

Cutting Mechanism

Concepts		1	2	3	4	5	6	7	D
Criteria	Wgt								DATUM
Cost	3	+	+	+	+	+	-	+	
Speed	5	S	-	S	S	-	-	-	
Material	4	-	-	-	-	-	-	+	
Clean	3	-	-	-	-	-	-	-	
Durability/Life	4	-	-	-	S	-	-	-	
Cut Quality	5	-	-	-	-	-	-	-	
Safety	5	-	-	-	S	+	+	-	
Maintenance	3	-	+	S	-	-	-	-	
Size	2	+	+	-	+	+	-	+	
Controls	2	+	+	+	+	+	-	-	
	#+	7	10	5	7	12	5	9	0
	#-	24	26	23	15	24	29	25	0
	#S	1	0	2	3	0	0	0	0
Weighted total		-17	-16	-18	-8	-12	-24	-16	0

CONCEPT	DESCRIPTION
1	Band Saw Cutter
2	stationary blade on linear motion
3	Rotating Blades
4	Stationary Blade on rotation Motion
5	Wire Cutting
6	Robotic Fingers
7	High Pressure Air/Impact
D	Water Jet Cutting