CAESAR II ANALYSIS REPORT: NEMA SM23 1991 - Steam Turbines

OUTPUT DATA:

Output in local coordinates.
Local X axis = Shaft CL
Local Y axis = Vertical
Local Z axis = Right angle to Shaft CL

Note - The calculated % of allowable is based' upon ENGLISH units.

Nozzle		Distance From Resolution Point X (in.)	Y (in.)	Z (in.)
INLET	10	-19.488	-1.142	8.189
EXHAUST	10	0.000	0.000	0.000

Individual Nozzle Calculations

Nozzle	Node	Components (lb. & ft.lb.)		Resultants (lb. & ft.lb.)		Values/Allowables (ENGLISH)	
INLET	10	FX=	-184			3F + M < 500*D(used)	
		FY=	-57				
		FZ=	-199			3F + M =	1151
		Fr=	277	F =	277		
						500*D(used) =	1500
		MX=	-229				
		MY=	210			% of ALLOW. =	76.76
		MZ=	79				
		Mr=	321	M =	321		
Moments due to "Force Resolution"							
		MX=	58				
		MY=	-449				
		MZ=	75				
Moments About Resolution Point (Algebraic addition of the moments above)							
MX=	-171	ft.lb.					
MY=	-239	ft.lb.					
MZ=	154	ft.lb.					
EXHAUST	10	FX=	-152			3F + M < 500*D(used)	
		FY=	29				
		FZ=	-488			3F + M =	2677
		Fr=	512	F =	512		
						500*D(used) =	4000
		MX=	-1272				
		MY=	361			% of ALLOW. =	71.94
		MZ=	227				
		Mr=	1342	M =	1342		
Moments due to "Force Resolution"							
		MX=	0				
		MY=	0				
		MZ=	0				
Moments About Resolution Point (Algebraic addition of the moments above)							
MX=	-1272	ft.lb.					
MY=	361	ft.lb.					
MZ=	227	ft.lb.					