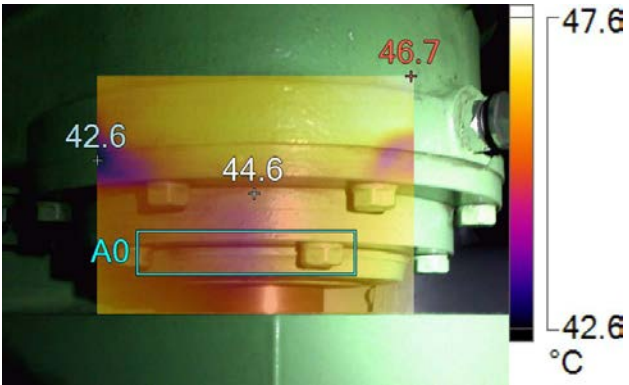


Visible Light Image

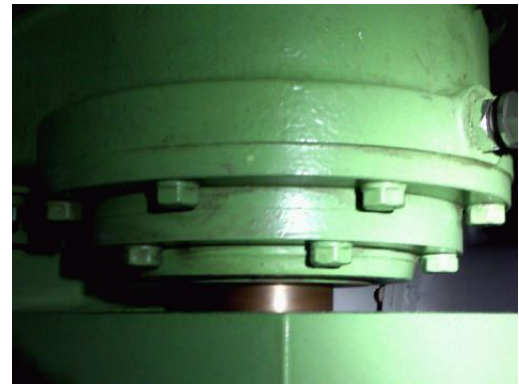
12/5/2016 3:40:11 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.5°C	43.7°C	48.5°C	0.95



IR005826.IS2-No1 IG fan



Visible Light Image

12/5/2016 3:40:30 PM

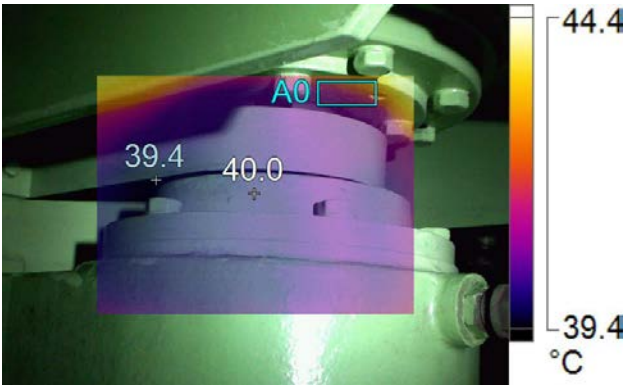
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	44.9°C	44.2°C	45.7°C	0.95

Name	Temperature	Emissivity
Centerpoint	44.6°C	0.95
Hot	46.7°C	0.95
Cold	42.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005827.IS2-No1 IG fan



Visible Light Image

12/5/2016 3:41:04 PM

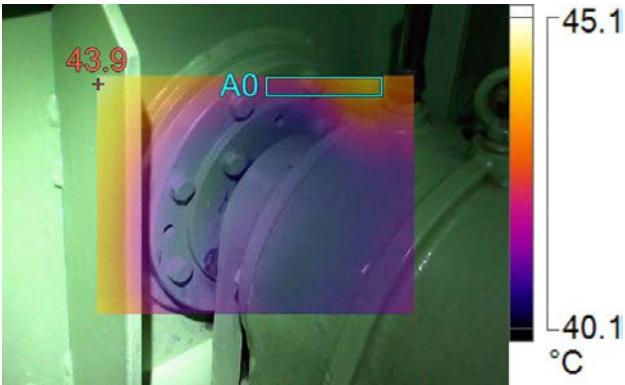
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.9°C	40.2°C	42.1°C	0.95

Name	Temperature	Emissivity
Centerpoint	40.0°C	0.95
Cold	39.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005828.IS2-No1 IG fan



Visible Light Image

12/5/2016 3:41:22 PM

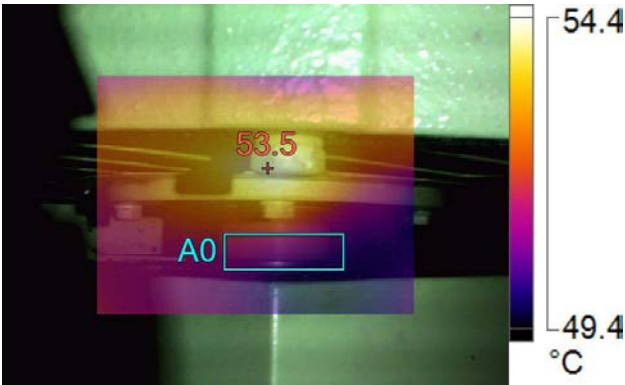
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.2°C	41.0°C	43.3°C	0.95

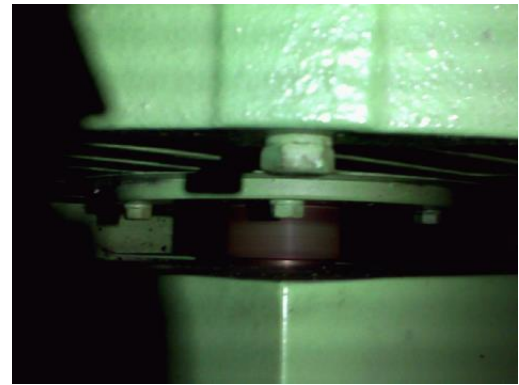
Name	Temperature	Emissivity
Hot	43.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005829.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:06:46 PM

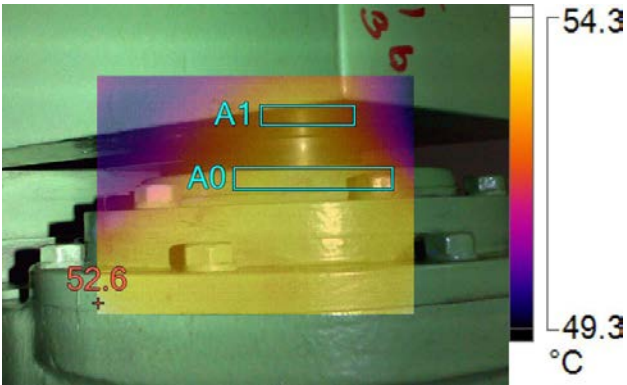
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	50.5°C	49.7°C	51.5°C	0.95

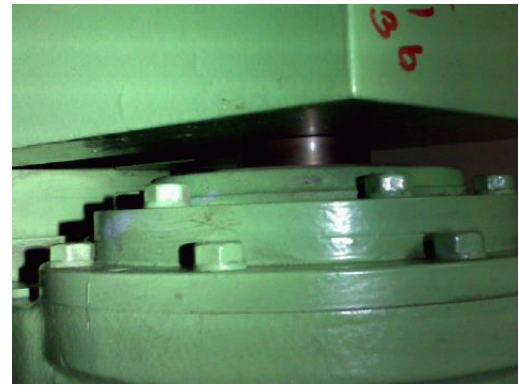
Name	Temperature	Emissivity
Hot	53.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005830.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:06:53 PM

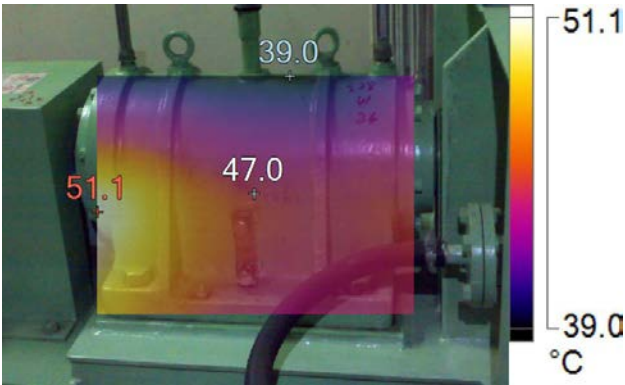
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	51.9°C	51.1°C	52.3°C	0.95
A1	51.6°C	50.9°C	52.0°C	0.95

Name	Temperature	Emissivity
Hot	52.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005831.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:07:07 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	47.0°C	0.95
Hot	51.1°C	0.95
Cold	39.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005832.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:20:51 PM



IR005833.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:21:01 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.7°C	42.0°C	43.5°C	0.95
A1	42.9°C	42.3°C	43.5°C	0.95
A2	42.3°C	41.4°C	43.1°C	0.95

Name	Temperature	Emissivity
Hot	45.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005834.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:21:18 PM

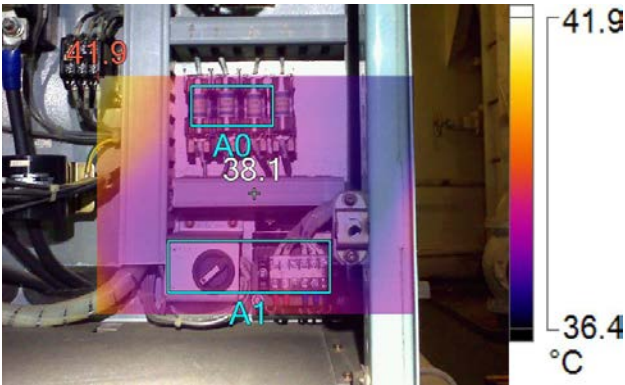
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	43.3°C	42.8°C	43.8°C	0.95
A1	43.3°C	42.9°C	43.7°C	0.95
A2	42.0°C	41.6°C	42.4°C	0.95

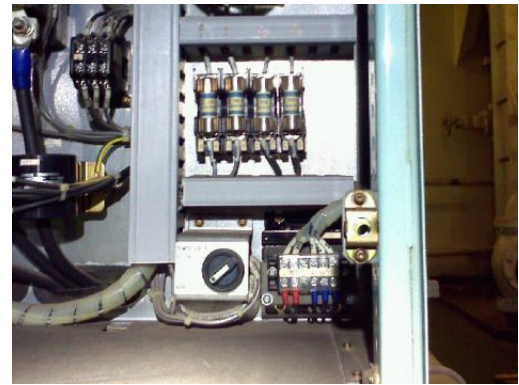
Name	Temperature	Emissivity
Hot	46.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005835.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:21:28 PM

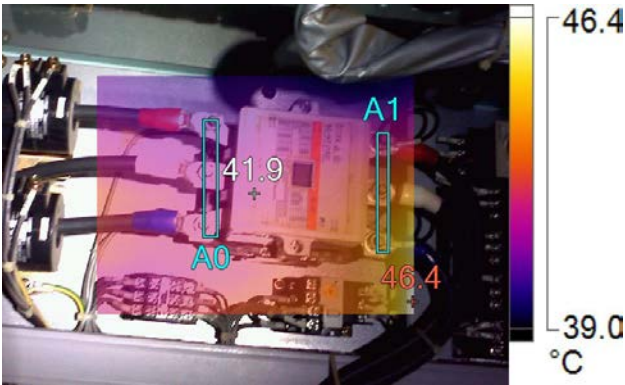
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	38.1°C	37.8°C	38.5°C	0.95
A1	38.1°C	37.4°C	38.6°C	0.95

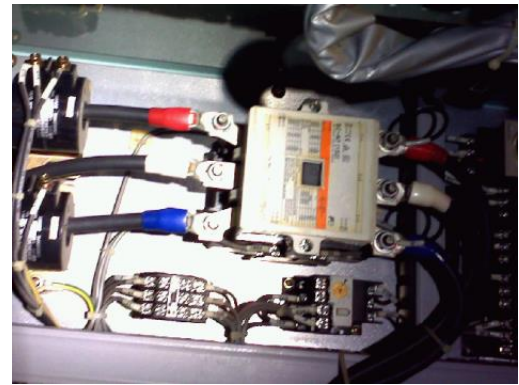
Name	Temperature	Emissivity
Centerpoint	38.1°C	0.95
Hot	41.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005836.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:21:36 PM

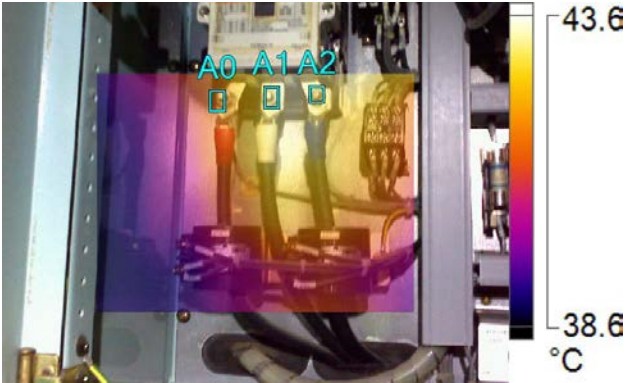
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.5°C	40.5°C	42.2°C	0.95
A1	43.2°C	41.4°C	44.5°C	0.95

Name	Temperature	Emissivity
Centerpoint	41.9°C	0.95
Hot	46.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005837.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:21:44 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.5°C	41.2°C	41.9°C	0.95
A1	42.8°C	42.6°C	43.0°C	0.95
A2	42.7°C	42.5°C	43.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005838.IS2-No1 IG fan



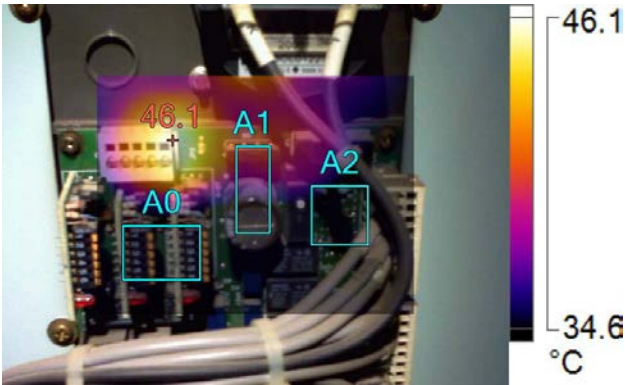
Visible Light Image

12/5/2016 4:21:51 PM

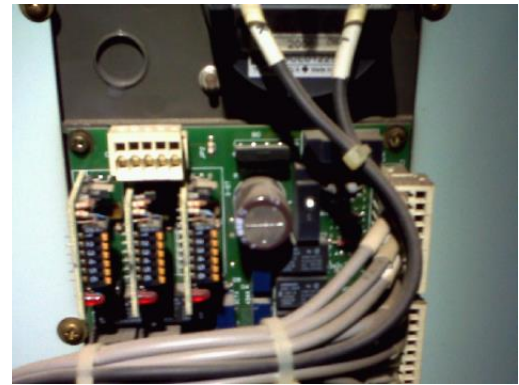
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	44.2°C	42.5°C	45.5°C	0.95

Name	Temperature	Emissivity
Hot	47.4°C	0.95



IR005839.IS2-No1 IG fan



Visible Light Image

12/5/2016 4:23:00 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.6°C	35.1°C	36.0°C	0.95
A1	37.8°C	35.1°C	41.1°C	0.95
A2	35.6°C	35.0°C	37.8°C	0.95

Name	Temperature	Emissivity
Hot	46.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted

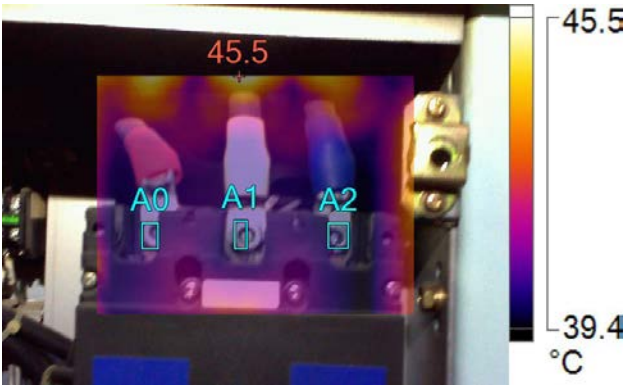


IR005840.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:23:30 PM



IR005841.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:23:57 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.3°C	40.0°C	40.6°C	0.95
A1	39.9°C	39.5°C	40.3°C	0.95
A2	39.8°C	39.5°C	40.1°C	0.95

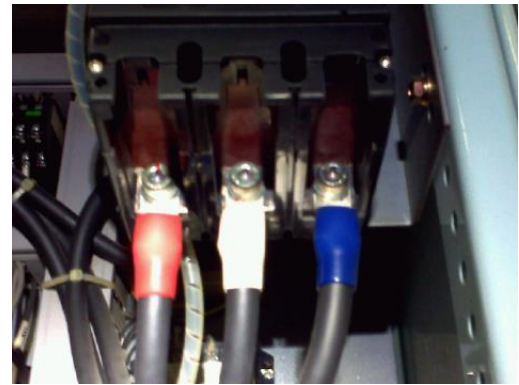
Name	Temperature	Emissivity
Hot	45.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005842.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:24:30 PM

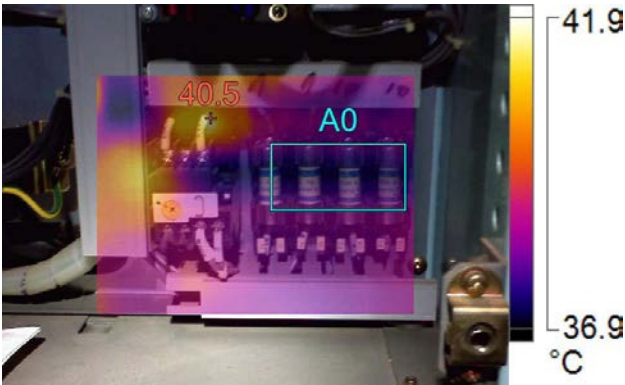
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.7°C	46.3°C	48.4°C	0.95
A1	46.3°C	45.5°C	46.6°C	0.95
A2	45.3°C	45.1°C	45.5°C	0.95

Name	Temperature	Emissivity
Hot	52.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005843.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:24:42 PM

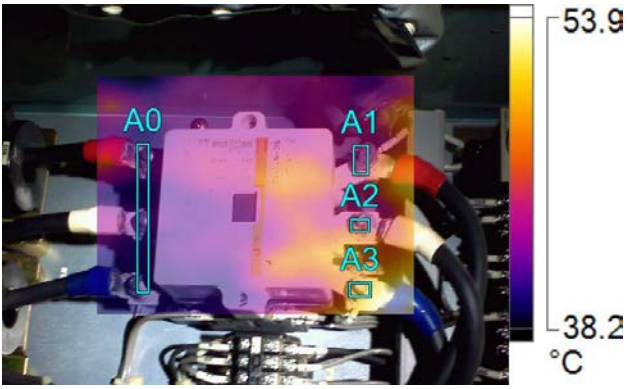
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	37.4°C	37.0°C	38.0°C	0.95

Name	Temperature	Emissivity
Hot	40.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005844.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:24:52 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.7°C	40.0°C	44.7°C	0.95
A1	45.9°C	45.0°C	47.4°C	0.95
A2	47.3°C	46.5°C	48.4°C	0.95
A3	50.7°C	49.4°C	52.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005845.IS2-No 2 IG fan



Visible Light Image

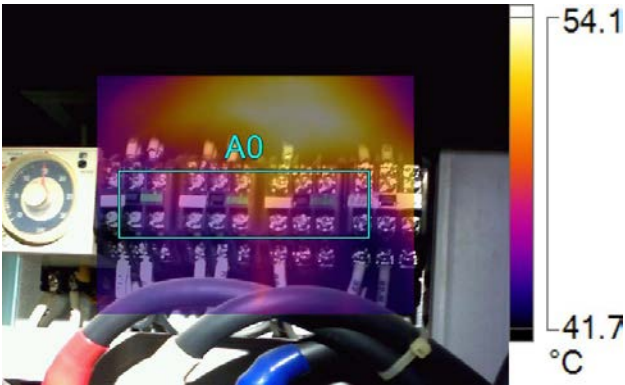
12/5/2016 4:25:08 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.7°C	38.6°C	42.6°C	0.95
A1	42.7°C	41.0°C	45.1°C	0.95
A2	44.0°C	42.1°C	45.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005846.IS2-No 2 IG fan



Visible Light Image

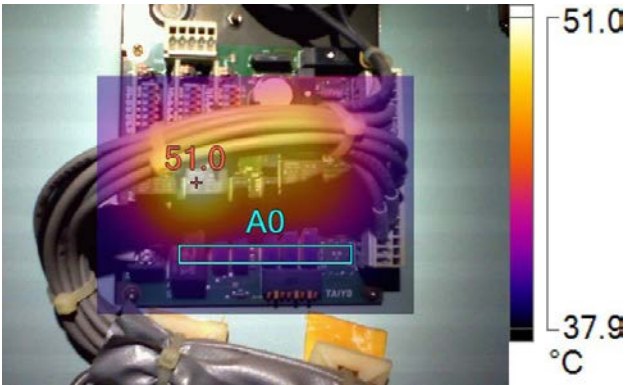
12/5/2016 4:25:31 PM

Main Image Markers

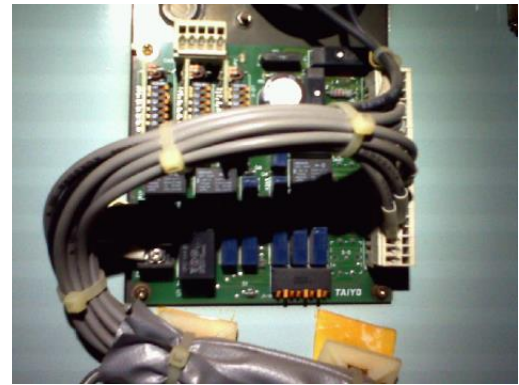
Name	Avg	Min	Max	Emissivity
A0	47.3°C	41.7°C	51.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005847.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:25:53 PM

