

## COST REDUCTION TABLE

	Baseline - Dec 2010			Dec 2010 - June 2011			June 2011 - Dec 2011		
	Product	Freight	Total	Product	Freight	Total	Product	Freight	Total
<b>STRUCTURAL</b>	32%	15%	29%	24%	30%	25%	7%	5%	6%
<b>MAIN SHAFT</b>	18%	2%	15%	42%	8%	36%	0%	0%	0%
<b>BED SUPPORT (ARM)</b>	48%	-8%	37%	54%	50%	53%	0%	0%	0%
<b>MIRROR</b>	50%	67%	54%	18%	-50%	8%	5%	20%	8%
<b>MIRROR BED ASSEMBLY</b>	10%	0%	9%	-15%	62%	-6%	0%	-5%	0%
MIRROR BED	11%		11%	-14%		-14%	0%		0%
MIRROR ASSEMBLY	7%	0%	5%	0%	61%	15%	0%	0%	0%
ATTACHMENT	23%	0%	23%	-90%	0%	-88%	0%	0%	0%
<b>COLUMNS</b>	52%		45%	3%	25%	6%	50%	31%	49%
NORTH COLUMN	56%		51%	15%	0%	13%	26%	31%	27%
SOUTH COLUMN	46%		39%	-8%	50%	-2%	69%	31%	66%
<b>SLEW GEAR</b>	29%	47%	33%	50%	80%	55%	0%	0%	0%
<b>OTHER</b>	9%	0%	7%	5%	0%	4%	5%	0%	4%
BEARING COVER	56%		56%	5%		5%	5%		5%
NSK BEARING UNIT	0%		0%	5%		5%	5%		5%
STRUCTURAL MISC. (hardware)	0%	0%	0%	5%	0%	3%	5%	0%	3%
<b>CONTROLS</b>	35%	37%	35%	65%	65%	65%	0%	0%	0%
<b>MOTOR and GEAR DRIVE (w/covers)</b>	31%	77%	51%	61%	0%	49%	0%	0%	0%
<b>MCU COMPLETE</b>	34%	0%	28%	50%	92%	61%	0%	0%	0%
MCU CABINET LESS PLC	10%	0%	9%	50%	50%	50%	0%	0%	0%
PLC	50%		50%	50%		50%	0%		0%
<b>DRIVER CABINET COMPLETE</b>	37%	0%	29%	100%	100%	100%			
DRIVER CABINET LESS PCB	10%		10%	100%		100%			
PCBA STEPPER DRIVER	80%		80%	100%		100%			
<b>ENCODER UNIT</b>	51%	0%	49%	59%	0%	55%	0%	0%	0%
ENCODER ASSEMBLY	80%		80%	-56%		-56%	0%		0%
ENCODER UNIT/CABLE	-39%	0%	-37%	100%	0%	96%		0%	0%
COUPLING FC FLEXIBLE SHAFT	100%	0%	83%		0%	0%		0%	0%
<b>MICROSWITCH ASSY</b>	0%		0%	76%		74%	0%	0%	0%
<b>CONTROLS MISC</b>	5%	0%	2%	5%	0%	2%	5%	0%	2%

## COST REDUCTION TABLE - continued

<b>RECEIVER</b>	19%	66%	30%	17%	6%	-3%	-11%	1%	-5%
<b>Substrate Total</b>	-9%	0%	-7%	25%	0%	21%	23%	0%	17%
SUBSTRATE, RECEIVER	-14%	0%	-11%	18%	0%	14%	23%	0%	17%
Substrate Material	0%			0%			20%		
Change coating				0%			0%		
2-channel version									
Mask inside of channels	0%			0%			50%		
Machining process improvement	0%			65%			0%		
Increased subreceiver length									
<b>CELLS, TOTAL</b>	11%		11%	23%		23%	-67%		-67%
CELLS	0%		0%	12%		12%	-41%		-41%
# of cell	0%			0%			3%		
watt per cell	0%			0%			-3%		
cost per watt	0%			12%			-21%		
Change cells									
<b>LAMINATED STACK</b>	6%	94%	48%	23%	0%	22%	-17%	6%	-15%
JUNCTION BOX	0%		0%	58%		58%	-25%		-25%
Reduce width of laminate materials due to narrower receiver									
Added wings and labor	0%			0%			-67%		
ASSEMBLY, LAMINATE	10%	95%	74%	11%	0%	9%	-13%	8%	-9%
WIRE, RIBBON	0%		0%	0%		0%	0%		0%
<b>WATER CONNECTIONS</b>	27%	0%	22%	37%	0%	28%	23%	0%	15%
MANIFOLD, INTERCONNECT	61%	0%	34%	0%	0%	0%	25%	0%	8%
ASSEMBLY, TUBE, INTERCONNECT	0%		0%	38%		38%	33%		33%
PLUGS	35%		35%	0%		0%	33%		33%
FLUID JUNCTION LABOR	0%		0%	66%		66%	0%		0%
Change to an integrated fitting into the manifold. Reduce material consumption by 30%	61%			0%			0%		
Outsource plug and junction assembly	89%			0%			0%		
Outsource plug shield	94%			0%			0%		



## COST REDUCTION TABLE - continued

<b>HYDRAULICS</b>	73%	75%	74%	29%	-75%	26%	1%	0%	1%
<b>MANIFOLDS</b>	95%		99%	0%		-67%	0%	0%	0%
HYDRAULIC MANIFOLD ASSY	98%		98%	0%		-67%	0%	0%	0%
SOUTH MANIFOLD ASSEMBLY	100%		100%						
90 Deg return tube assembly				0%			0%		
Double system interconnect tube assemblies				0%			0%		
<b>SUPPORTS</b>	76%		76%	53%		46%	0%	0%	0%
SOUTH SUPPORT ASSEMBLY	82%		82%	0%		-13%	0%	0%	0%
SOUTH HYDRAULIC SUPPORT	25%		25%	100%		100%			
NORTH TUBE SUPPORT	80%		80%	0%		-15%	0%	0%	0%
NORTH TUBE SUPPORT	95%		95%	100%		100%			
<b>HOSES</b>	54%	50%	54%	26%	0%	24%	0%	0%	0%
FLEXIBLE HOSE ASSEMBLY	0%	50%	4%	29%	0%	28%	0%	0%	0%
FLEXIBLE HOSE ASSEMBLY	91%	50%	88%	0%	0%	0%	0%	0%	0%
Change to silicone				0%			0%		
<b>PRESSURE RELIEF</b>	0%			50%			0%		
T&P valve	0%			0%			0%		
Flexible hose	0%			0%			0%		
Fittings, guides, clamps	0%			0%			0%		
Labor	0%			0%			0%		
<b>HYDRAULICS MISC</b>	5%		5%	5%		5%	5%		5%
6 month Percentage Reduction	34%	40%	35%	27%	28%	22%	14%	45%	20%
Percentage Reduction from Baseline	34%	87%	21%	52%	91%	38%	59%	95%	50%