Table-2. Allowable pressure ratio for example-1.

Thinning %	OVALITY, %									
	Stress values in MPa									
	0		5		10		15		20	
0	P_{im}= 31.65 P_{ib} = 12.19 P_{iF}= 1.493	P_{om}= 23.30 P_{ob}= 11.12 P_{oF}= 1.478	P_{im}= 30.76 P_{ib}= 3.540 P_{iF}= 0.496	P_{om}= 23.20 P_{ob}= 3.351 P_{oF}= 0.458	P_{im}= 31.87 P_{ib}= 4.806 P_{iF}= 0.505	P_{om}= 23.72 P_{ob}= 5.995 P_{oF}= 0.776	P_{im}= 36.93 P_{ib}= 10.73 P_{iF}= 0.963	P_{om}= 28.27 P_{ob}= 11.76 P_{oF}= 1.325	P_{im}= 41.73 P_{ib}= 16.41 P_{iF}= 1.271	P_{om}= 32.72 P_{ob}= 17.80 P_{oF}= 1.720
	P_{nm}= 25.84 P_{nb}= 4.653 P_{nF}= 0.714	$\frac{P}{S_m} = 0.243$	P_{nm}= 25.07 P_{nb}= 14.05 P_{nF}= 1.900	$\frac{P}{S_m} = 0.250$	P_{nm}= 24.21 P_{nb}= 23.20 P_{nF}= 3.240	$\frac{P}{S_m} = 0.242$	P_{nm}= 23.28 P_{nb}= 32.09 P_{nF}= 4.743	$\frac{P}{S_m} = 0.209$	P_{nm}= 22.26 P_{nb}= 40.72 P_{nF}= 6.424	$\frac{P}{S_m} = 0.183$
5	P_{im}= 30.17 P_{ib}= 11.89 P_{iF}= 1.480	P_{om}= 24.54 P_{ob}= 10.94 P_{oF}= 1.429	P_{im}= 29.32 P_{ib}= 3.354 P_{iF}= 0.456	P_{om}= 24.43 P_{ob}= 3.198 P_{oF}= 0.425	P_{im}= 30.35 P_{ib}= 4.872 P_{iF}= 0.569	P_{om}= 24.71 P_{ob}= 6.442 P_{oF}= 0.776	P_{im}= 35.17 P_{ib}= 10.72 P_{iF}= 1.034	P_{om}= 29.48 P_{ob}= 12.63 P_{oF}= 1.316	P_{im}= 39.75 P_{ib}= 16.36 P_{iF}= 1.345	P_{om}=34.16 P_{ob}= 18.84 P_{oF}= 1.706
	P_{nm}= 25.87 P_{nb}= 4.835 P_{nF}= 0.728	$\frac{P}{S_m} = 0.255$	P_{nm}= 25.10 P_{nb}= 14.28 P_{nF}= 1.927	$\frac{P}{S_m} = 0.263$	P_{nm}= 24.24 P_{nb}= 23.46 P_{nF}= 3.278	$\frac{P}{S_m} = 0.242$	P_{nm}=23.31 P_{nb}= 32.39 P_{nF}= 4.792	$\frac{P}{S_m} = 0.207$	P_{nm}= 22.30 P_{nb}= 41.04 P_{nF}= 6.484	$\frac{P}{S_m} = 0.182$
10	P_{im}= 28.83 P_{ib}= 11.60 P_{iF}= 1.464	P_{om}= 25.91 P_{ob}= 10.75 P_{oF}= 1.380	P_{im}= 28.00 P_{ib}= 3.164 P_{iF}= 0.413	P_{om}= 25.79 P_{ob}= 3.034 P_{oF}= 0.394	P_{im}= 28.95 P_{ib}= 4.952 P_{iF}= 0.635	P_{om}= 25.82 P_{ob}= 6.932 P_{oF}= 0.776	P_{im}= 33.57 P_{ib}= 10.74 P_{iF}= 1.106	P_{om}= 30.82 P_{ob}= 13.58 P_{oF}= 1.307	P_{im}= 37.95 P_{ib}= 16.35 P_{iF}= 1.422	P_{om}= 35.74 P_{ob}= 19.20 P_{oF}= 1.691