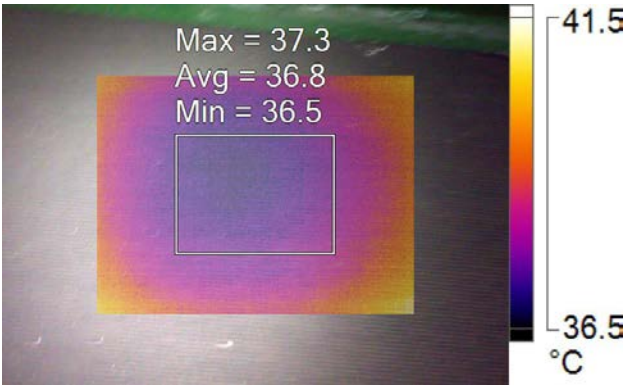
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.7°C	39.6°C	44.1°C	0.95

Name	Temperature	Emissivity
Hot	51.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



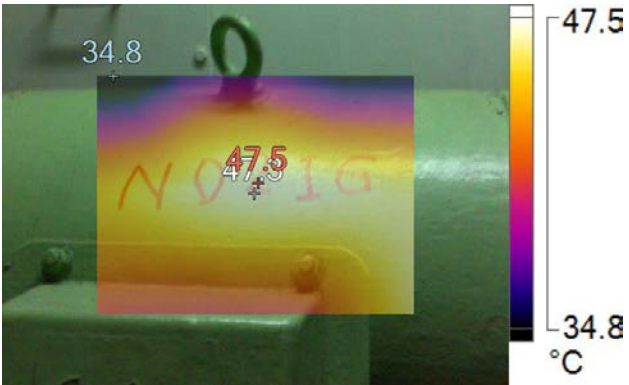
IR005848.IS2-Room Temperature
12/5/2016 4:26:15 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
Centerbox	36.8°C	36.5°C	37.3°C	0.95



IR005849.IS2-No 2 IG fan



Visible Light Image

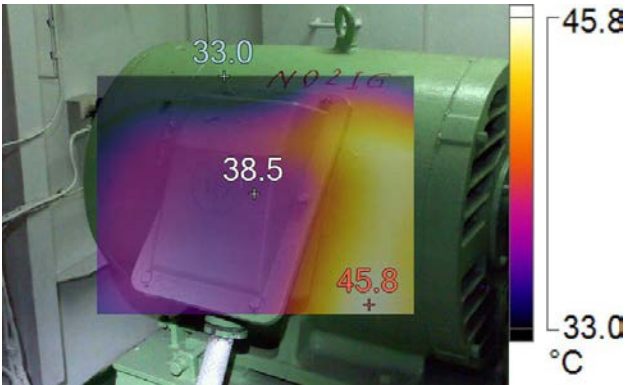
12/5/2016 4:32:01 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	47.3°C	0.95
Hot	47.5°C	0.95
Cold	34.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005850.IS2-No 2 IG fan



Visible Light Image

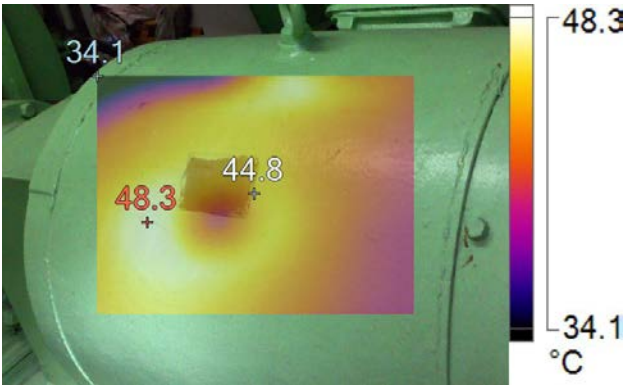
12/5/2016 4:32:18 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	38.5°C	0.95
Hot	45.8°C	0.95
Cold	33.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005851.IS2-No 2 IG fan



Visible Light Image

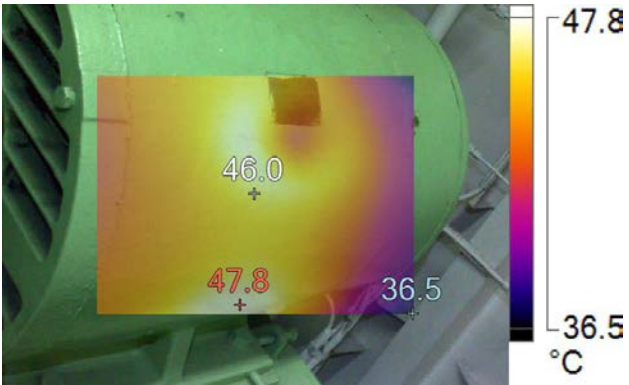
12/5/2016 4:32:36 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	44.8°C	0.95
Hot	48.3°C	0.95
Cold	34.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005852.IS2-No 2 IG fan

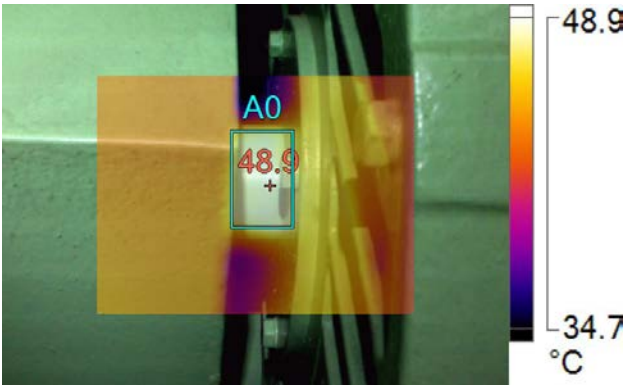


Visible Light Image

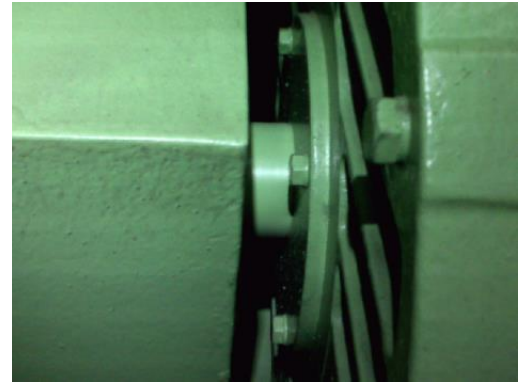
12/5/2016 4:32:56 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	46.0°C	0.95
Hot	47.8°C	0.95
Cold	36.5°C	0.95



IR005853.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:33:06 PM

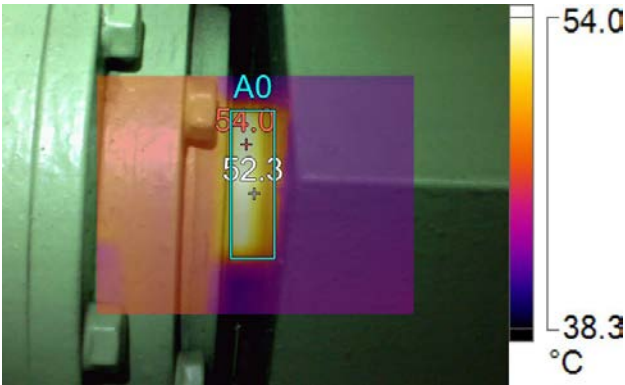
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.9°C	44.9°C	48.9°C	0.95

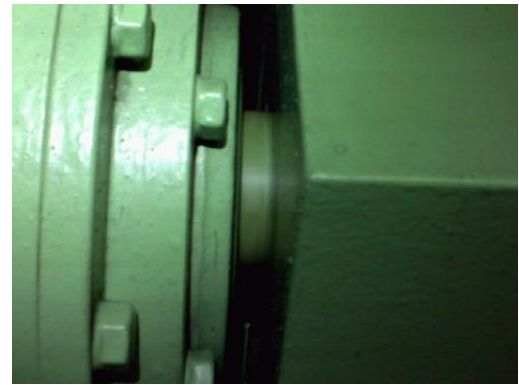
Name	Temperature	Emissivity
Hot	48.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005854.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:33:13 PM

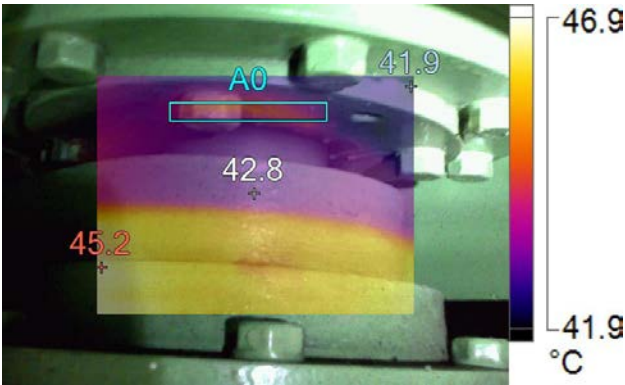
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	52.0°C	46.1°C	54.0°C	0.95

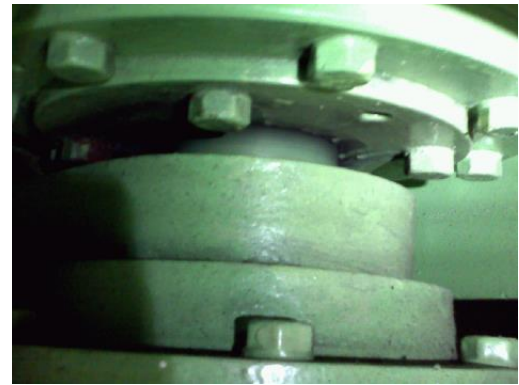
Name	Temperature	Emissivity
Centerpoint	52.3°C	0.95
Hot	54.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005855.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:33:29 PM

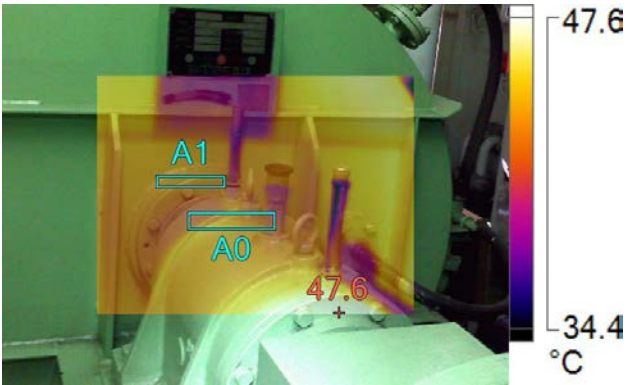
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	43.1°C	42.3°C	43.7°C	0.95

Name	Temperature	Emissivity
Centerpoint	42.8°C	0.95
Hot	45.2°C	0.95
Cold	41.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005856.IS2-No 2 IG fan



Visible Light Image

12/5/2016 4:33:54 PM

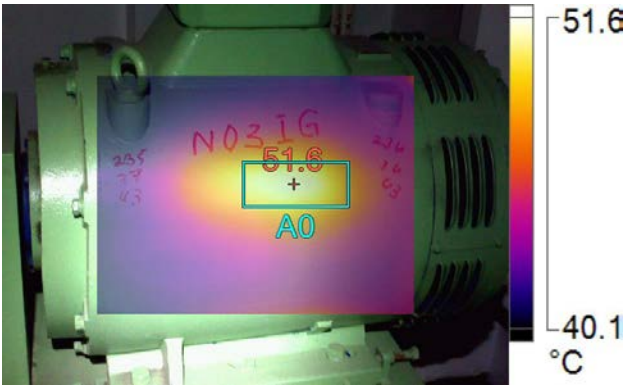
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.5°C	41.0°C	43.9°C	0.95
A1	42.7°C	42.0°C	43.3°C	0.95

Name	Temperature	Emissivity
Hot	47.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005857.IS2-No 3 IG fan



Visible Light Image

12/5/2016 5:30:46 PM

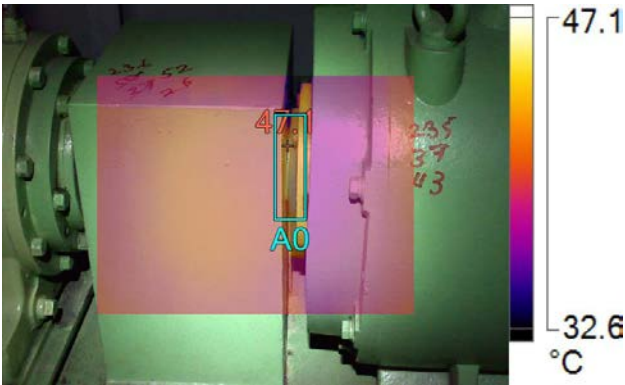
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	50.0°C	46.4°C	51.6°C	0.95

Name	Temperature	Emissivity
Hot	51.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005858.IS2-No 3 IG fan



Visible Light Image

12/5/2016 5:30:52 PM

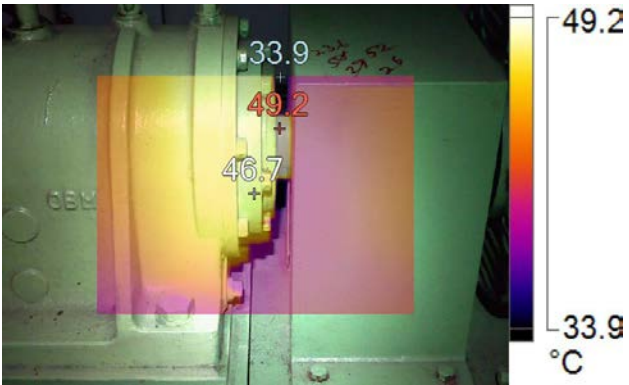
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.8°C	37.5°C	47.1°C	0.95

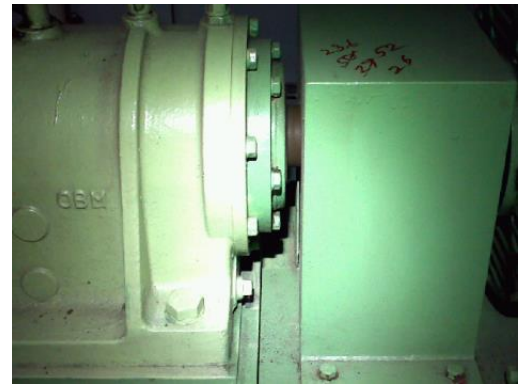
Name	Temperature	Emissivity
Hot	47.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005859.IS2-No 3 IG fan



Visible Light Image

12/5/2016 5:30:59 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	46.7°C	0.95
Hot	49.2°C	0.95
Cold	33.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005860.IS2-No 3 IG fan



Visible Light Image

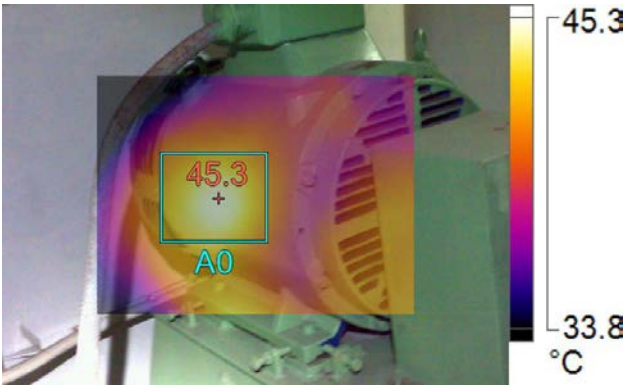
12/5/2016 5:31:08 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	40.3°C	0.95
Hot	41.5°C	0.95
Cold	36.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005861.IS2-No 3 IG fan



Visible Light Image

12/5/2016 5:31:53 PM

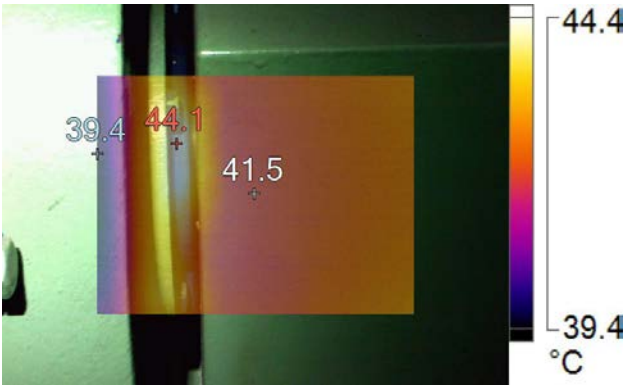
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	43.6°C	41.1°C	45.3°C	0.95

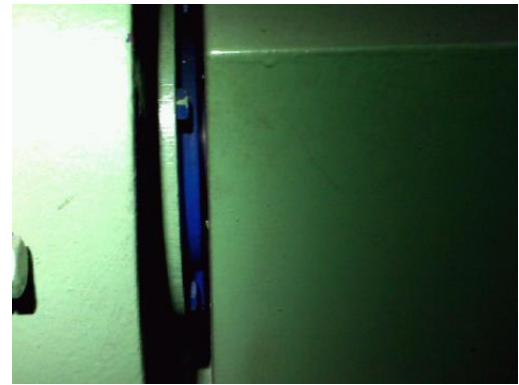
Name	Temperature	Emissivity
Hot	45.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005862.IS2-No 3 IG fan



Visible Light Image

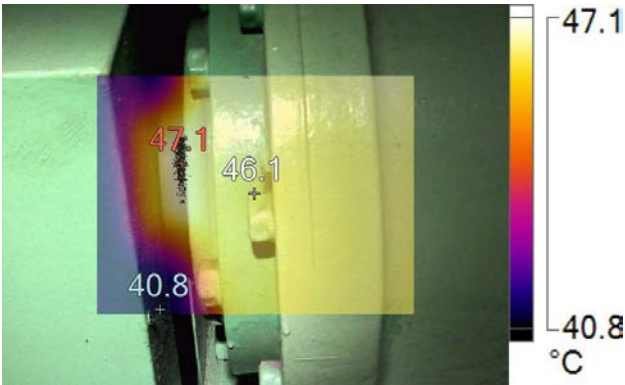
12/5/2016 5:32:13 PM

Main Image Markers

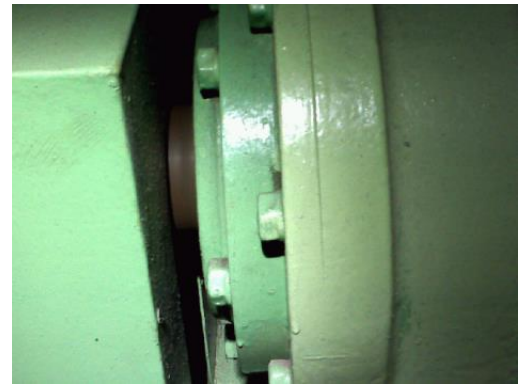
Name	Temperature	Emissivity
Centerpoint	41.5°C	0.95
Hot	44.1°C	0.95
Cold	39.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005863.IS2-No 3 IG fan



Visible Light Image

12/5/2016 5:32:20 PM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	46.1°C	0.95
Hot	47.1°C	0.95
Cold	40.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

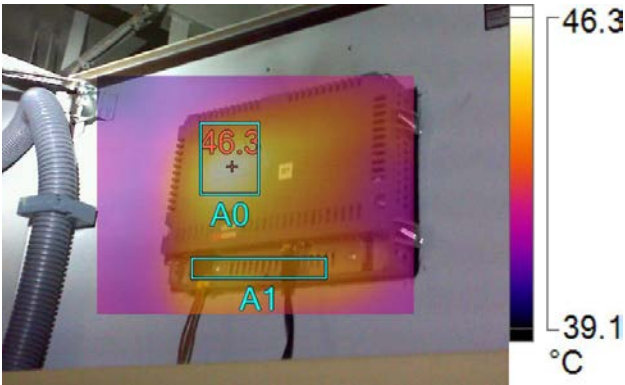
All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005864.IS2-Boilers panel
12/5/2016 5:37:00 PM



