

<u>Stent Design Inputs</u>			<u>Units</u>	<u>Value</u>
4.1	N_col	number of columns	#	10
4.2	N_struts	struts around circumference	#	42
4.3	D_tube	outer diamter of tubing	mm	1.915
4.4	t_raw	wall thickness of raw tubing	mm	0.170
4.5	L_strut_inner	strut length to inner tangents	mm	1.200
4.6	w_apex_raw	apex width, as-cut	mm	0.130
4.7	X_bridge	axial gap between outer tangents	mm	0.150
4.8	Y_bridge	circumferential span of bridge	mm	0.000
4.9	w_bridge_raw	width of bridge	mm	0.125
4.10	N_bridges	number of bridges around circ.	#	7

Process Parameters

4.11	w_kerf	minimum effectivte kerf width	mm	0.025
4.12	m_width	width removal in finishing	mm	0.036
4.13	m_thickness	wall thickness removal	mm	0.059
4.14	Af	Af of finished component	degC	27

Material Properties

4.15	E_Af_low	modulus of elasticity at Low Af	Mpa	94000
4.16	Af_low	Low Af for defining E	degC	-5
4.17	E_Af_high	modulus of elasticity at Af High	Mpa	34000
4.18	Af_high	High Af for defining E	degC	37
4.19	Af_inflection	Inflection point in E vs Af	degC	19
4.20	E_case1	E for Af < Af_low	MPa	94000
4.21	E_case2	E for Af_low < Af < Af_inflection	MPa	31741
4.22	E_case3	E for Af_inflection < Af < Af_high	MPa	34059
4.23	E_case1	E for Af > Af_high	MPa	34000
4.24	E	modulus of elasticity at spec'ed Af	MPa	34059
4.25	density_niti	density of Nitinol	mg/mm^3	6.7
4.26	strain_endurance	endurance limit	%	0.40%

Service Parameters

4.27	D_set	expanded inner diameter of stent	mm	8.00
4.28	D_ves	diameter of vessel	mm	6.50
4.29	D	analysis diameter	mm	6.50
4.30	C_percent	compliance: % change in diameter	%	6%
4.31	C_pressure	compliance: pressure for % change	mmHg	100
4.32	P_systolic	systolic pressure at implant site	mmHg	150
4.33	P_diastolic	diastolic pressure at implant site	mmHg	50
4.34	P_mean	mean pressure at implant site	mmHg	100