	P_{nm}= 25.89 P_{nb}= 5.055 P_{nF}= 0.736	$\frac{P}{S_m} = 0.267$	P_{nm}= 25.13 P_{nb}= 14.54 P_{nF}= 1.959	$\frac{P}{S_m} = 0.275$	P_{nm}= 24.27 P_{nb} = 23.76 P_{nF} = 3.320	$\frac{P}{S_m} = 0.241$	P_{nm}= 23.34 P_{nb}= 32.69 P_{nF}= 4.846	$\frac{P}{S_m} = 0.206$	P_{nm}= 23.33 P_{nb}= 41.35 P_{nF}= 6.547	$\frac{P}{S_m} = 0.181$
15	P_{im}= 27.61 P_{ib}= 11.32 P_{iF}= 1.448	P_{om}= 27.45 P_{ob}= 10.55 P_{oF}= 1.333	P_{im}= 26.80 P_{ib}= 2.970 P_{iF}= 0.369	P_{om}= 27.32 P_{ob}= 2.857 P_{oF}= 0.364	P_{im}= 27.68 P_{ib} = 5.044 P_{iF} = 0.703	P_{om}= 27.10 P_{ob}= 7.471 P_{oF}= 0.774	P_{im}= 32.11 P_{ib}= 10.81 P_{iF}= 1.182	P_{om}= 32.31 P_{ob}= 14.63 P_{oF}= 1.298	P_{im}= 36.30 P_{ib}= 16.38 P_{iF}= 1.500	P_{om}= 37.47 P_{ob}= 21.28 P_{oF}= 1.676
	P_{nm}= 25.94 P_{nb}= 5.343 P_{nF}= 0.783	$\frac{P}{S_m} = 0.279$	P_{nm}= 25.16 P_{nb}= 14.84 P_{nF}= 1.995	$\frac{P}{S_m} = 0.282$	P_{nm}= 24.30 P_{nb}= 24.07 P_{nF}= 3.368	$\frac{P}{S_m} = 0.239$	P_{nm}= 23.37 P_{nb}= 33.01 P_{nF}= 4.903	$\frac{P}{S_m} = 0.205$	P_{nm}=22.37 P_{nb}= 41.66 P_{nF}= 6.613	$\frac{P}{S_m} = 0.180$

20	P_{im}= 26.48 P_{ib}= 11.05 P_{iF}= 1.430	P_{om}= 29.17 P_{ob}= 10.34 P_{oF}= 1.286	P_{im}= 25.69 P_{ib}= 2.769 P_{iF}= 0.323	P_{om}=29.03 P_{ob}= 2.666 P_{oF}= 0.334	P_{im}= 26.51 P_{ib}= 5.149 P_{iF}= 0.773	P_{om}= 28.81 P_{ob}= 8.069 P_{oF}= 0.773	P_{im}= 30.76 P_{ib}= 10.91 P_{iF}= 1.260	P_{om}= 33.97 P_{ob}= 15.80 P_{oF}= 1.288	P_{im}= 34.78 P_{ib}= 16.46 P_{iF}= 1.583	P_{om}= 39.46 P_{ob}= 22.70 P_{oF}= 1.660
	P_{nm}= 25.97 P_{nb}= 5.669 P_{nF}= 0.822	$\frac{P}{S_m} = 0.264$	P_{nm}= 25.19 P_{nb}= 15.18 P_{nF}= 2.037	$\frac{P}{S_m} = 0.265$	P_{nm}= 24.33 P_{nb}= 24.39 P_{nF}= 3.419	$\frac{P}{S_m} = 0.237$	P_{nm}= 23.41 P_{nb}= 33.32 P_{nF}= 4.964	$\frac{P}{S_m} = 0.204$	P_{nm}= 22.41 P_{nb}= 41.95 P_{nF}= 6.682	$\frac{P}{S_m} = 0.180$