Visible Light Image



IR005865.IS2
12/5/2016 5:37:09 PM



Visible Light Image

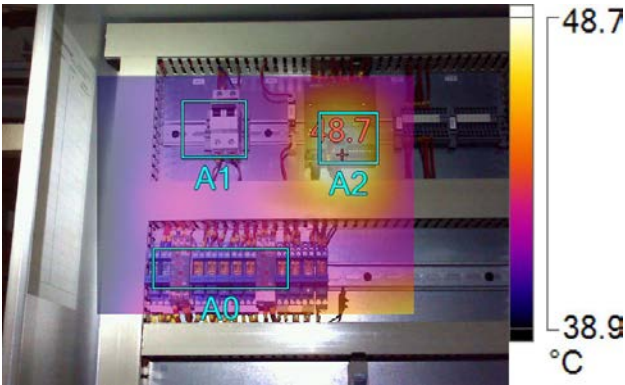
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	45.1°C	42.4°C	46.3°C	0.95
A1	44.1°C	43.6°C	44.8°C	0.95

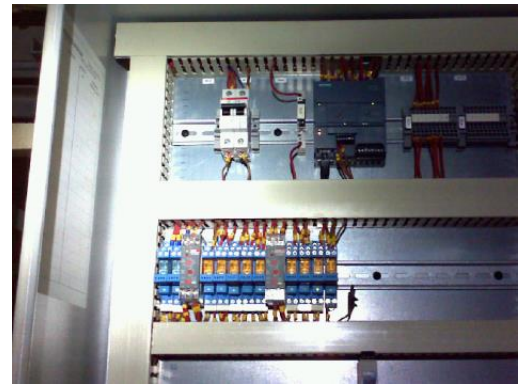
Name	Temperature	Emissivity
Hot	46.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005866.IS2
12/5/2016 5:37:22 PM



Visible Light Image

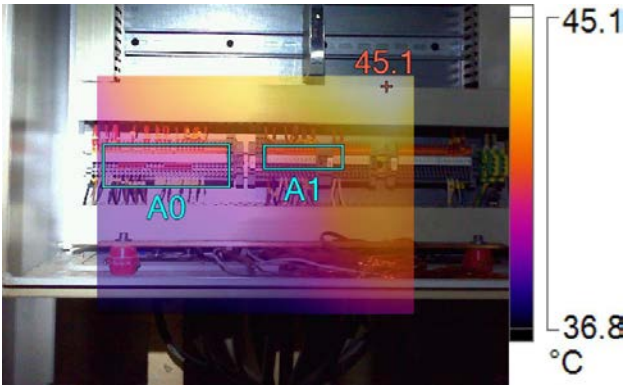
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.0°C	40.5°C	42.1°C	0.95
A1	40.8°C	40.4°C	41.3°C	0.95
A2	46.8°C	43.6°C	48.7°C	0.95

Name	Temperature	Emissivity
Hot	48.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005867.IS2
12/5/2016 5:37:38 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	39.2°C	38.2°C	40.8°C	0.95
A1	41.0°C	39.7°C	42.6°C	0.95

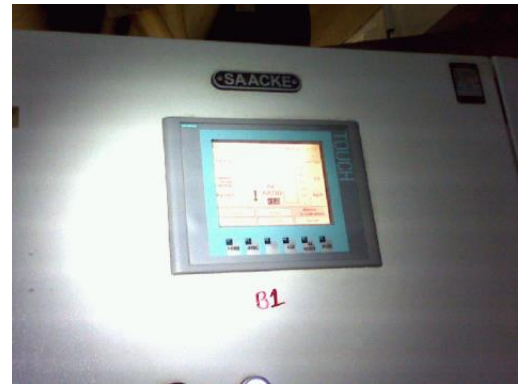
Name	Temperature	Emissivity
Hot	45.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005868.IS2-Boilers panel



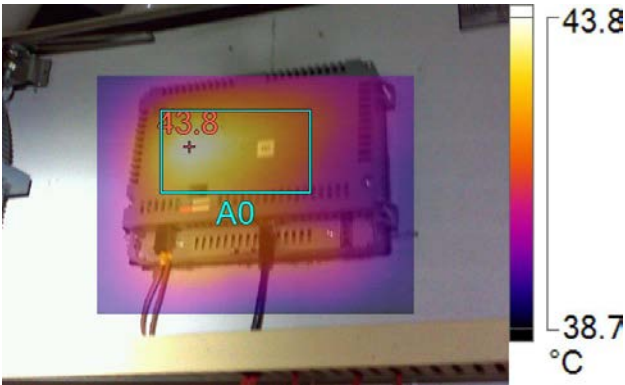
Visible Light Image

12/5/2016 5:37:50 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.8°C	41.2°C	43.7°C	0.95

Name	Temperature	Emissivity
Hot	43.7°C	0.95



IR005869.IS2-Boilers panel



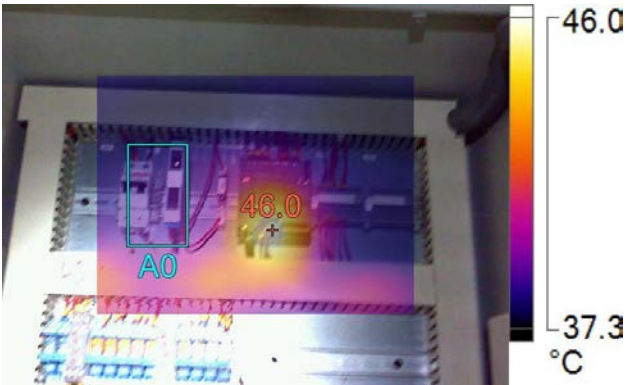
Visible Light Image

12/5/2016 5:37:58 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.5°C	40.7°C	43.8°C	0.95

Name	Temperature	Emissivity
Hot	43.8°C	0.95



IR005870.IS2-Boilers panel



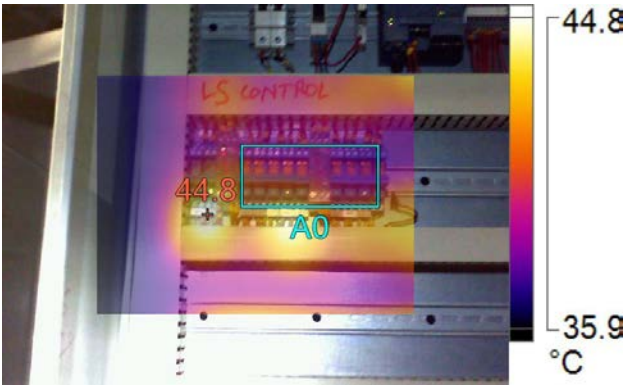
Visible Light Image

12/5/2016 5:38:08 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	38.9°C	38.0°C	40.0°C	0.95

Name	Temperature	Emissivity
Hot	46.0°C	0.95



IR005871.IS2-Boilers panel



Visible Light Image

12/5/2016 5:38:18 PM

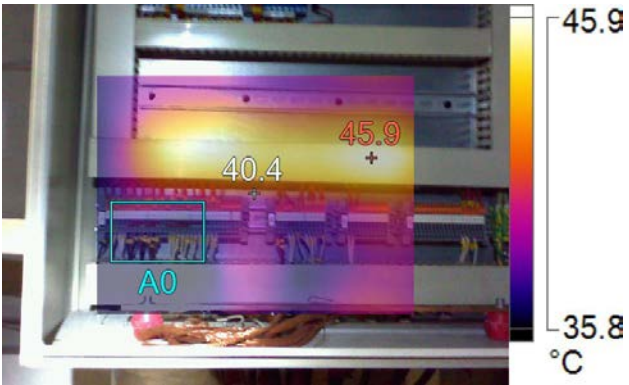
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	39.8°C	37.9°C	43.2°C	0.95

Name	Temperature	Emissivity
Hot	44.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005872.IS2-Boilers panel



Visible Light Image

12/5/2016 5:38:23 PM

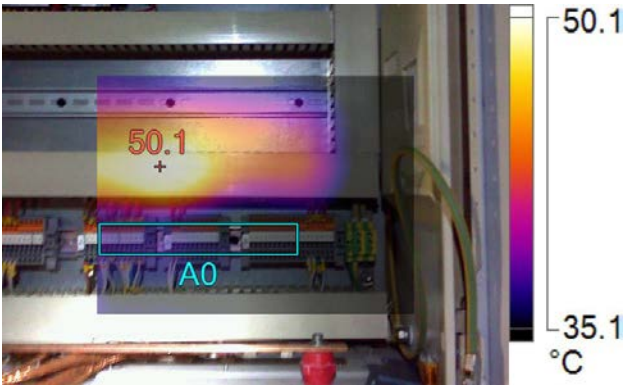
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.8°C	36.0°C	38.9°C	0.95

Name	Temperature	Emissivity
Centerpoint	40.4°C	0.95
Hot	45.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005873.IS2-Boilers panel



Visible Light Image

12/5/2016 5:38:28 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	37.2°C	35.7°C	38.7°C	0.95

Name	Temperature	Emissivity
Hot	50.1°C	0.95

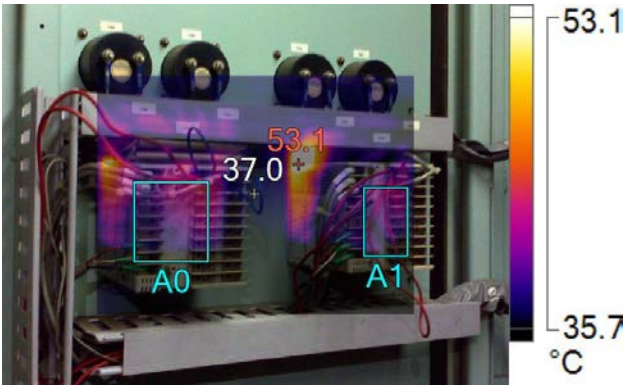


IR005874.IS2-Boilers panel



Visible Light Image

12/5/2016 5:39:42 PM



IR005875.IS2-Boilers panel



Visible Light Image

12/5/2016 5:40:02 PM

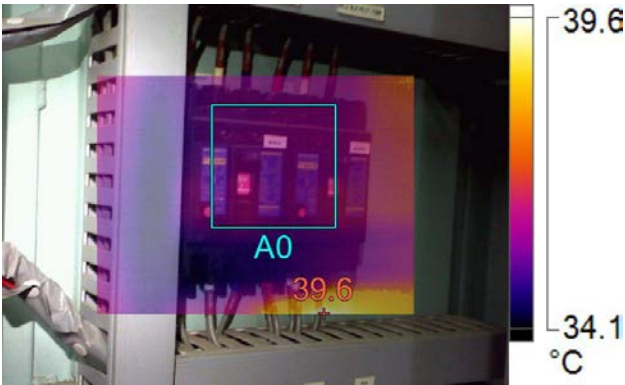
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	38.3°C	36.0°C	41.5°C	0.95
A1	37.9°C	35.9°C	40.3°C	0.95

Name	Temperature	Emissivity
Centerpoint	37.0°C	0.95
Hot	53.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005876.IS2-Boilers panel



Visible Light Image

12/5/2016 5:41:27 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.0°C	34.7°C	35.5°C	0.95

Name	Temperature	Emissivity
Hot	39.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005877.IS2-Boilers panel



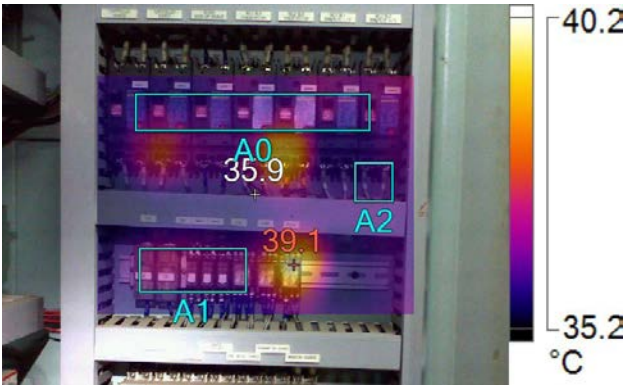
Visible Light Image

12/5/2016 5:41:39 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.0°C	35.2°C	37.2°C	0.95

Name	Temperature	Emissivity
Hot	38.5°C	0.95



IR005878.IS2-Boilers panel



Visible Light Image

12/5/2016 5:41:52 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A1	36.3°C	35.9°C	36.8°C	0.95
A2	35.9°C	35.6°C	36.2°C	0.95
A0	36.1°C	35.6°C	37.4°C	0.95

Name	Temperature	Emissivity
Centerpoint	35.9°C	0.95
Hot	39.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005879.IS2-Boilers panel



Visible Light Image

12/5/2016 5:42:15 PM

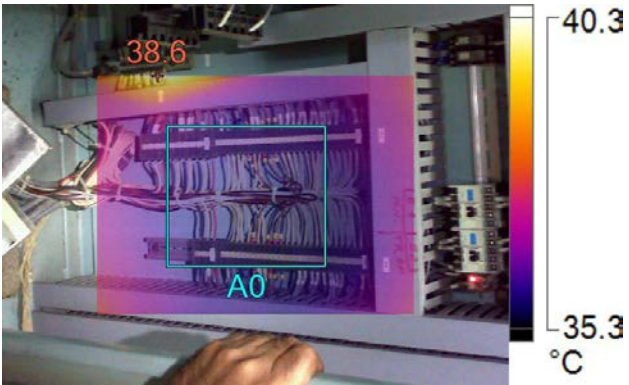
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	37.1°C	36.4°C	38.3°C	0.95
A1	37.3°C	36.9°C	37.7°C	0.95

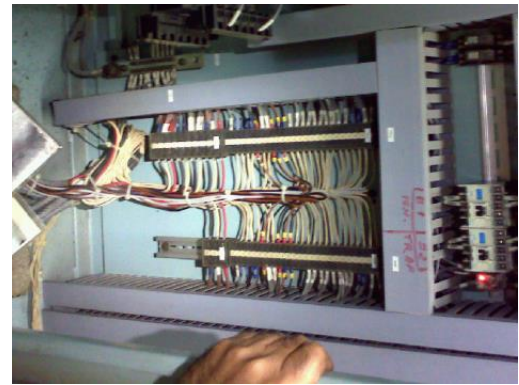
Name	Temperature	Emissivity
Hot	38.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005880.IS2-Boilers panel



Visible Light Image

12/5/2016 5:42:22 PM

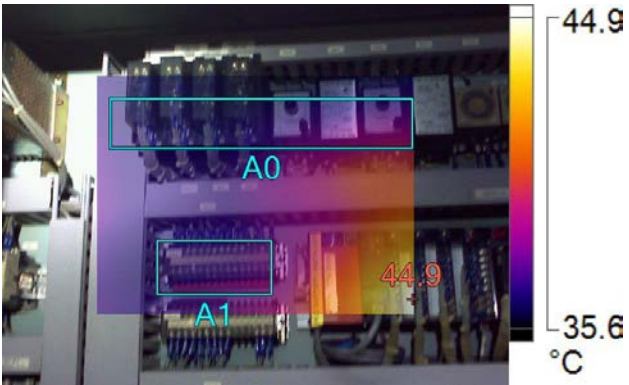
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.7°C	35.3°C	36.2°C	0.95

Name	Temperature	Emissivity
Hot	38.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005881.IS2-Boilers panel



Visible Light Image

12/5/2016 5:42:38 PM

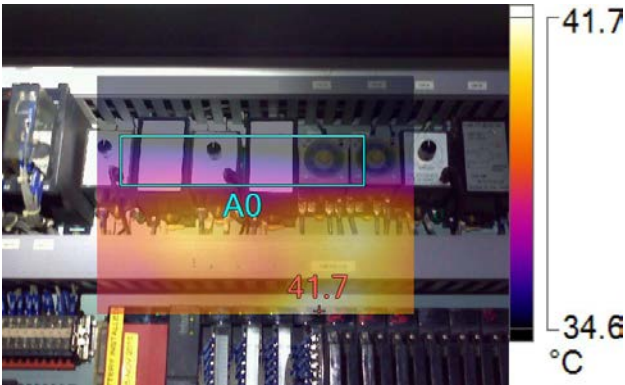
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	37.0°C	36.0°C	39.7°C	0.95
A1	37.2°C	36.6°C	38.6°C	0.95

Name	Temperature	Emissivity
Hot	44.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005882.IS2-Boilers panel



Visible Light Image

12/5/2016 5:42:49 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.8°C	35.2°C	38.6°C	0.95

Name	Temperature	Emissivity
Hot	41.7°C	0.95



IR005883.IS2-Boilers panel



Visible Light Image

12/5/2016 5:42:55 PM

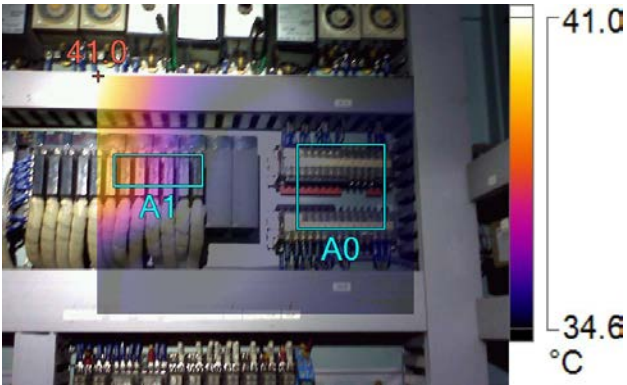
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.1°C	34.2°C	37.3°C	0.95

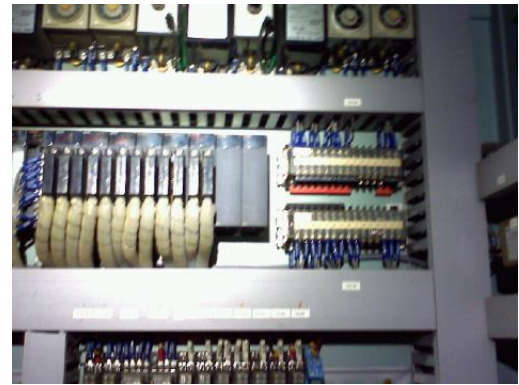
Name	Temperature	Emissivity
Centerpoint	35.0°C	0.95
Hot	41.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005884.IS2-Boilers panel



Visible Light Image

12/5/2016 5:43:00 PM

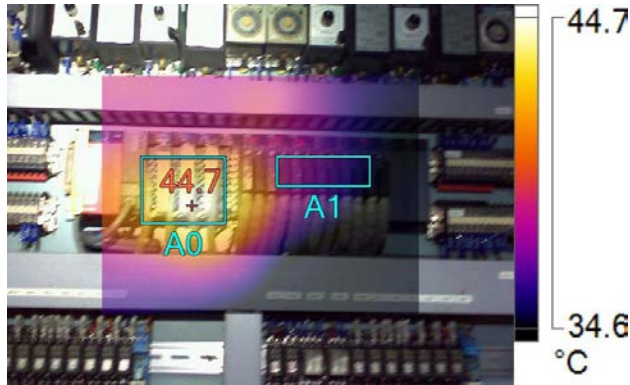
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.4°C	34.9°C	36.0°C	0.95
A1	37.7°C	35.9°C	39.5°C	0.95

Name	Temperature	Emissivity
Hot	41.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005885.IS2-Boilers panel



Visible Light Image

12/5/2016 5:43:10 PM

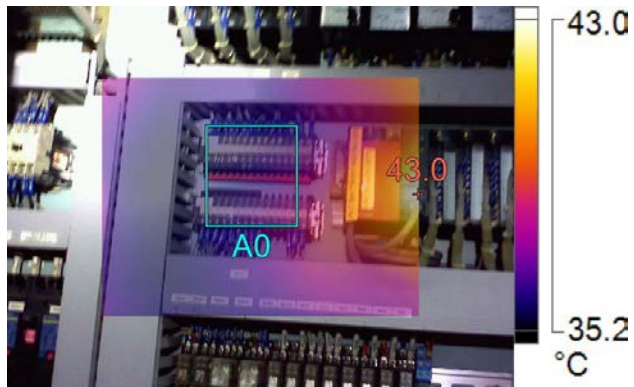
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	43.2°C	40.8°C	44.7°C	0.95
A1	38.1°C	36.4°C	40.2°C	0.95

Name	Temperature	Emissivity
Hot	44.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005886.IS2-Boilers panel



Visible Light Image

12/5/2016 5:43:15 PM

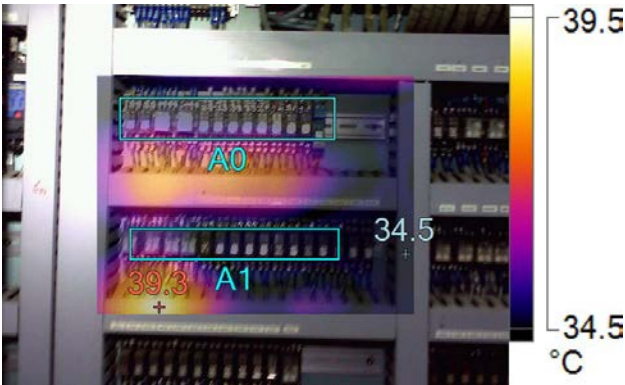
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.4°C	35.6°C	38.0°C	0.95

