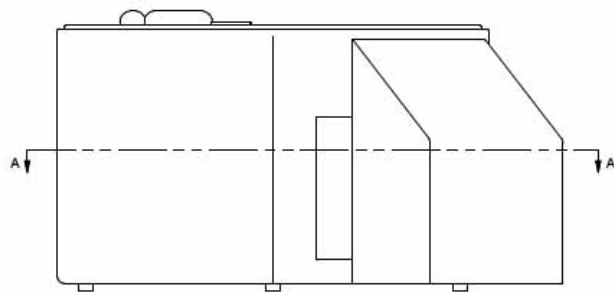
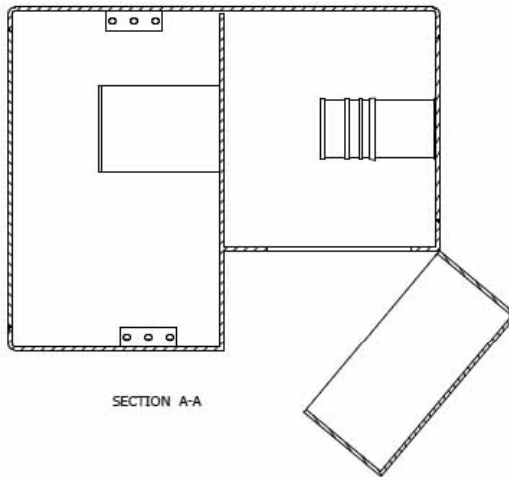


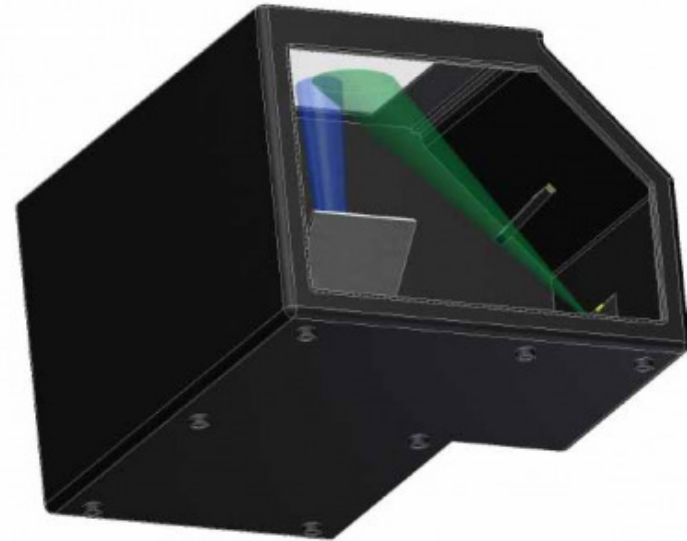
Concept Generation



Mechanical Concepts

Mechanical Concepts

- Multiple Grids
- One Grid
- Grid Magnification
- Grid Adjustability
- Direct Light
- Indirect Light



Programming Concepts

- Three programs that need to be integrated
 - Optigrig motor control
 - Optigrig depth resolution algorithm
 - Carestream's image capture algorithm



Multiple Grids	+												
One Grid	-												
Grid Magnification		+	-										
Grid Adjustability		-	+										
Direct Light	-	-	+		+								
Indirect Light	+	+		+	+	-							
Image Magnification		+	-	+		-	+						
Existing Box		+	-			-	-	+					
New Box (Fabricated)	+	+	+		+	+	+		-				
Manual Movement		-	+		+								
Mechanized Movement		+	+		+								
		Multiple Lamps	Multiple Grids	One Grid	Grid Magnification	Grid Adjustability	Direct Light	Indirect Light	Image Magnification	Existing Box	New Box (Fabricated)	Manual Movement	Mechanized Movement
Design Needs													
Picture Area	+	+	-	+	0	0	-	+	0	0	0	0	0
Clarity	+	+	-	-	+	+	-	0	0	0	0	0	0
Cost	-	-	+	0	-	-	+	0	+	-	+	-	-
Ease of operation	0	-	+	0	+	+	0	0	0	0	0	-	+
Focus ability	-	-	+	+	+	+	-	+	0	0	0	0	0
Depth Resolution	+	+	-	-	+	0	-	-	0	0	0	0	0
No Keystoning	0	+	-	+	0	+	-	0	0	0	0	0	0
Existing Components	-	0	+	0	-	-	+	0	+	-	0	0	0
Sum +		3	4	4	3	4	4	2	2	2	0	1	1
Sum 0		2	1	0	3	2	2	1	5	6	6	6	6
Sum -		3	3	4	2	2	2	5	1	0	2	1	1
Net Score		0	1	0	1	2	2	-3	1	2	-2	0	0