

TABLE I

STRESS DISTRIBUTION FOR 1×10^6 psi PUNCH ASSEMBLY

Position	Rings ABC (psi)	Rings ABCD (psi)	Total Assembly Unloaded (psi)	Total Assembly Loaded (psi)
o.d. A	$f_t = 28,000$	$f_t = 67,600$	$f_t = 76,900$	$f_t = 98,700$
AB interface	$p = 23,000$	$p = 126,000$	$p = 254,000$	$p = 554,000$
o.d. B	$f_t = 33,050$	$f_t = 80,050$	$f_t = 91,050$	$f_t = 116,750$
i.d. B	$f_c = 57,000$	$f_t = 15,700$	$f_t = 141,250$	$f_t = 181,250$
BC interface	$p = 23,000$	$p = 126,000$	$p = 254,000$	$p = 554,000$
o.d. C	$f_t = 51,100$	$f_t = 124,200$	$f_t = 32,750$	$f_t = 73,000$
i.d. C	$f_c = 80,000$	$f_t = 15,700$	$f_t = 98,000$	$f_t = 178,000$
CD interface		$p = 103,000$	$p = 231,000$	$p = 531,000$
o.d. D		$f_c = 163,000$	$f_c = 128,000$	$f_c = 49,000$
i.d. D		$f_c = 264,000$	$f_c = 128,000$	$f_c = 164,000$
D Vega interface			$p = 128,000$	$p = 428,000$
o.d. Vega			$f_c = 128,000$	$f_c = 428,000$
Punch (center)			$f_c = 256,000$	$f_c = 821,000$

TABLE II
STRESS DISTRIBUTION FOR 1×10^6 psi DIE ASSEMBLY

Position	Rings ABC (psi)	Rings ABCD (psi)	Total Assembly Unloaded (psi)	Total Assembly Loaded (psi)
o.d. A	$f_t = 12,564$	$f_t = 33,060$	$f_t = 47,563$	$f_t = 50,063$
AB interface	$p = 11,458$	$p = 55,307$	$p = 144,037$	$p = 924,037$
o.d. B	$f_t = 13,714$	$f_t = 36,068$	$f_t = 51,886$	$f_t = 54,613$
i.d. B	$f_c = 37,780$	$f_t = 1,387$	$f_t = 29,103$	$f_t = 33,880$
BC interface	$p = 11,458$	$p = 55,307$	$p = 144,037$	$p = 924,037$
o.d. C	$f_t = 24,029$	$f_t = 63,196$	$f_t = 91,912$	$f_t = 96,689$
i.d. C	$f_c = 49,240$	$f_t = 15,096$	$f_t = 60,535$	$f_t = 68,385$
CD interface		$p = 43,849$	$p = 132,579$	$p = 912,579$
o.d. D		$f_c = 101,980$	$f_c = 56,541$	$f_c = 48,691$
i.d. D		$f_c = 145,830$	$f_c = 42,576$	$f_c = 24,776$
D-Vega interface			$p = 88,730$	$p = 868,730$
o.d. Vega			$f_c = 92,400$	$f_c = 74,600$
i.d. Vega			$f_c = 93,000$	$f_c = 70,050$
Vega-Die interface			$p = 88,730$	$p = 868,730$
i.d. Die			$f_c = 181,000$	$f_c = 599,000$