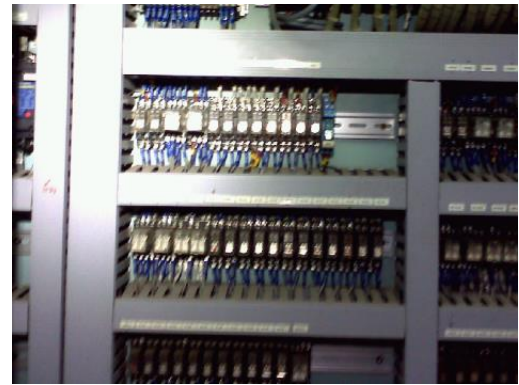
Name	Temperature	Emissivity
Hot	43.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005887.IS2-Boilers panel



Visible Light Image

12/5/2016 5:43:21 PM

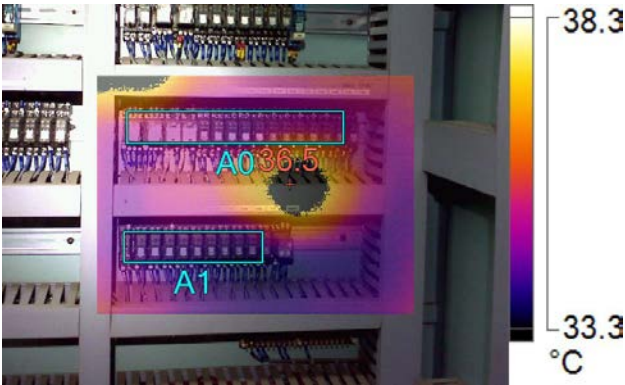
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.4°C	35.7°C	37.6°C	0.95
A1	35.9°C	35.0°C	37.6°C	0.95

Name	Temperature	Emissivity
Hot	39.3°C	0.95
Cold	34.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005888.IS2-Boilers panel



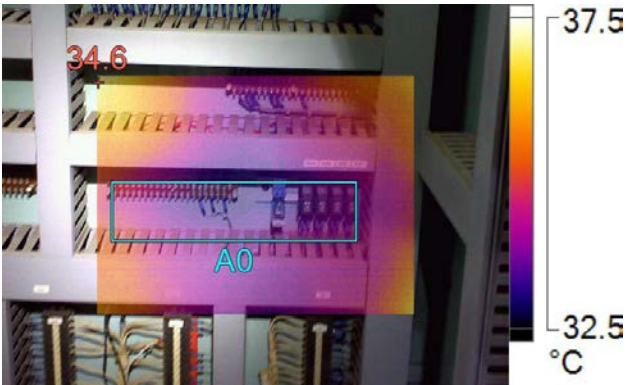
Visible Light Image

12/5/2016 5:43:28 PM

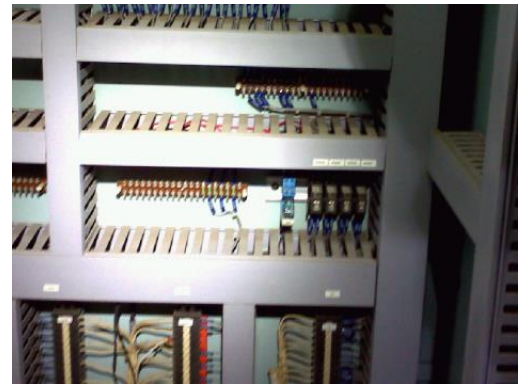
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	34.4°C	33.8°C	35.3°C	0.95
A1	33.8°C	33.3°C	34.6°C	0.95

Name	Temperature	Emissivity
Hot	36.5°C	0.95



IR005889.IS2-Boilers panel



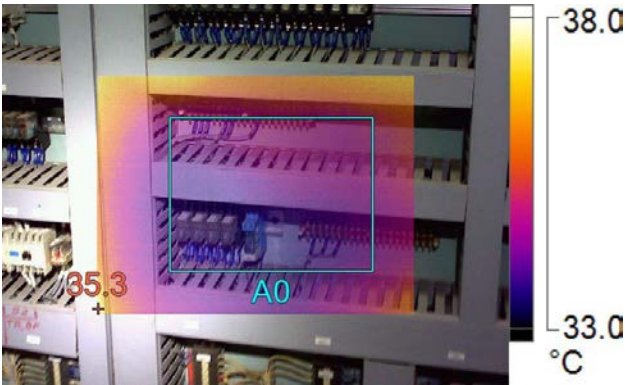
Visible Light Image

12/5/2016 5:43:34 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.0°C	32.5°C	33.8°C	0.95

Name	Temperature	Emissivity
Hot	34.6°C	0.95



IR005890.IS2-Boilers panel



Visible Light Image

12/5/2016 5:43:38 PM

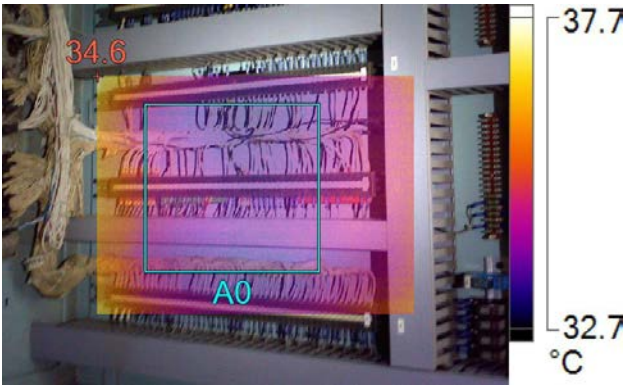
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.5°C	33.0°C	34.1°C	0.95

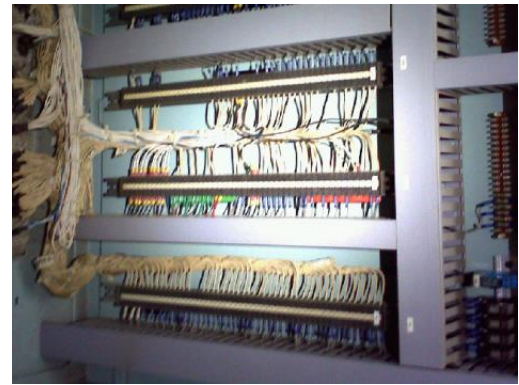
Name	Temperature	Emissivity
Hot	35.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005891.IS2-Boilers panel



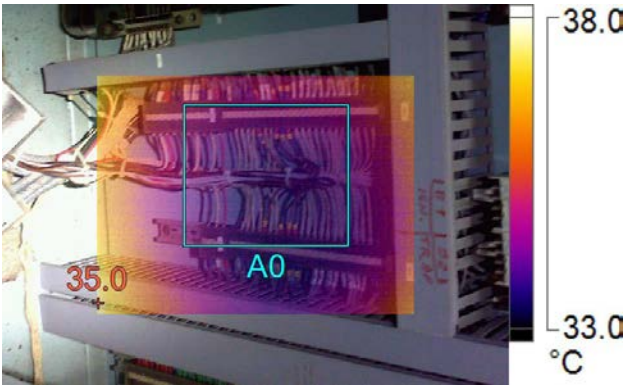
Visible Light Image

12/5/2016 5:43:50 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.1°C	32.7°C	33.7°C	0.95

Name	Temperature	Emissivity
Hot	34.6°C	0.95



IR005892.IS2-Boilers panel



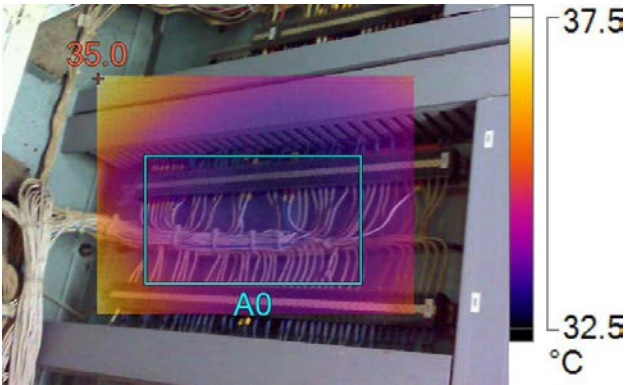
Visible Light Image

12/5/2016 5:44:34 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.5°C	33.1°C	34.0°C	0.95

Name	Temperature	Emissivity
Hot	35.0°C	0.95



IR005893.IS2-Boilers panel



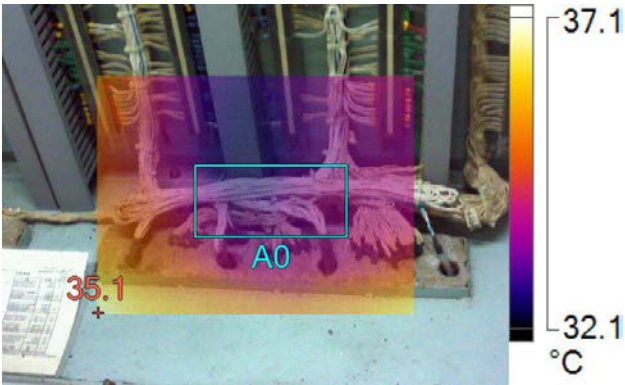
Visible Light Image

12/5/2016 5:44:56 PM

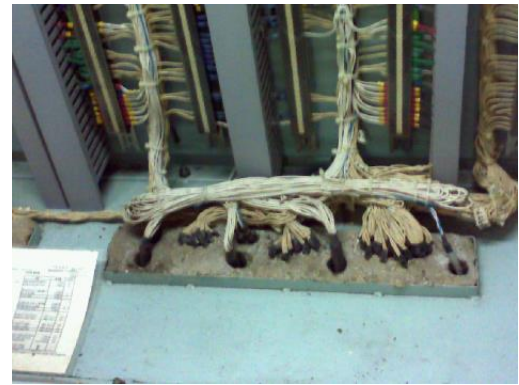
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.0°C	32.5°C	33.8°C	0.95

Name	Temperature	Emissivity
Hot	35.0°C	0.95



IR005894.IS2-Boilers panel



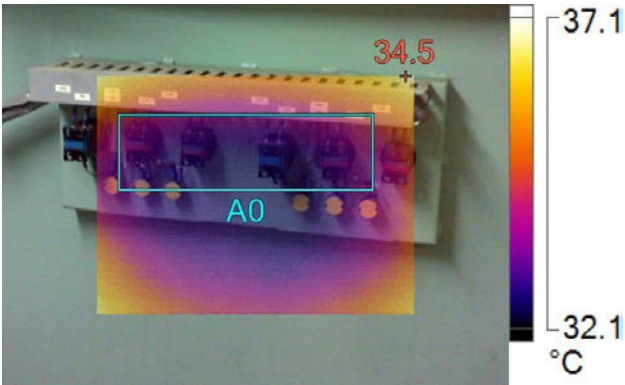
Visible Light Image

12/5/2016 5:45:01 PM

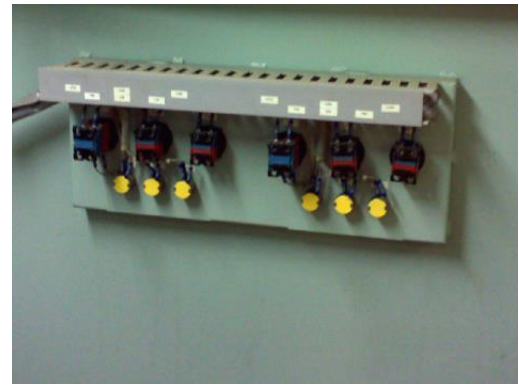
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	32.8°C	32.2°C	33.4°C	0.95

Name	Temperature	Emissivity
Hot	35.1°C	0.95



IR005895.IS2-Boilers panel



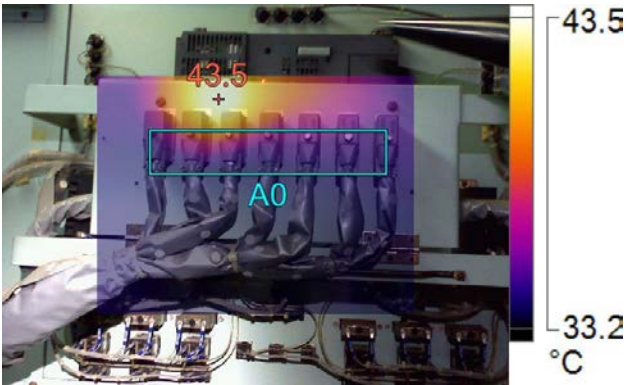
Visible Light Image

12/5/2016 5:45:16 PM

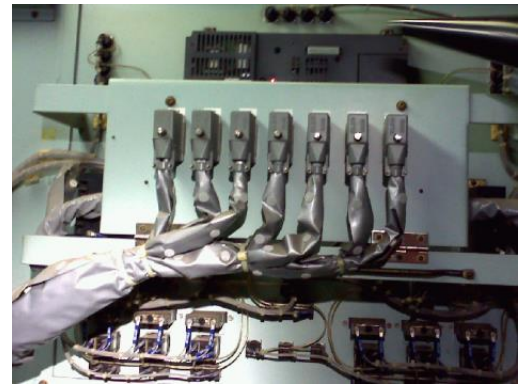
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	32.6°C	32.1°C	33.5°C	0.95

Name	Temperature	Emissivity
Hot	34.5°C	0.95



IR005896.IS2-Boilers panel



Visible Light Image

12/5/2016 5:45:41 PM

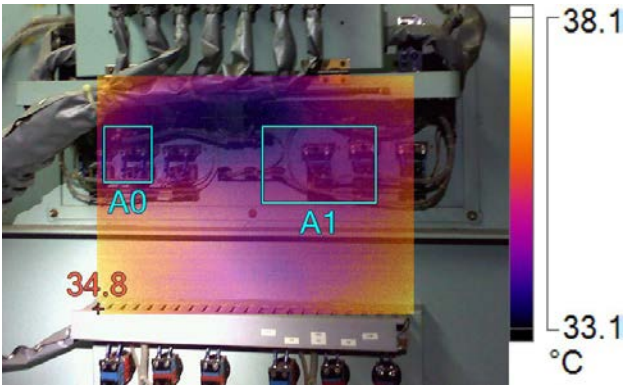
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.9°C	34.1°C	40.9°C	0.95

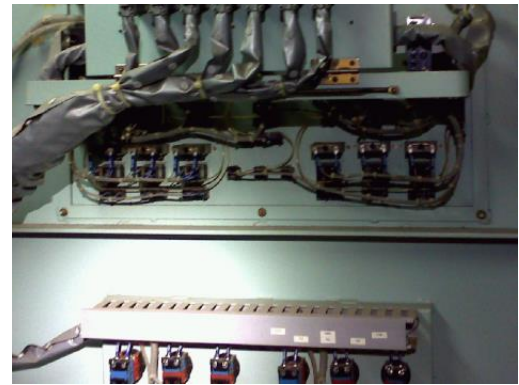
Name	Temperature	Emissivity
Hot	43.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005897.IS2-Boilers panel



Visible Light Image

12/5/2016 5:45:49 PM

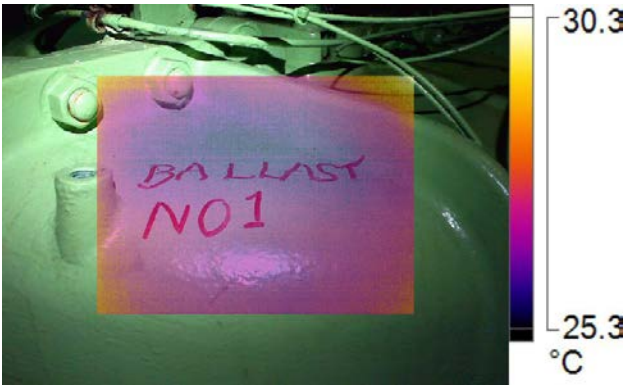
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.5°C	33.2°C	33.9°C	0.95
A1	33.6°C	33.1°C	34.0°C	0.95

Name	Temperature	Emissivity
Hot	34.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

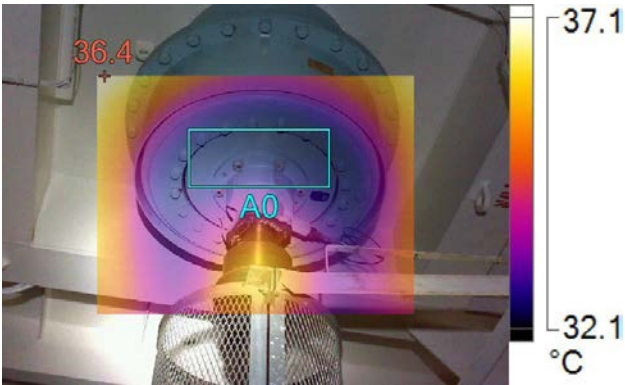
All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005898.IS2-No1 Ballast pump
12/5/2016 7:06:54 PM



Visible Light Image



IR005899.IS2-No1 Ballast pump



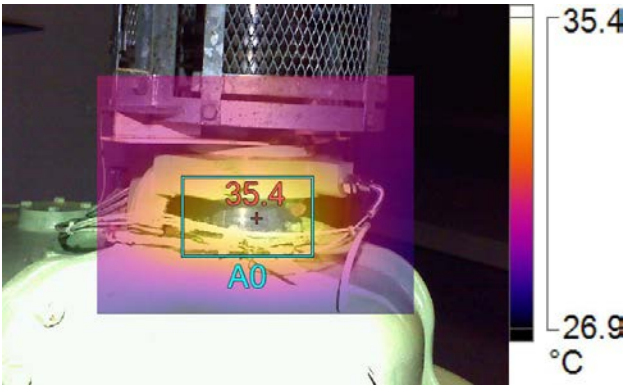
Visible Light Image

12/5/2016 7:07:11 PM

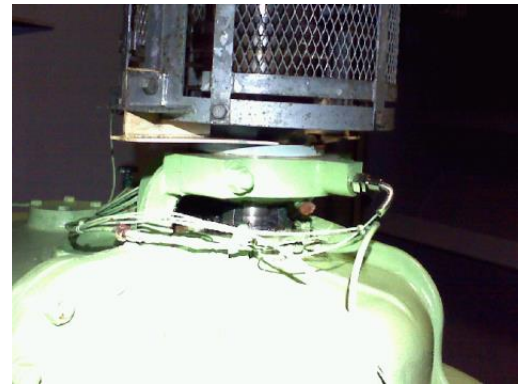
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	32.4°C	32.1°C	33.0°C	0.95

Name	Temperature	Emissivity
Hot	36.4°C	0.95



IR005900.IS2-No1 Ballast pump



Visible Light Image

12/5/2016 7:07:23 PM

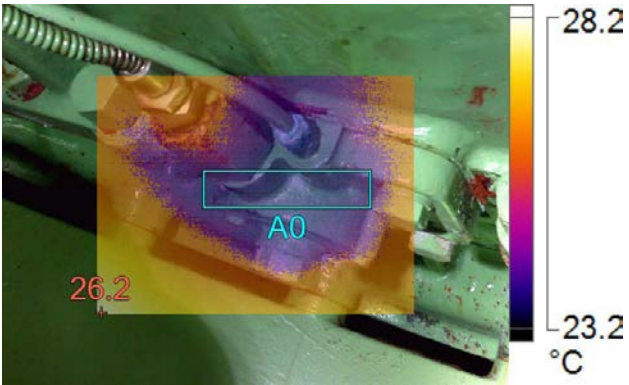
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.7°C	31.6°C	35.4°C	0.95

Name	Temperature	Emissivity
Hot	35.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005901.IS2-No1 Ballast pump



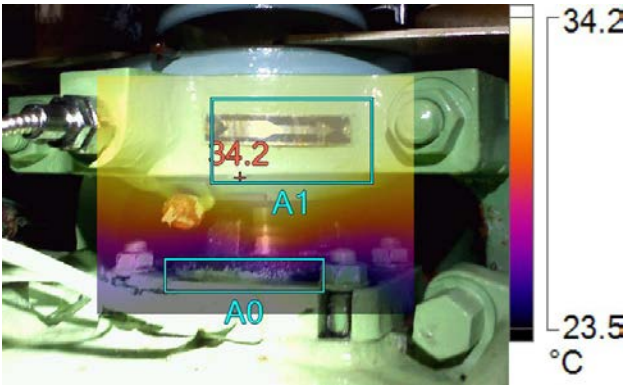
Visible Light Image

12/5/2016 7:09:06 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	23.5°C	23.2°C	23.9°C	0.95

Name	Temperature	Emissivity
Hot	26.2°C	0.95



IR005902.IS2-No1 Ballast pump



Visible Light Image

12/5/2016 7:09:52 PM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	25.1°C	23.9°C	27.2°C	0.95
A1	33.6°C	32.4°C	34.2°C	0.95

Name	Temperature	Emissivity
Hot	34.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted

