

Heated Diagnostic Radiology Examination Table

Week 15 – May 1st to May 8th, 2009

Team Members:

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Problem Statement

A frequent patient complaint is that current x-ray tables are hard and cold. A pad can be used to eliminate the first complaint; however the temperature of the table cannot be altered on standard tables. A heated exam table or attachment that has a temperature control to give patients added comfort during exams, needs to be developed. The materials used need to be radiolucent and may not obscure the body part being imaged. A mechanism must be implemented that eliminates the possibility of patient injury such as burn.

Last Week's Team Goals

- i. Complete final report.
- ii. Prepare notebooks for submission.

Summary of Accomplishments

- i. As a team the final report was completed.
- ii. We will schedule meetings with our client and WARF to discuss the project.

This Week's Goals

- i. Schedule a final meeting with our client

- ii. Prepare for and schedule a meeting with WARF.

Project Difficulties

The polyethylene tubing in our design introduces an unacceptable amount of contrast. We were not able to solve this problem after testing several variations on design. We have researched a suggested alternative material (Gammex Company) and presented the information on this in our report and poster presentation. We have built a scaled down prototype at the suggestion of our client

Activities

5.3.2009	Team: Prepared final report and reviewed individually	10 hours
5.7.2009	Paul: Updated website.	.5 hour
5.7.2009	Tyler: Wrote progress report.	.5 hour

Tentative Project Schedule

	January		February				March				April				May
Task	23	30	6	13	20	27	6	13	20	27	3	10	17	24	1
Project Research	X	X	X	X	X	X	X	X		X	X	X	X	X	X
Brainstorming/Work on Design		X	X	X	X	X	X	X		X	X	X	X	X	X
Prototype															
I. Ordering													X	X	
ii. Expected Shipping														X	
iii. Work on Design/Building										X	X	X	X	X	X
iv. Testing						X					X	X	X	X	
v. Re-design													X	X	
vi. Re-test													X	X	
Deliverables															
i. Progress Reports	X	X	X	X	X	X	X	X		X	X	X	X	X	X
ii. PDS		X	X	X	X	X	X	X		X	X	X	X	X	X
iii. Mid-Semester Presentation						X	X								X
iv. Mid-Semester Report							X	X							
v. Final Poster Presentation														X	X
vi. Final Report														X	X
Meetings															
i. Group	X	X	X	X	X	X	X	X		X	X	X	X	X	X
ii. Advisor		X	X	X	X	X	X			X	X			X	X
iii. Client		X				X						X	X		
iv. Semester Wrap-Up w/ Advisor															X
Website	X	X	X	X	X	X	X	X		X	X	X	X	X	X

Expenses:

Test - PE fine	9.56
Test - PE coarse	5.86
Test - PVR	9.68
Prototype - PE fine	5.44
Particle Board	14.16
PVC elbows	2
Heating element and control	83.55
Tubing etc	109.57
Screws	2.59
Adhesives	
TOTAL	242.41