



6th KAIZEN CONFERENCE

KAIZEN IDEA - SHEET

Activity	KK	JH	QM	PM	SHE	OTPM	DM	ET
Loss No./ Step								
Result Area	P	Q	C	D	S	M		



Plant : Engineering Services

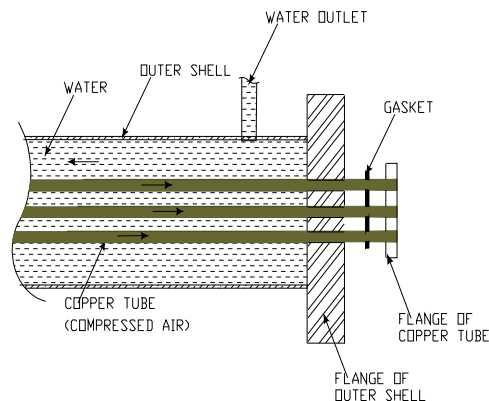
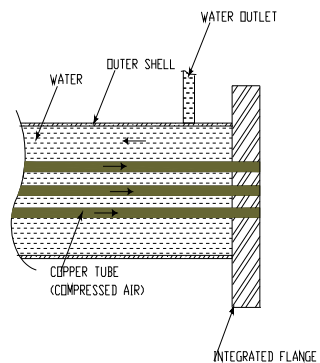
Machine : Air Compressor - I

kaizen theme : Reduce the Equipment loss (Repairing and replacement).

Idea : Disintegrate the flanges of Outer shell and Copper tube structure.

Problem/present status : Difficult / long duration for descaling Aftercooler.

Countermeasure : Added separate independent flange for Outer shell and for Copper tubes shell with appropriate packing at both ends of Aftercooler.



BEFORE

AFTER

Analysis :

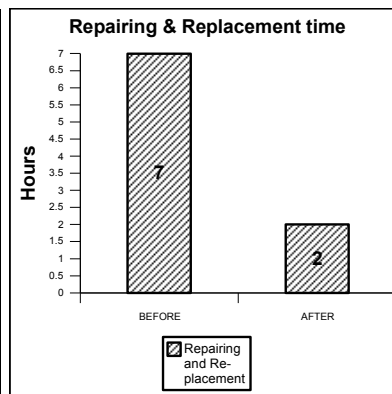
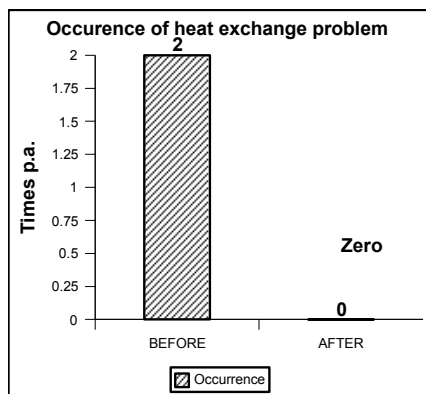
Why? Difficult / long duration to descale the Aftercooler?

Why? Difficult to access Copper tubes ?

Why? Copper tubing structure is permanently fixed / located **inside** the Outer shell ?

Why? **Integrated** arrangement of flanges for Outer Shell & Copper tubing structure.

Results :



Bench mark

Occur. of heat exch prob. = **Twice p.a.**
Repairing & Replacement time = **7 hrs.**

Target

Occur. of heat exch prob. = **Nil**
Repairing & Replacement time = **2 hrs.**

Kaizen start

6/26/2004

Kaizen Finish

10/24/2004

Team members

Mr. G.N.Reddy

Mr. Yogesh Sawant

Mr. Tukoba Dessai

Mr. Parshuram Patil

Benefits:

1. Temperature difference between the Incoming and Outgoing water temperature of the Aftercooler increased from 5.5°C to 8°C which means increase in **efficiency of Aftercooler by 45 %** hence improved efficiency of life of Air Compressor and its parts.
2. **Ease of checking** the copper tubings for damage.
3. Thorough and proper **non chemical cleaning** of copper tubing possible, also leading to **longer life** of copper tubes

Scope & plan for Horizontal Deployment

Sl. No.	M/c No.	Target dat	Responsibility	Status
1	II	Nov-04	Yogesh Sawant	Completed

|

|

Repairing and Replacement time	BEFORE 7	AFTER 2
--------------------------------	-------------	------------

Occurrence	BEFORE 2	AFTER 0
------------	-------------	------------