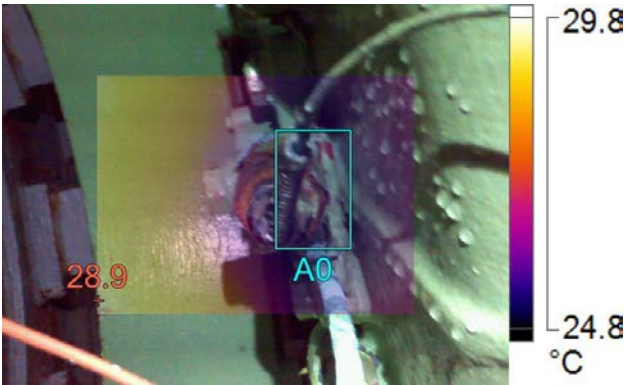


IR005903.IS2-No 2 Ballast pump



Visible Light Image

12/5/2016 7:19:24 PM



IR005904.IS2-No 2 Ballast pump
12/5/2016 7:19:48 PM



Visible Light Image

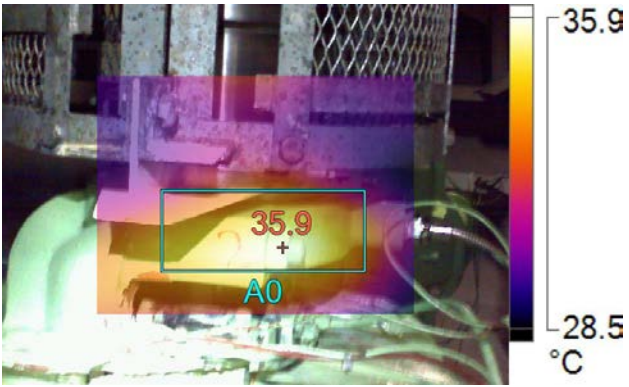
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	25.3°C	24.8°C	25.6°C	0.95

Name	Temperature	Emissivity
Hot	28.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005905.IS2-No 2 Ballast pump
12/5/2016 7:20:24 PM



Visible Light Image

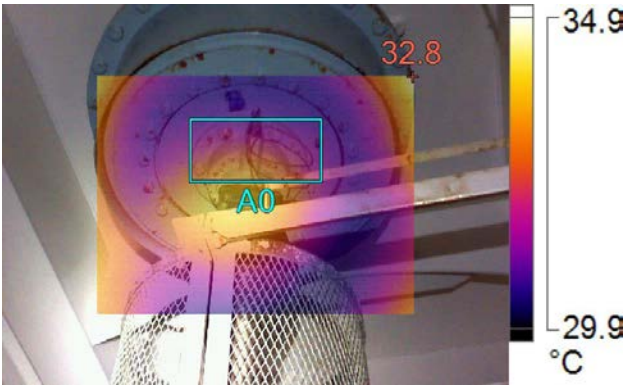
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	34.1°C	30.7°C	35.9°C	0.95

Name	Temperature	Emissivity
Hot	35.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005906.IS2-No 2 Ballast pump
12/5/2016 7:20:35 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	31.1°C	30.4°C	32.1°C	0.95

Name	Temperature	Emissivity
Hot	32.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005907.IS2-No 1 Ballast pump panel
12/5/2016 8:12:30 PM



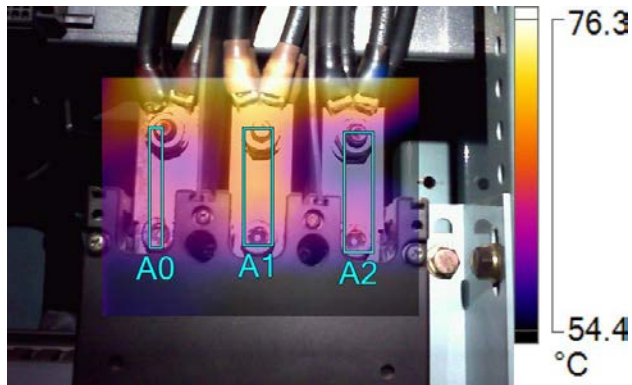
Visible Light Image



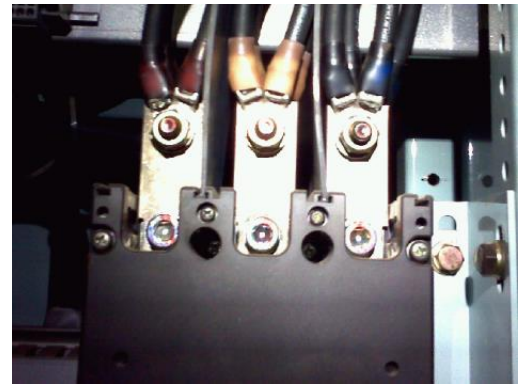
IR005908.IS2-No 1 Ballast pump panel
12/5/2016 8:12:44 PM



Visible Light Image



IR005909.IS2-No 1 Ballast pump panel
12/5/2016 8:13:05 PM



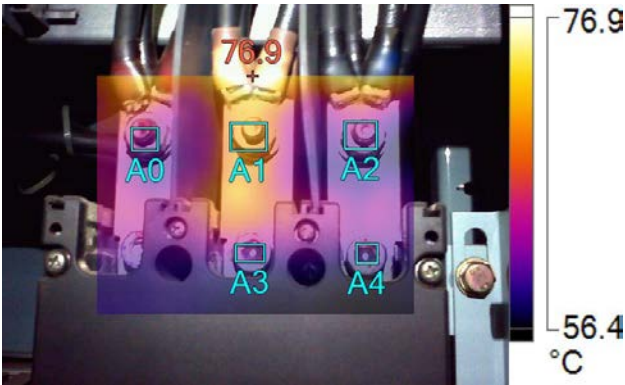
Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	62.0°C	60.0°C	65.2°C	0.95
A1	64.6°C	60.0°C	68.0°C	0.95
A2	59.7°C	57.5°C	61.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005910.IS2-No 1 Ballast pump panel
12/5/2016 8:13:20 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	62.2°C	60.4°C	64.5°C	0.95
A1	69.5°C	67.3°C	70.7°C	0.95
A2	61.5°C	59.2°C	63.6°C	0.95
A3	61.2°C	59.3°C	63.4°C	0.95
A4	59.5°C	58.1°C	60.7°C	0.95

Name	Temperature	Emissivity
Hot	76.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005911.IS2-No 1 Ballast pump panel
12/5/2016 8:13:46 PM



Visible Light Image

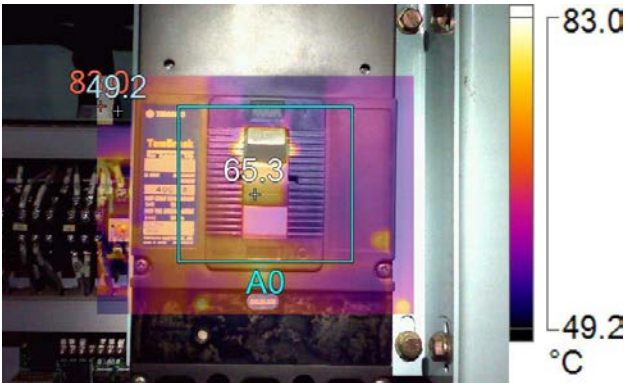
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	61.9°C	60.5°C	63.7°C	0.95
A1	64.3°C	63.4°C	65.3°C	0.95
A2	62.1°C	60.5°C	64.1°C	0.95

Name	Temperature	Emissivity
Hot	74.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005912.IS2-No 1 Ballast pump panel
12/5/2016 8:14:07 PM



Visible Light Image

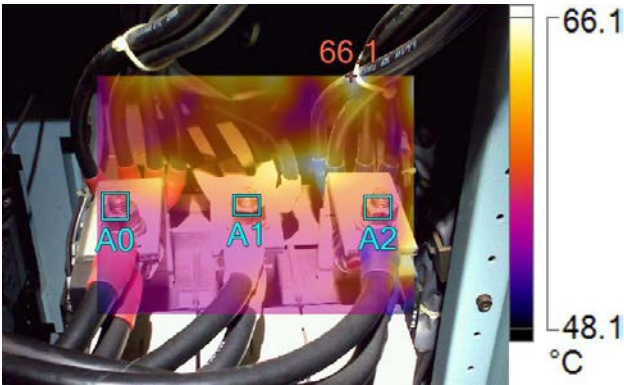
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	61.1°C	51.0°C	73.6°C	0.95

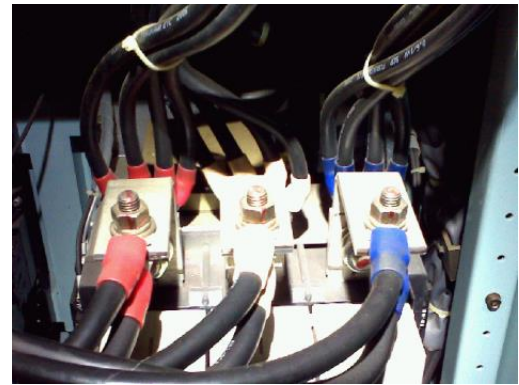
Name	Temperature	Emissivity
Centerpoint	65.3°C	0.95
Hot	83.0°C	0.95
Cold	49.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005913.IS2-No 1 Ballast pump panel
12/5/2016 8:14:26 PM



Visible Light Image

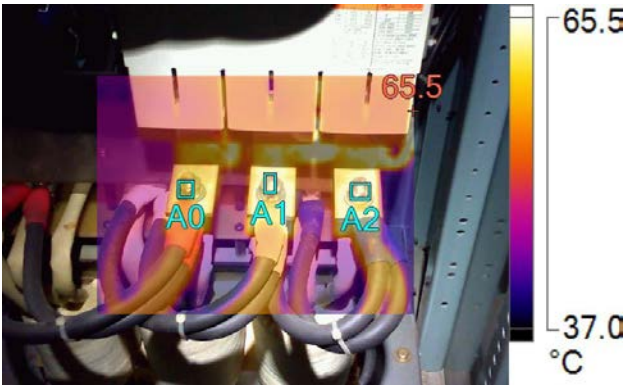
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	56.8°C	55.9°C	58.3°C	0.95
A1	58.8°C	57.7°C	60.2°C	0.95
A2	58.0°C	56.0°C	59.3°C	0.95

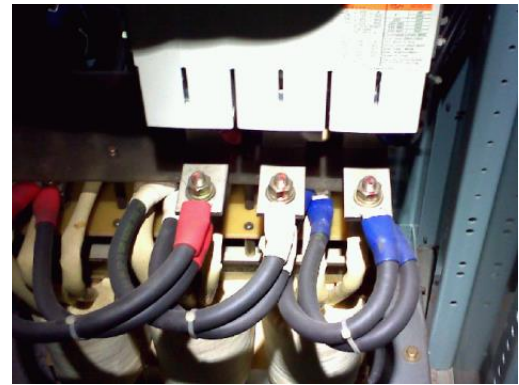
Name	Temperature	Emissivity
Hot	66.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005914.IS2-No 1 Ballast pump panel
12/5/2016 8:14:36 PM



Visible Light Image

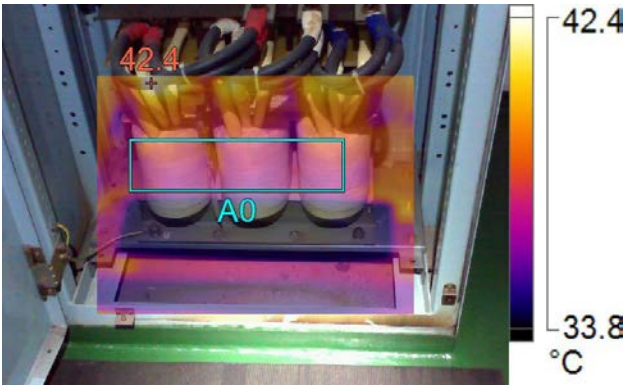
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	54.9°C	53.4°C	55.8°C	0.95
A1	57.5°C	56.1°C	58.4°C	0.95
A2	58.4°C	56.7°C	59.4°C	0.95

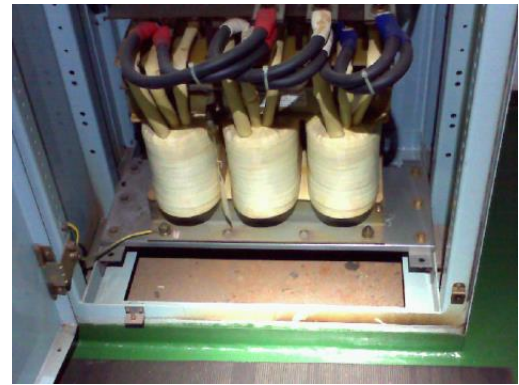
Name	Temperature	Emissivity
Hot	65.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005915.IS2-No 1 Ballast pump panel
12/5/2016 8:14:54 PM



Visible Light Image

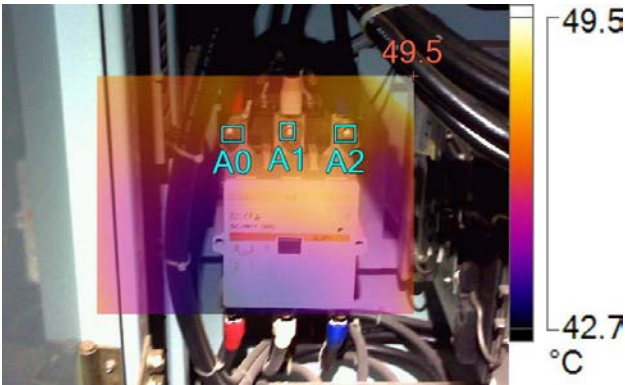
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	38.1°C	37.2°C	39.3°C	0.95

Name	Temperature	Emissivity
Hot	42.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005916.IS2-No 1 Ballast pump panel
12/5/2016 8:15:49 PM



Visible Light Image

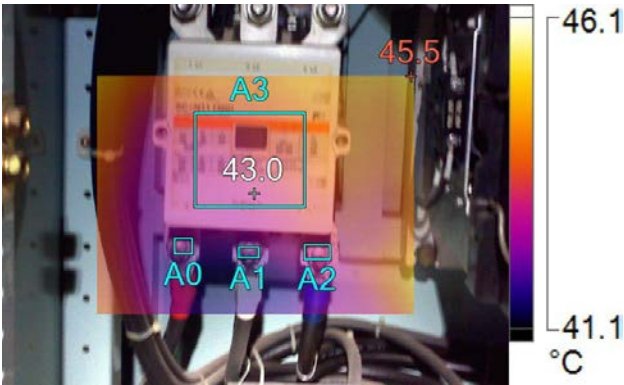
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	45.2°C	44.9°C	45.4°C	0.95
A1	45.4°C	45.2°C	45.6°C	0.95
A2	45.7°C	45.5°C	45.9°C	0.95

Name	Temperature	Emissivity
Hot	49.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005917.IS2-No 1 Ballast pump panel
12/5/2016 8:16:08 PM



Visible Light Image

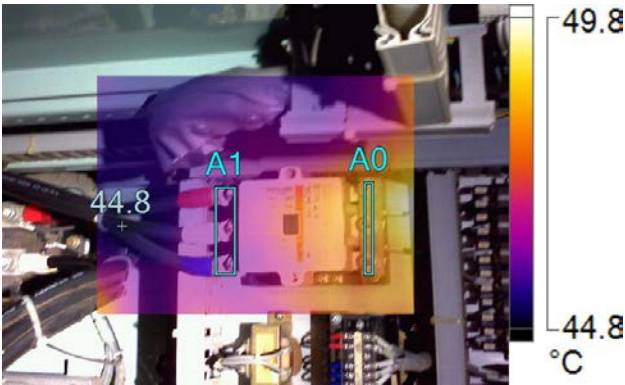
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.2°C	41.9°C	42.5°C	0.95
A1	42.0°C	41.7°C	42.4°C	0.95
A2	43.0°C	42.6°C	43.3°C	0.95
A3	43.3°C	42.6°C	44.2°C	0.95

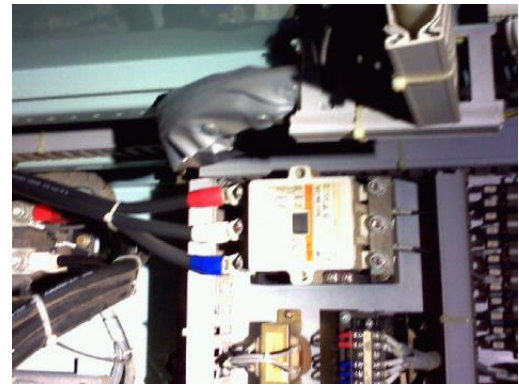
Name	Temperature	Emissivity
Centerpoint	43.0°C	0.95
Hot	45.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005918.IS2-No 1 Ballast pump panel
12/5/2016 8:16:16 PM



Visible Light Image

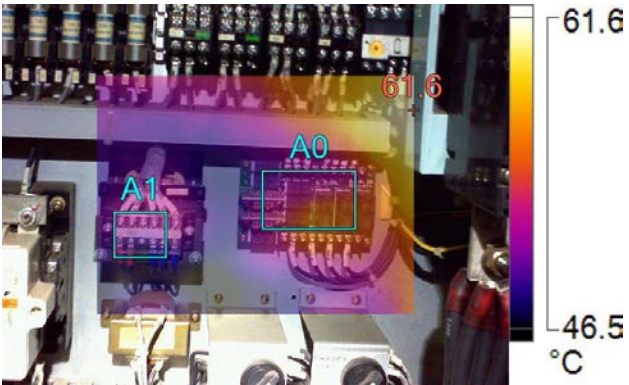
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.9°C	47.2°C	48.5°C	0.95
A1	46.0°C	45.8°C	46.3°C	0.95

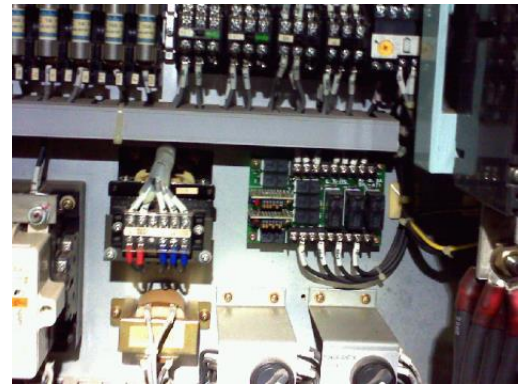
Name	Temperature	Emissivity
Cold	44.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005919.IS2-No 1 Ballast pump panel
12/5/2016 8:16:23 PM



Visible Light Image

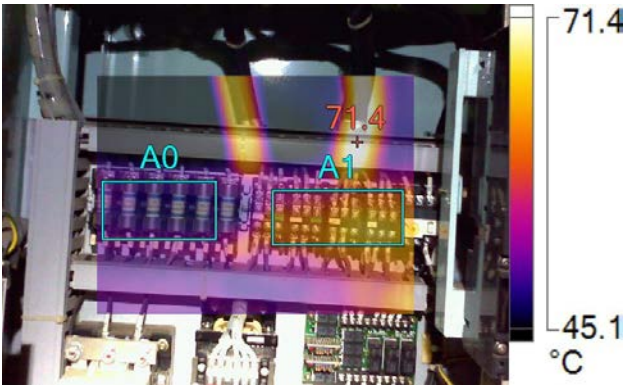
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	52.5°C	49.4°C	55.0°C	0.95
A1	49.8°C	47.9°C	51.6°C	0.95

Name	Temperature	Emissivity
Hot	61.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005920.IS2-No 1 Ballast pump panel
12/5/2016 8:16:35 PM



Visible Light Image

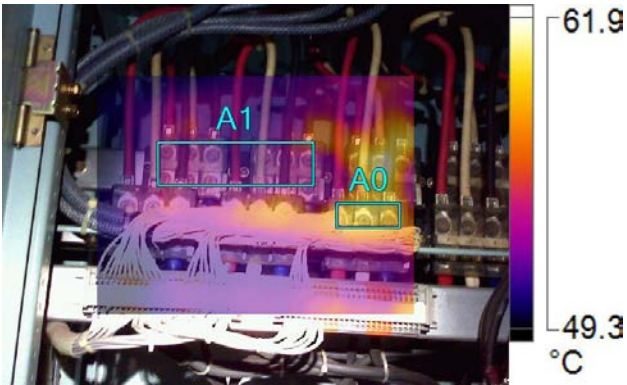
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	49.3°C	47.8°C	51.4°C	0.95
A1	58.0°C	52.2°C	63.4°C	0.95

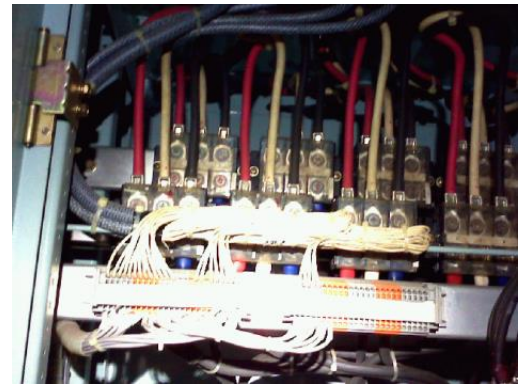
Name	Temperature	Emissivity
Hot	71.4°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005921.IS2-No 1 Ballast pump panel
12/5/2016 8:16:54 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	60.1°C	58.1°C	60.9°C	0.95
A1	54.8°C	52.5°C	58.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005922.IS2-No 1 Ballast pump panel
12/5/2016 8:17:03 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	56.5°C	52.8°C	58.9°C	0.95

Name	Temperature	Emissivity
Hot	79.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005923.IS2-No 1 Ballast pump panel
12/5/2016 8:17:39 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	57.5°C	57.1°C	57.9°C	0.95
A1	56.9°C	56.4°C	57.6°C	0.95
A2	55.9°C	55.3°C	56.6°C	0.95

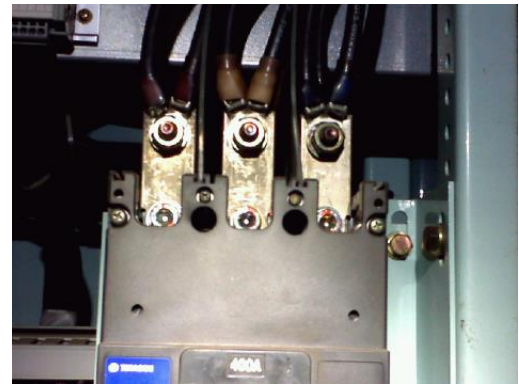
Name	Temperature	Emissivity
Centerpoint	56.9°C	0.95
Hot	68.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005924.IS2-No 1 Ballast pump panel
12/5/2016 8:17:48 PM



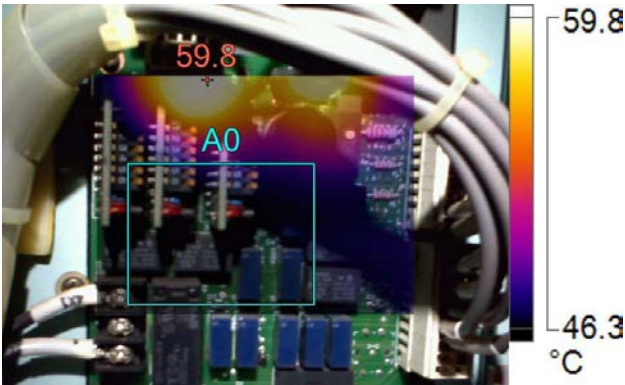
Visible Light Image

Main Image Markers

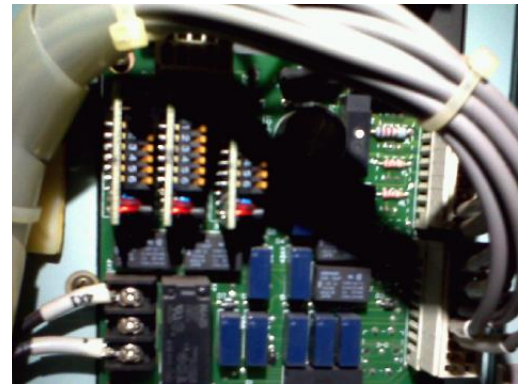
Name	Avg	Min	Max	Emissivity
A0	59.1°C	58.5°C	59.6°C	0.95
A1	59.4°C	58.8°C	60.9°C	0.95
A2	58.0°C	57.5°C	58.4°C	0.95
A3	60.7°C	60.5°C	60.8°C	0.95
A4	58.1°C	57.4°C	58.7°C	0.95
A5	58.7°C	58.4°C	59.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005925.IS2-No 1 Ballast pump panel
12/5/2016 8:18:10 PM



Visible Light Image

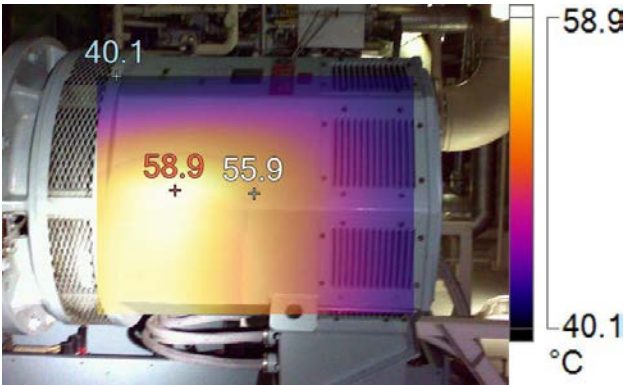
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.0°C	46.3°C	49.6°C	0.95

Name	Temperature	Emissivity
Hot	59.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005926.IS2-No 1 Ballast pump
12/5/2016 8:18:57 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	55.9°C	0.95
Hot	58.9°C	0.95
Cold	40.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005927.IS2-No 1 Ballast pump
12/5/2016 8:19:11 PM



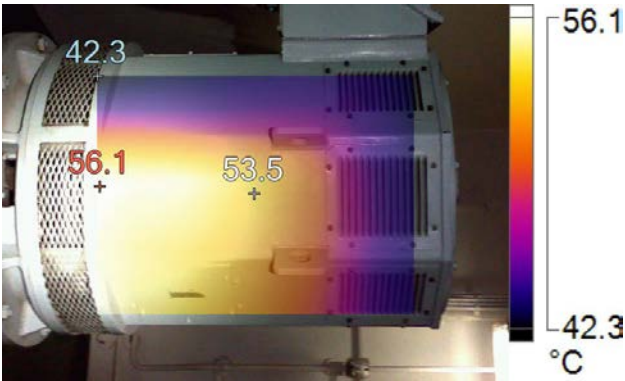
Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	56.9°C	0.95
Hot	66.3°C	0.95
Cold	43.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



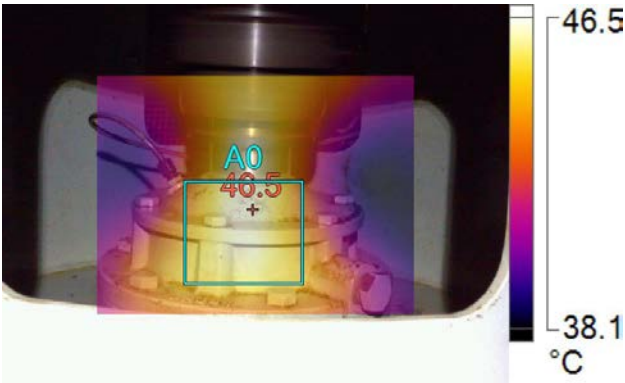
IR005929.IS2-No 1 Ballast pump
12/5/2016 8:19:52 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	53.5°C	0.95
Hot	56.1°C	0.95
Cold	42.3°C	0.95



IR005930.IS2-No 1 Ballast pump
12/5/2016 8:20:33 PM



Visible Light Image

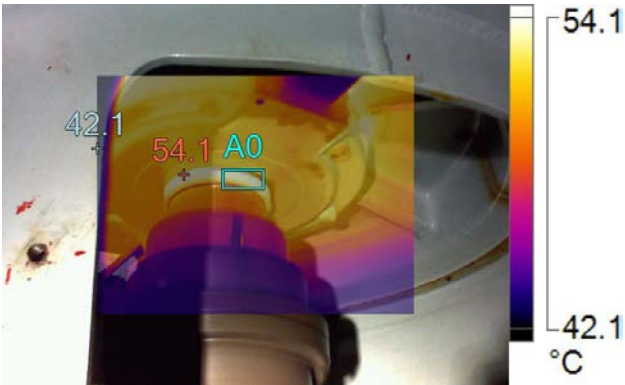
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	45.3°C	42.8°C	46.5°C	0.95

Name	Temperature	Emissivity
Hot	46.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005931.IS2-No 1 Ballast pump
12/5/2016 8:21:26 PM



Visible Light Image

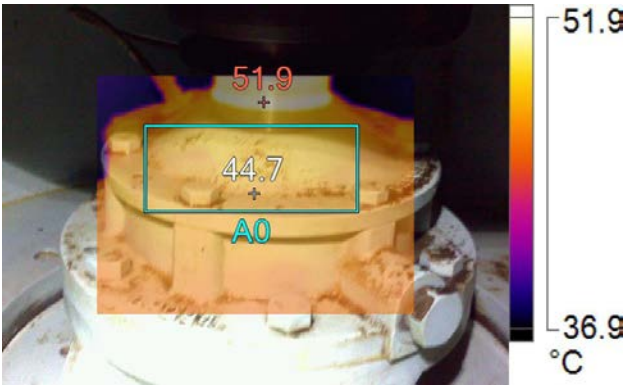
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	52.8°C	49.5°C	54.0°C	0.95

Name	Temperature	Emissivity
Hot	54.1°C	0.95
Cold	42.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005932.IS2-No 1 Ballast pump
12/5/2016 8:21:53 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	45.1°C	43.7°C	45.9°C	0.95

Name	Temperature	Emissivity
Centerpoint	44.7°C	0.95
Hot	51.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005933.IS2-No2 Ballast pump panel
12/5/2016 8:22:06 PM



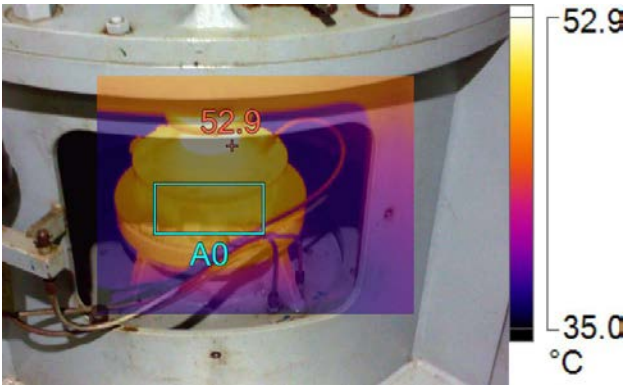
Visible Light Image



IR005934.IS2-No2 Ballast pump panel
12/5/2016 8:22:31 PM



Visible Light Image



IR005935.IS2-No2 Ballast pump panel
12/5/2016 8:23:10 PM



Visible Light Image

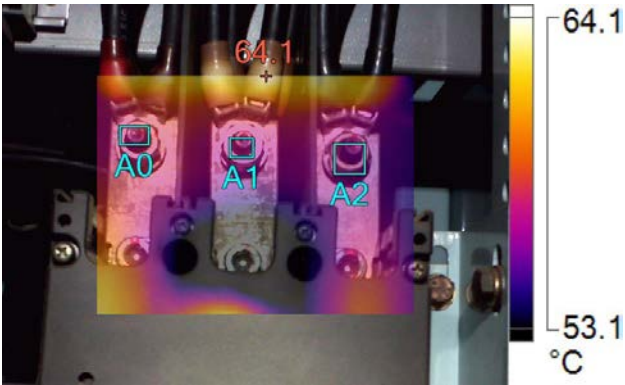
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	45.1°C	40.0°C	46.4°C	0.95

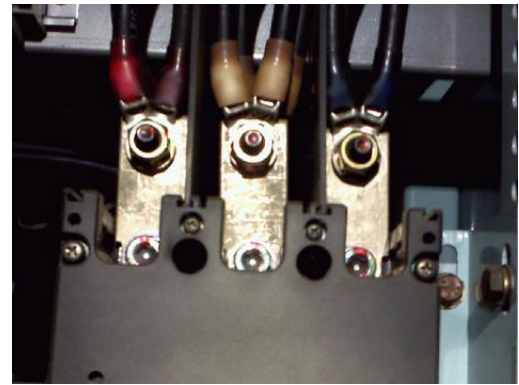
Name	Temperature	Emissivity
Hot	52.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005936.IS2-No2 Ballast pump panel
12/5/2016 8:23:39 PM

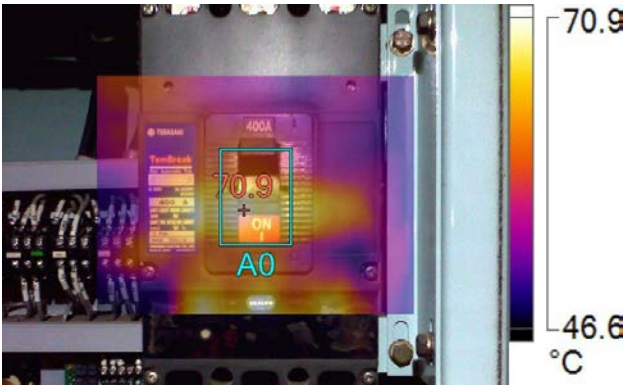


Visible Light Image

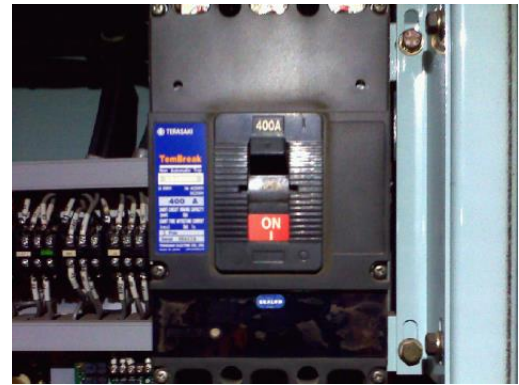
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	59.7°C	59.4°C	59.9°C	0.95
A1	59.1°C	58.7°C	59.5°C	0.95
A2	58.6°C	58.3°C	59.0°C	0.95

Name	Temperature	Emissivity
Hot	64.1°C	0.95



IR005937.IS2-No2 Ballast pump panel
12/5/2016 8:23:45 PM



Visible Light Image

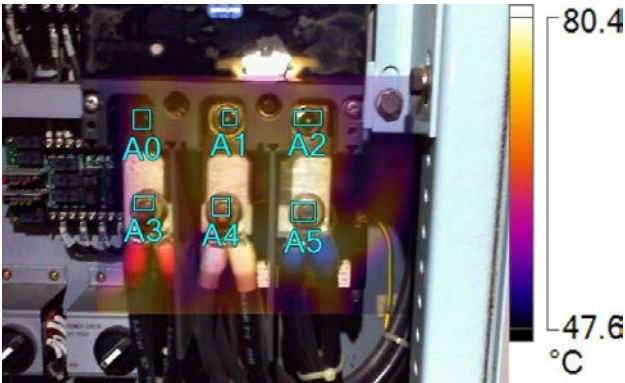
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	66.0°C	60.5°C	70.9°C	0.95

Name	Temperature	Emissivity
Hot	70.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005938.IS2-No2 Ballast pump panel
12/5/2016 8:23:55 PM



Visible Light Image

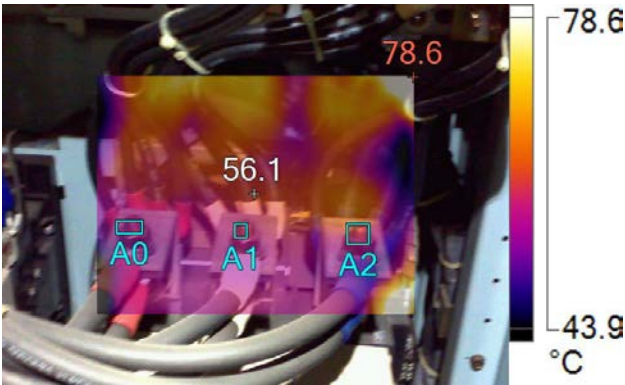
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	69.7°C	65.6°C	73.3°C	0.95
A1	74.5°C	73.2°C	75.5°C	0.95
A2	72.9°C	70.1°C	74.7°C	0.95
A3	67.5°C	64.1°C	71.5°C	0.95
A4	70.0°C	68.4°C	72.3°C	0.95
A5	77.5°C	76.2°C	78.5°C	0.95

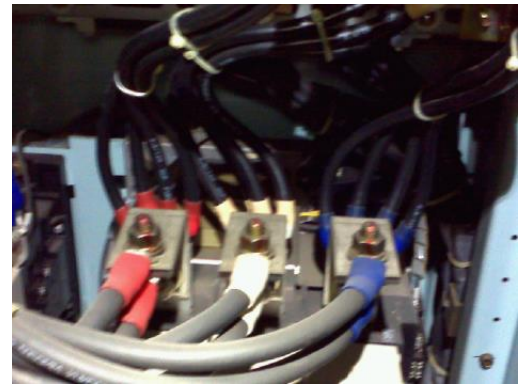
A3 & A5 connections Delta "T" 10 deg C.
Connections to be opened u, cleaned & fitted back

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005939.IS2-No2 Ballast pump panel
12/5/2016 8:24:05 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	52.4°C	51.8°C	52.8°C	0.95
A1	54.0°C	53.5°C	54.6°C	0.95
A2	54.9°C	52.8°C	57.5°C	0.95

Name	Temperature	Emissivity
Centerpoint	56.1°C	0.95
Hot	78.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005940.IS2-No2 Ballast pump panel
12/5/2016 8:24:26 PM



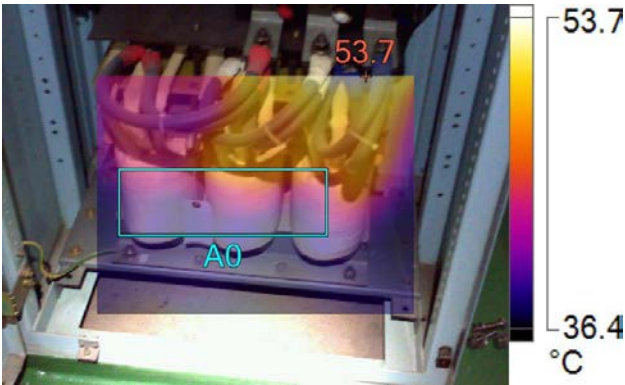
Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	51.0°C	48.9°C	52.5°C	0.95
A1	53.3°C	52.1°C	53.9°C	0.95
A2	54.0°C	53.5°C	54.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005941.IS2-No2 Ballast pump panel
12/5/2016 8:24:32 PM



Visible Light Image

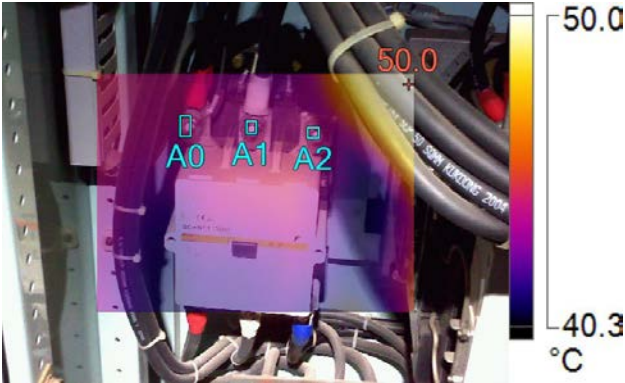
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.1°C	37.5°C	45.5°C	0.95

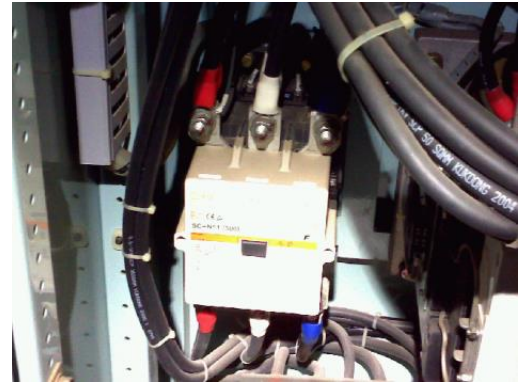
Name	Temperature	Emissivity
Hot	53.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005942.IS2-No2 Ballast pump panel
12/5/2016 8:24:46 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	43.1°C	42.9°C	43.3°C	0.95
A1	43.0°C	42.7°C	43.1°C	0.95
A2	43.1°C	42.9°C	43.3°C	0.95

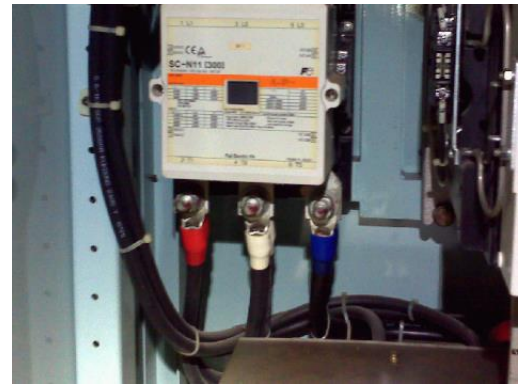
Name	Temperature	Emissivity
Hot	50.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005943.IS2-No2 Ballast pump panel
12/5/2016 8:24:58 PM



Visible Light Image

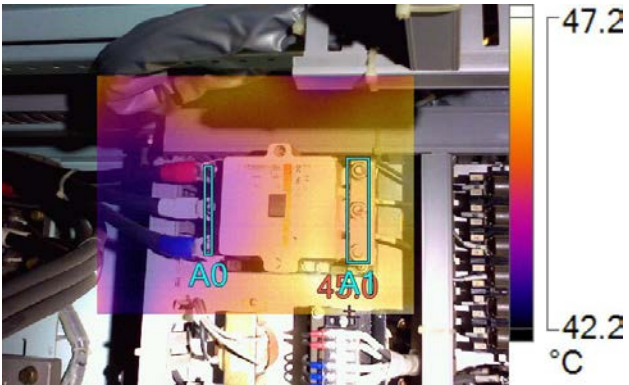
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.4°C	40.1°C	40.7°C	0.95
A1	40.2°C	39.8°C	40.5°C	0.95
A2	40.5°C	40.2°C	40.8°C	0.95

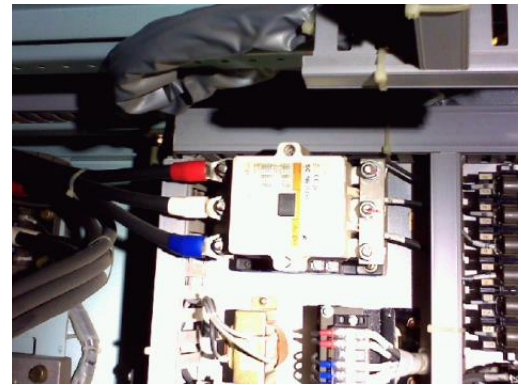
Name	Temperature	Emissivity
Hot	42.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005944.IS2-No2 Ballast pump panel
12/5/2016 8:25:13 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	42.9°C	42.6°C	43.1°C	0.95
A1	44.2°C	43.8°C	44.5°C	0.95

Name	Temperature	Emissivity
Hot	45.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005945.IS2-No2 Ballast pump panel
12/5/2016 8:25:24 PM



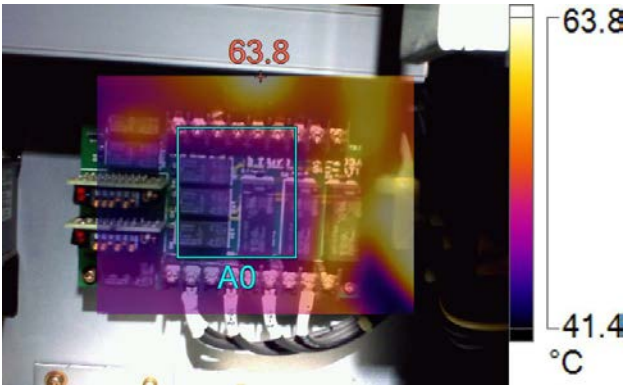
Visible Light Image

Main Image Markers

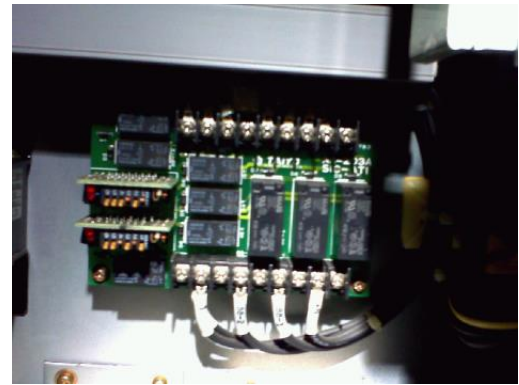
Name	Avg	Min	Max	Emissivity
A0	54.6°C	51.4°C	57.5°C	0.95
A1	45.5°C	43.9°C	51.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005946.IS2-No2 Ballast pump panel
12/5/2016 8:25:40 PM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	46.5°C	42.3°C	51.5°C	0.95

Name	Temperature	Emissivity
Hot	63.8°C	0.95



IR005947.IS2-No2 Ballast pump panel
12/5/2016 8:25:53 PM

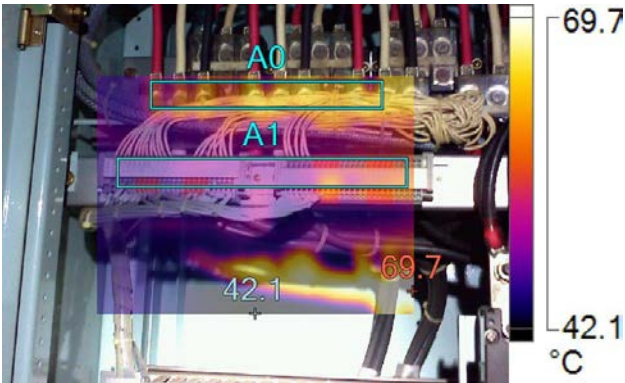


Visible Light Image

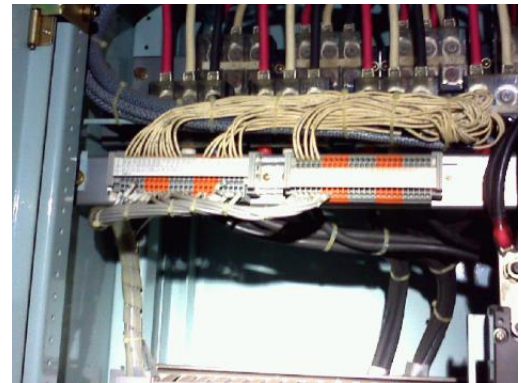
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	44.9°C	42.6°C	46.9°C	0.95
A1	53.0°C	47.4°C	61.1°C	0.95

Name	Temperature	Emissivity
Hot	63.6°C	0.95



IR005948.IS2-No2 Ballast pump panel
12/5/2016 8:26:14 PM



Visible Light Image

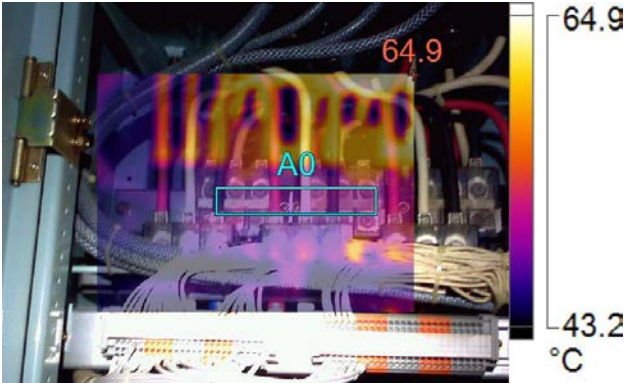
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	54.8°C	49.6°C	59.8°C	0.95
A1	49.3°C	45.8°C	55.1°C	0.95

Name	Temperature	Emissivity
Hot	69.7°C	0.95
Cold	42.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005949.IS2-No2 Ballast pump panel
12/5/2016 8:26:23 PM

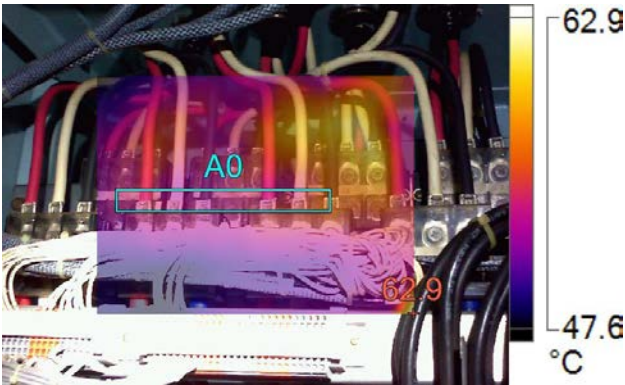


Visible Light Image

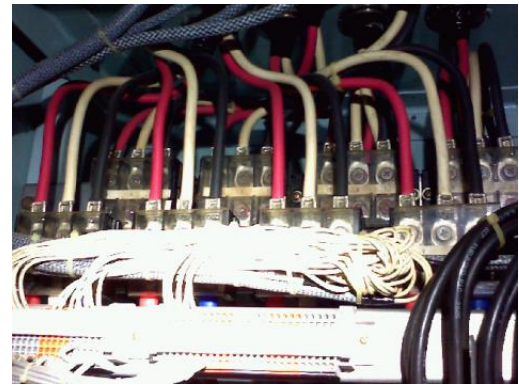
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	49.4°C	47.6°C	51.9°C	0.95

Name	Temperature	Emissivity
Hot	64.9°C	0.95



IR005950.IS2-No2 Ballast pump panel
12/5/2016 8:27:09 PM

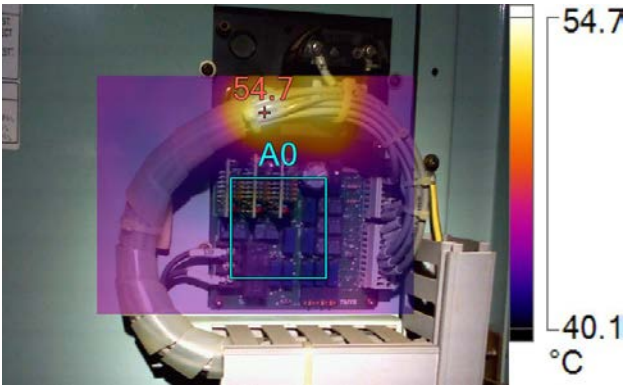


Visible Light Image

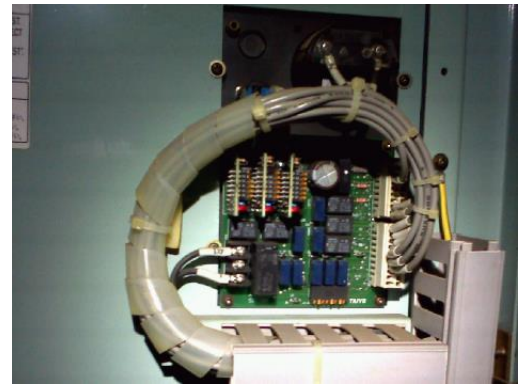
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	54.4°C	52.3°C	57.6°C	0.95

Name	Temperature	Emissivity
Hot	62.9°C	0.95



IR005951.IS2-No2 Ballast pump panel
12/5/2016 8:27:27 PM

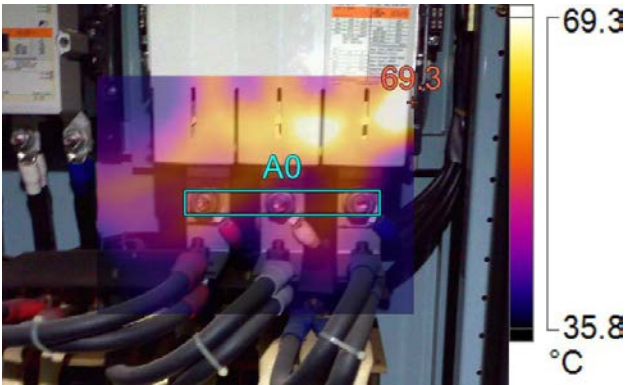


Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.4°C	40.1°C	42.8°C	0.95

Name	Temperature	Emissivity
Hot	54.7°C	0.95



IR005952.IS2-No2 Ballast pump panel
12/5/2016 8:27:59 PM

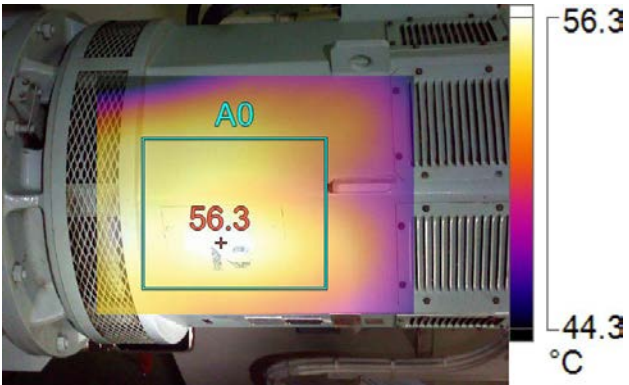


Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	45.1°C	39.1°C	48.1°C	0.95

Name	Temperature	Emissivity
Hot	69.3°C	0.95



IR005953.IS2-No2 Ballast pump
12/5/2016 8:28:21 PM



Visible Light Image

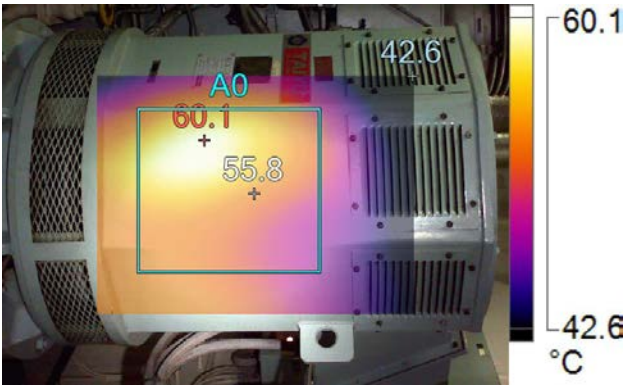
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	54.7°C	51.6°C	56.3°C	0.95

Name	Temperature	Emissivity
Hot	56.3°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005954.IS2-No2 Ballast pump
12/5/2016 8:28:42 PM



Visible Light Image

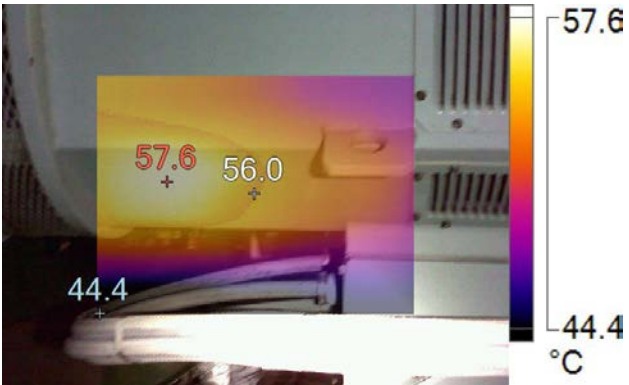
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	56.1°C	50.7°C	60.1°C	0.95

Name	Temperature	Emissivity
Centerpoint	55.8°C	0.95
Hot	60.1°C	0.95
Cold	42.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



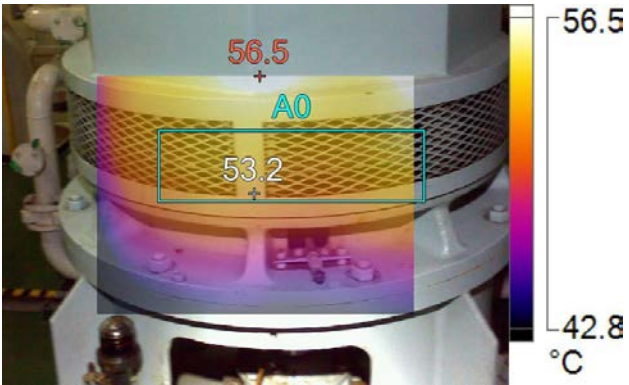
IR005955.IS2-No2 Ballast pump
12/5/2016 8:28:53 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	56.0°C	0.95
Hot	57.6°C	0.95
Cold	44.4°C	0.95



IR005956.IS2-No2 Ballast pump
12/5/2016 8:29:00 PM



Visible Light Image

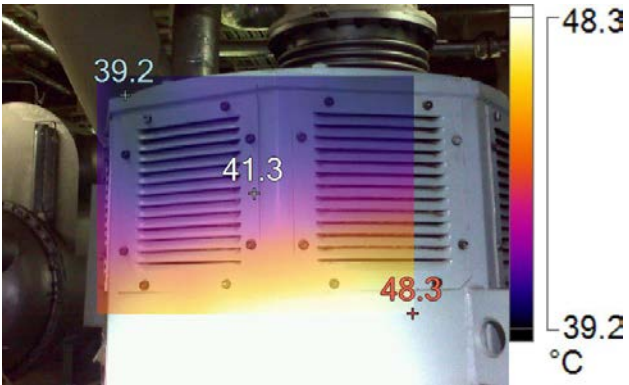
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	54.0°C	52.4°C	55.5°C	0.95

Name	Temperature	Emissivity
Centerpoint	53.2°C	0.95
Hot	56.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005957.IS2-No2 Ballast pump
12/5/2016 8:29:05 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	41.3°C	0.95
Hot	48.3°C	0.95
Cold	39.2°C	0.95



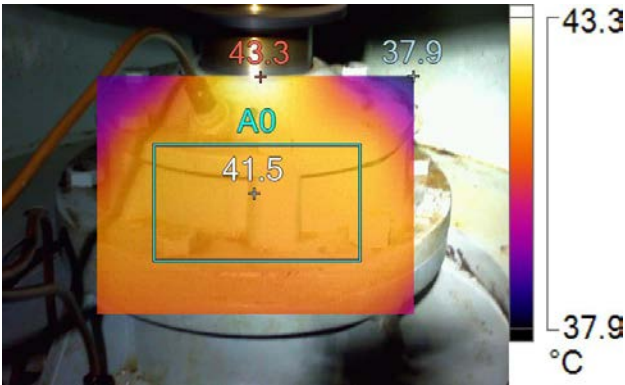
IR005958.IS2-No2 Ballast pump
12/5/2016 8:29:56 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	40.7°C	0.95
Hot	42.1°C	0.95
Cold	37.0°C	0.95



IR005959.IS2-No2 Ballast pump
12/5/2016 8:30:08 PM



Visible Light Image

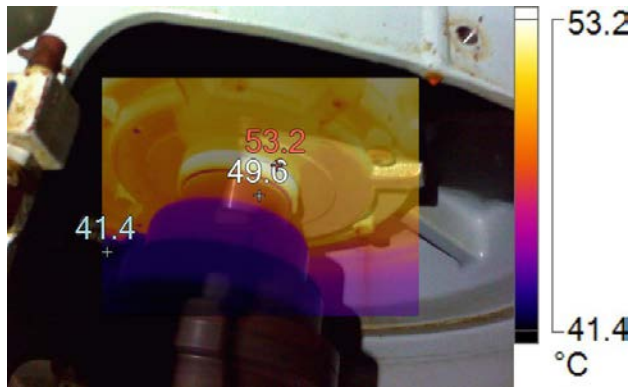
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	41.6°C	41.0°C	42.1°C	0.95

Name	Temperature	Emissivity
Centerpoint	41.5°C	0.95
Hot	43.3°C	0.95
Cold	37.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



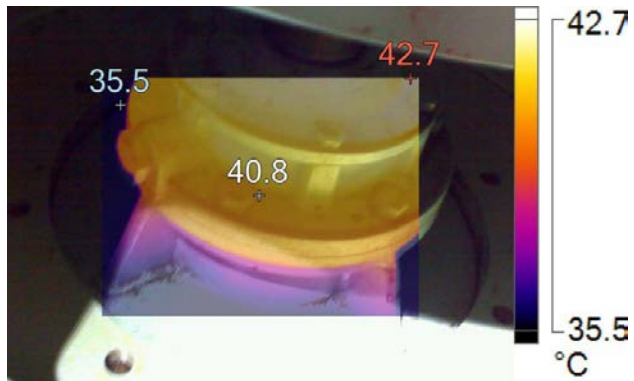
IR005960.IS2-No2 Ballast pump
12/5/2016 8:30:59 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	49.6°C	0.95
Hot	53.2°C	0.95
Cold	41.4°C	0.95



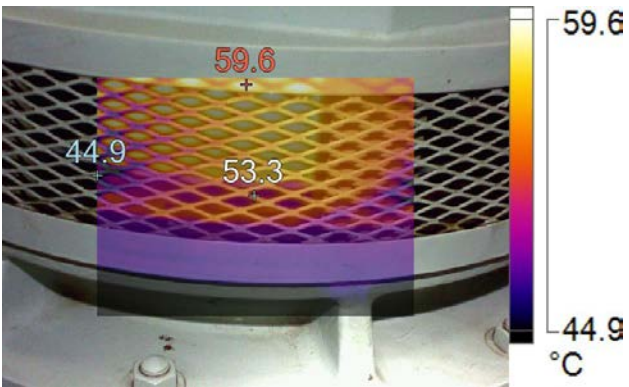
IR005961.IS2-No2 Ballast pump
12/5/2016 8:31:35 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	40.8°C	0.95
Hot	42.7°C	0.95
Cold	35.5°C	0.95



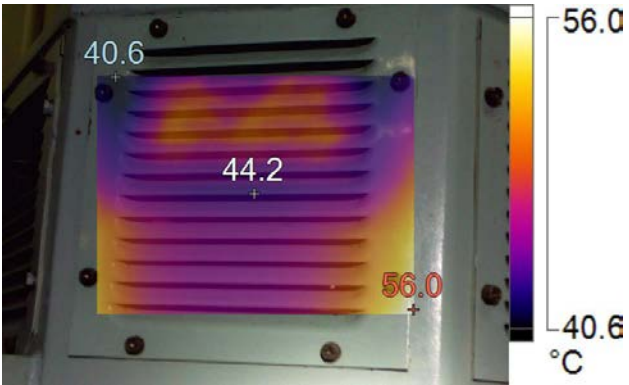
IR005962.IS2-No2 Ballast pump
12/5/2016 8:31:49 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	53.3°C	0.95
Hot	59.6°C	0.95
Cold	44.9°C	0.95



IR005963.IS2-No2 Ballast pump
12/5/2016 8:32:07 PM



Visible Light Image

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	44.2°C	0.95
Hot	56.0°C	0.95
Cold	40.6°C	0.95



IR005964.IS2-No1 Pump room fan
12/6/2016 9:25:51 AM



Visible Light Image



IR005965.IS2-No1 Pump room fan
12/6/2016 9:26:00 AM



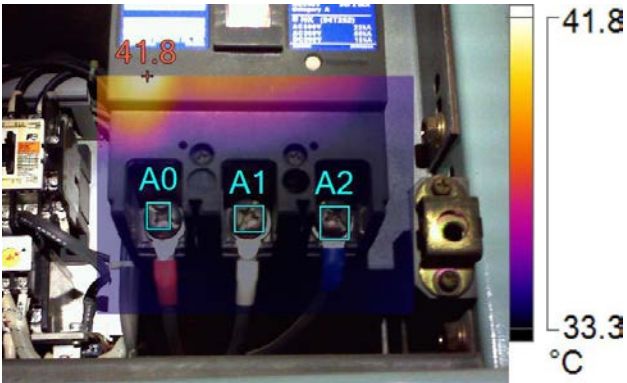
Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.1°C	34.2°C	36.7°C	0.95
A1	34.2°C	34.0°C	34.4°C	0.95
A2	34.2°C	33.9°C	34.5°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005966.IS2-No1 Pump room fan
12/6/2016 9:26:13 AM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	33.7°C	33.5°C	33.8°C	0.95
A1	33.5°C	33.3°C	33.6°C	0.95
A2	33.5°C	33.4°C	33.7°C	0.95

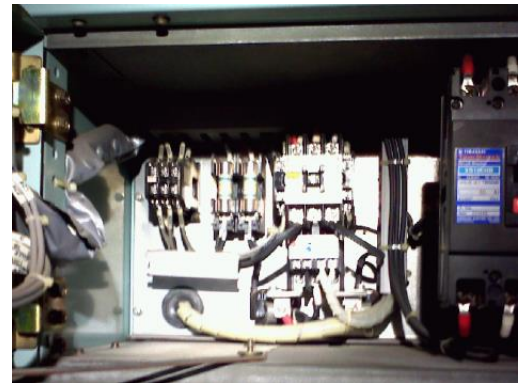
Name	Temperature	Emissivity
Hot	41.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005967.IS2-No1 Pump room fan
12/6/2016 9:26:31 AM



Visible Light Image

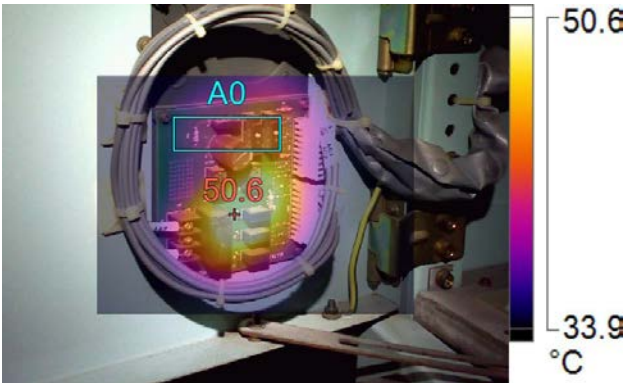
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	34.2°C	33.5°C	36.3°C	0.95
A1	34.3°C	33.8°C	34.9°C	0.95

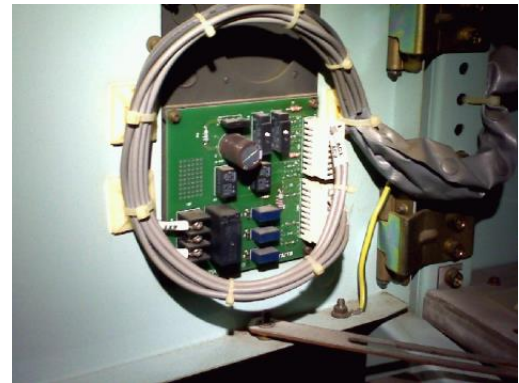
Name	Temperature	Emissivity
Hot	42.1°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005968.IS2-No1 Pump room fan
12/6/2016 9:26:45 AM



Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	40.7°C	36.9°C	43.7°C	0.95

Name	Temperature	Emissivity
Hot	50.6°C	0.95



IR005969.IS2-No 2 Pump room fan
12/6/2016 9:26:58 AM



Visible Light Image



IR005970.IS2-No 2 Pump room fan



Visible Light Image

12/6/2016 9:27:12 AM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	35.3°C	34.5°C	36.7°C	0.95
A1	34.7°C	34.2°C	35.4°C	0.95
A2	34.7°C	34.4°C	35.0°C	0.95

Name	Temperature	Emissivity
Hot	41.6°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005971.IS2-No 2 Pump room fan



Visible Light Image

12/6/2016 9:27:21 AM

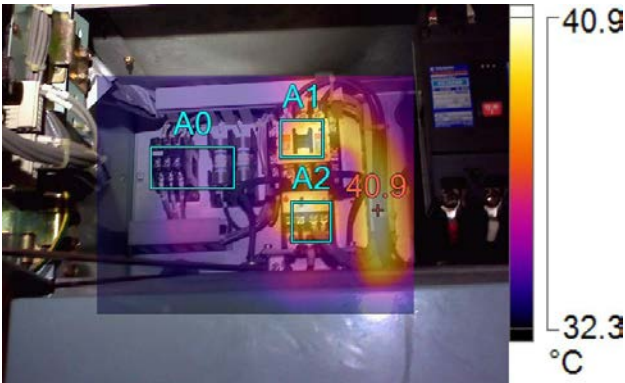
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	37.1°C	36.2°C	38.1°C	0.95
A1	36.1°C	35.9°C	36.3°C	0.95
A2	35.9°C	35.4°C	36.3°C	0.95

Name	Temperature	Emissivity
Hot	40.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005972.IS2-No 2 Pump room fan



Visible Light Image

12/6/2016 9:28:16 AM

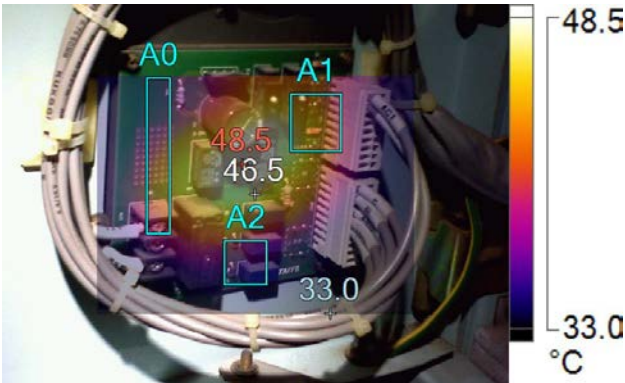
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	34.0°C	32.9°C	35.1°C	0.95
A1	39.3°C	36.2°C	40.7°C	0.95
A2	39.1°C	36.5°C	40.7°C	0.95

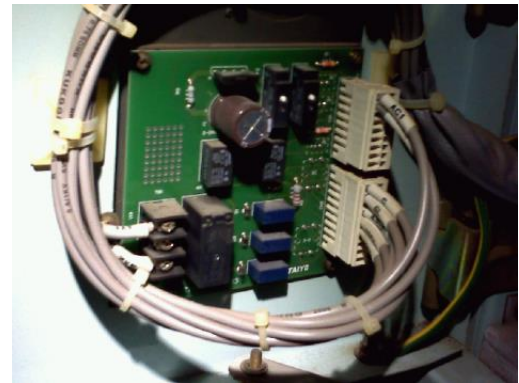
Name	Temperature	Emissivity
Hot	40.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005973.IS2-No 2 Pump room fan



Visible Light Image

12/6/2016 9:28:45 AM

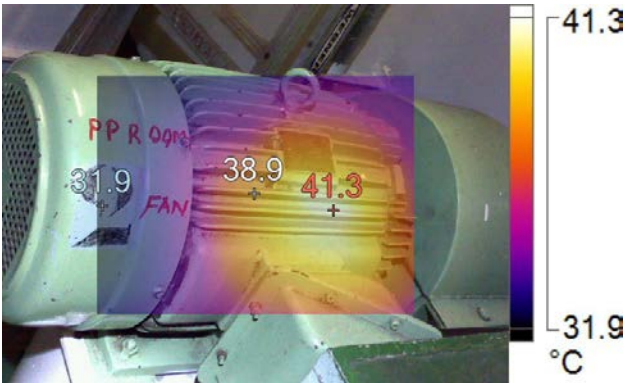
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	39.5°C	36.1°C	43.1°C	0.95
A1	42.9°C	39.2°C	46.8°C	0.95
A2	37.2°C	34.9°C	41.1°C	0.95

Name	Temperature	Emissivity
Centerpoint	46.5°C	0.95
Hot	48.5°C	0.95
Cold	33.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005974.IS2-No 2 Pump room fan



Visible Light Image

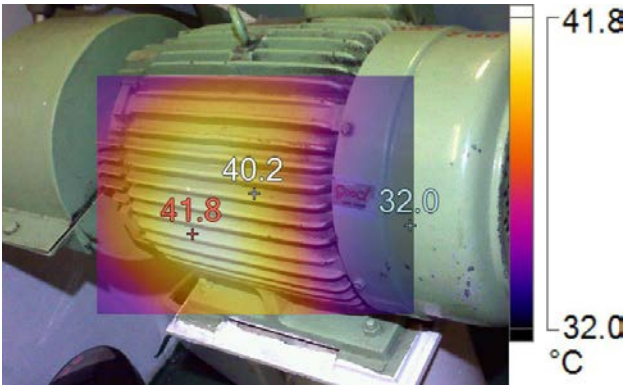
12/6/2016 9:29:33 AM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	38.9°C	0.95
Hot	41.3°C	0.95
Cold	31.9°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005975.IS2-No 2 Pump room fan

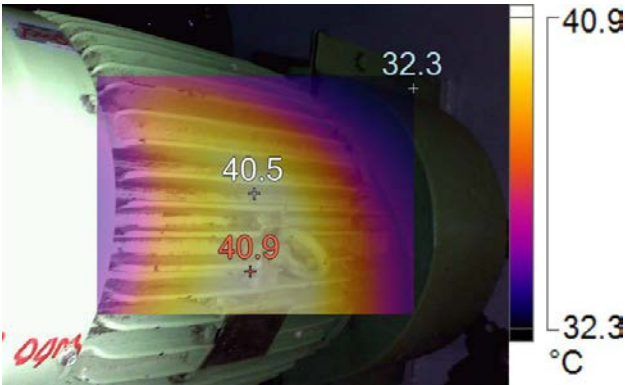


Visible Light Image

12/6/2016 9:30:01 AM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	40.2°C	0.95
Hot	41.8°C	0.95
Cold	32.0°C	0.95



IR005976.IS2-No 2 Pump room fan

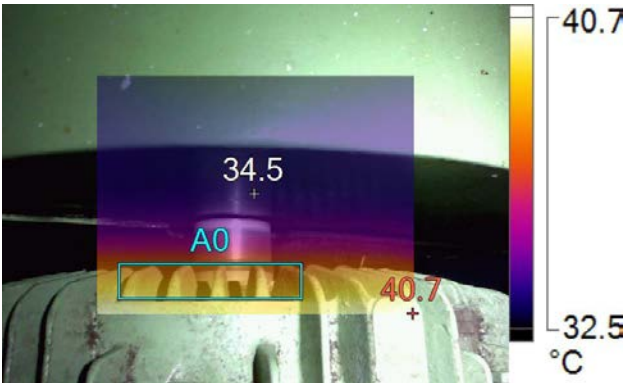


Visible Light Image

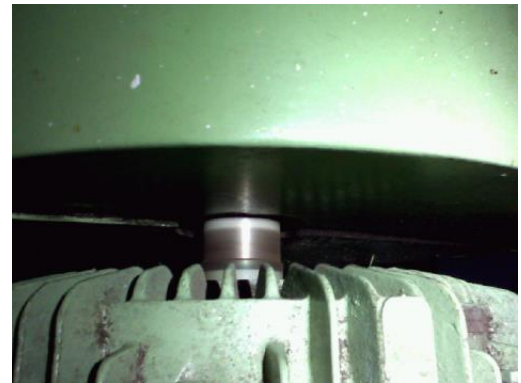
12/6/2016 9:30:11 AM

Main Image Markers

Name	Temperature	Emissivity
Centerpoint	40.5°C	0.95
Hot	40.9°C	0.95
Cold	32.3°C	0.95



IR005977.IS2-No 2 Pump room fan



Visible Light Image

12/6/2016 9:34:24 AM

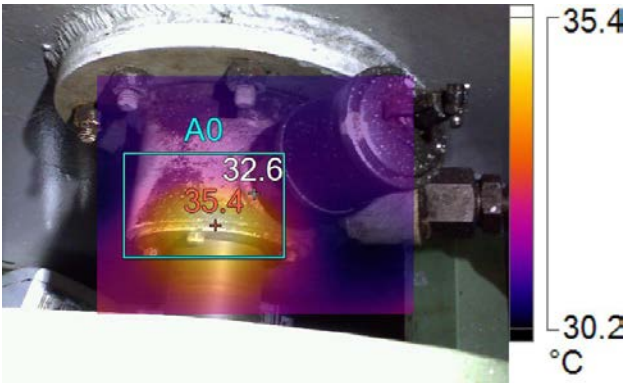
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	38.9°C	37.8°C	40.0°C	0.95

Name	Temperature	Emissivity
Centerpoint	34.5°C	0.95
Hot	40.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005978.IS2-No 2 Pump room fan

12/6/2016 9:34:31 AM

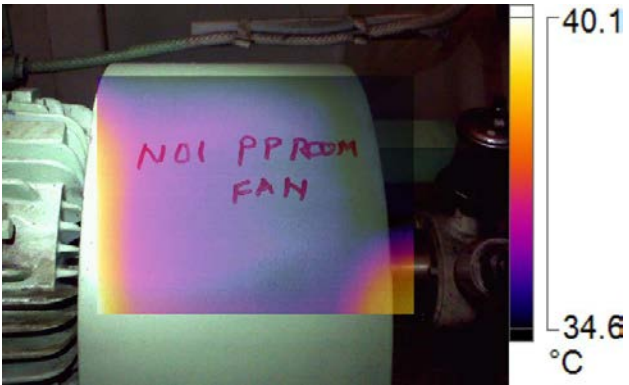


Visible Light Image

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	32.9°C	30.7°C	35.4°C	0.95

Name	Temperature	Emissivity
Centerpoint	32.6°C	0.95
Hot	35.4°C	0.95

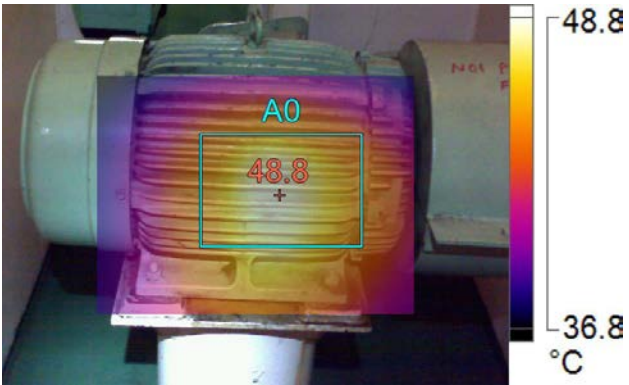


IR005979.IS2-No 1 Pump room fan



Visible Light Image

12/6/2016 9:35:47 AM



IR005980.IS2-No 1 Pump room fan



Visible Light Image

12/6/2016 9:35:59 AM

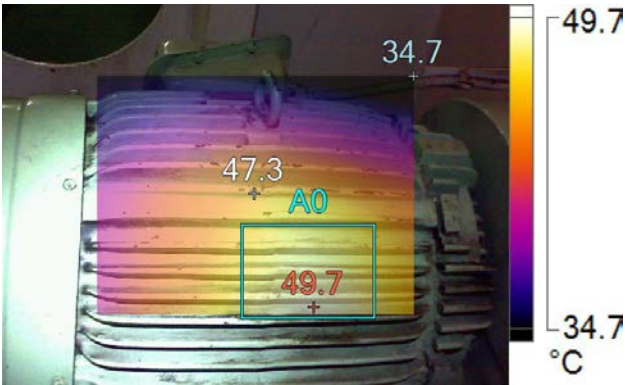
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	47.6°C	44.2°C	48.8°C	0.95

Name	Temperature	Emissivity
Hot	48.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005981.IS2-No 1 Pump room fan



Visible Light Image

12/6/2016 9:36:07 AM

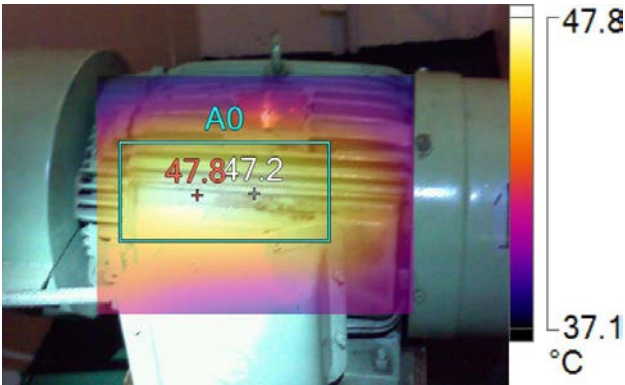
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	48.8°C	47.7°C	49.7°C	0.95

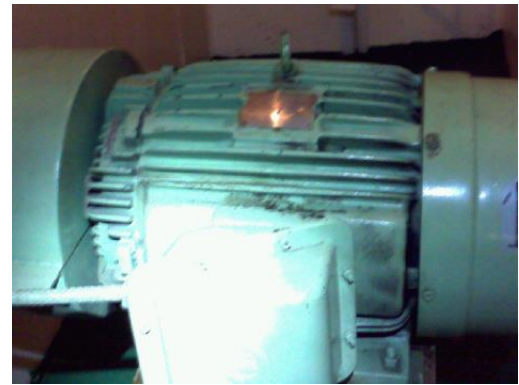
Name	Temperature	Emissivity
Centerpoint	47.3°C	0.95
Hot	49.7°C	0.95
Cold	34.7°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005982.IS2-No 1 Pump room fan



Visible Light Image

12/6/2016 9:36:27 AM

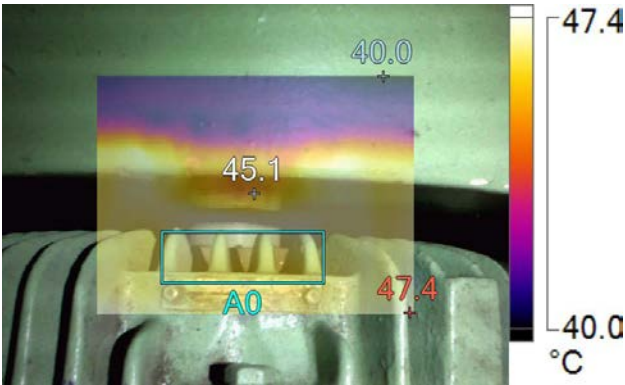
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	46.2°C	42.9°C	47.8°C	0.95

Name	Temperature	Emissivity
Centerpoint	47.2°C	0.95
Hot	47.8°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005983.IS2-No 1 Pump room fan



Visible Light Image

12/6/2016 9:36:58 AM

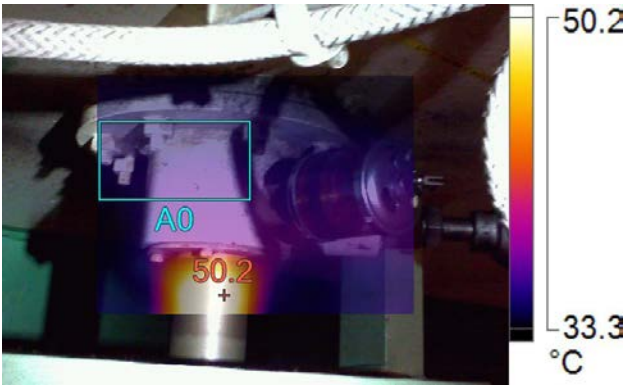
Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	46.5°C	45.7°C	47.2°C	0.95

Name	Temperature	Emissivity
Centerpoint	45.1°C	0.95
Hot	47.4°C	0.95
Cold	40.0°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted



IR005984.IS2-No 1 Pump room fan



Visible Light Image

12/6/2016 9:37:16 AM

Main Image Markers

Name	Avg	Min	Max	Emissivity
A0	36.0°C	34.1°C	37.4°C	0.95

Name	Temperature	Emissivity
Hot	50.2°C	0.95

Delta T between A3 & A5 high. Refer page 150

All the cargo turbines were run at a maximum RPM of 700 and hence the predictive capability is restricted