RMT Plate Roll Calculator

MACHINE NAME	Bertch #30
BENDING LENGTH	122" / 10' 2"
PREBENDING CAPACITY Ødx1.5	1.800"
ROLLING CAPACITY Ødx3	2.360"
TOP ROLL DIAMETER Ød	26.00"

PLATE WIDTH			122" 10' 2" 100% Width		110" 9' 2" 90% Width		98" 8' 2" 80% Width		85" 7' 1" 70% Width		73" 6' 1" 60% Width		61" 5' 1" 50% Width		49" 4' 1" 40% Width		37" 3' 1" 30% Width		24" 2' 0" 20% Width	
MATERIAL TYPES		Inside Diameter	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness	Pre-Bending Thickness	Rolling Thickness
CLASS-1 MATERIAL Max Yield Strength		28.60"	1.454"	2.034"	1.533"	2.144"	1.626"	2.274"	1.738"	2.431"	1.877"	2.625"	2.057"	2.876"	2.299"	3.216"	2.655"	3.713"	3.252"	4.547"
		33.80"	1.590"	2.186"	1.676"	2.304"	1.778"	2.444"	1.900"	2.613"	2.053"	2.822"	2.248"	3.092"	2.514"	3.457"				
		39.00"	1.939"	2.288"	2.044"	2.412"	2.168"	2.558"	2.317"	2.735"	2.503"	2.954"	2.742"	3.236"	3.066"	3.618"	3.540"	4.177"	4.336"	5.116"
		52.00"	1.987"	2.415"	2.095"	2.546"	2.222"	2.700"	2.375"	2.887"	2.566"	3.118"	2.811"	3.415"						
207	30,000	78.00"	2.016"	2.542"	2.126"	2.680"	2.254"	2.842"	2.410"	3.038"	2.603"	3.282"	2.852"	3.595"	3.188"	4.019"	3.682"	4.641"	4.509"	5.684"
		104.00"	2.041"	2.669"	2.151"	2.814"	2.282"	2.984"	2.439"	3.190"	2.635"	3.446"		3.775"						
N/mm²	PSI	130.00"	2.065"	2.745"	2.177"	2.894"	2.309"	3.070"	2.468"	3.281"	2.666"	3.544"	2.920"	3.883"	3.265"	4.341"	3.770"	5.013"	4.617"	6.139"
		260.00"	2.104"	2.796"	2.218"	2.948"	2.352"	3.126"	2.514"	3.342"	2.716"	3.610"								
CLASS-2 MATERIAL Max Yield Strength		28.60"	1.350"	1.888"	1.423"	1.990"	1.509"	2.111"	1.614"	2.257"	1.743"	2.437"	1.909"	2.670"	2.135"	2.985"	2.465"	3.447"	3.019"	4.222"
		31.20"	1.476"	2.030"	1.556"	2.139"	1.650"	2.269"	1.764"	2.426"	1.906"	2.620"	2.087"	2.870"	2.334"	3.209"	2.695"	3.706"		
		39.00"	1.800"	2.124"	1.897"	2.239"	2.012"	2.375"	2.151"	2.539"	2.324"	2.742"	2.546"	3.004"	2.846"	3.358"	3.286"	3.878"	4.025"	4.749"
		52.00"	1.845"	2.242"	1.945"	2.363"	2.063"	2.507"	2.205"	2.680"	2.382"	2.894"	2.609"	3.171"		3.545"				
248	36,000	78.00"	1.872"	2.360"	1.973"	2.488"	2.093"	2.639"	2.237"	2.821"	2.417"	3.047"	2.647"	3.338"	2.960"	3.731"	3.418"	4.309"	4.186"	5.277"
		104.00"	1.895"	2.478"	1.997"	2.612"	2.118"	2.770"	2.264"	2.962"	2.446"	3.199"	2.679"	3.504"						
N/mm²	PSI	130.00"	1.917"	2.549"	2.021"	2.687"	2.143"	2.850"	2.291"	3.046"	2.475"	3.290"	2.711"	3.605"	3.031"	4.030"	3.500"	4.653"	4.287"	5.699"
		260.00"	1.953"	2.596"	2.059"	2.736"	2.184"	2.902"	2.334"	3.103"	2.521"	3.351"	2.762"	3.671"						
CLASS-3 MATERIAL Max Yield Strength		28.60"	1.126"	1.575"	1.187"	1.661"	1.259"	1.761"	1.346"	1.883"	1.454"	2.034"	1.593"	2.228"	1.781"	2.491"	2.057"	2.876"	2.519"	3.522"
		33.80"	1.232"	1.693"	1.298"	1.785"	1.377"	1.893"	1.472"	2.024"	1.590"	2.186"	1.742"	2.395"	1.947"	2.678"	2.248"	3.092"	2.754"	
		39.00"	1.502"	1.772"	1.583"	1.868"	1.679"	1.981"	1.795"	2.118"	1.939"	2.288"	2.124"	2.506"	2.375"	2.802"	2.742"	3.236"	3.358"	3.963"
		52.00"	1.539"	1.871"	1.623"	1.972"	1.721"	2.091"	1.840"	2.236"	1.987"	2.415"	2.177"	2.646"	2.434"	2.958"	2.811"	3.415"		
345	50,000	78.00"	1.562"	1.969"	1.646"	2.076"	1.746"	2.202"	1.867"	2.354"	2.016"	2.542"	2.209"	2.785"	2.470"	3.113"	2.852"	3.595"	3.493"	4.403"
		104.00"	1.581"	2.068"	1.666"	2.179"	1.767"	2.312"	1.889"	2.471"	2.041"	2.669"	2.235"	2.924"	2.499"	3.269"		3.775"		
N/mm²	PSI	130.00"	1.599"	2.127"	1.686"	2.242"	1.788"	2.378"	1.912"	2.542"	2.065"	2.745"	2.262"	3.008"	2.529"	3.363"	2.920"	3.883"	3.577"	4.755"
		260.00"	1.630"	2.166"	1.718"	2.283"	1.822"	2.422"	1.948"	2.589"	2.104"	2.796"	2.305"	3.063"	2.577"	3.425"				
CLASS-4 MATERIAL Max Yield Strength		28.60"	0.988"	1.382"	1.041"	1.456"	1.105"	1.545"	1.181"	1.651"	1.275"	1.784"	1.397"	1.954"	1.562"	2.185"	1.804"	2.522"	2.209"	3.089"
		33.80"	1.080"	1.485"	1.139"	1.566"	1.208"	1.661"	1.291"	1.775"	1.394"	1.917"	1.528"	2.100"	1.708"	2.348"	1.972"	2.712"	2.415"	3.321"
		39.00"	1.317"	1.554"	1.388"	1.638"	1.473"	1.738"	1.574"	1.858"	1.701"	2.007"	1.863"	2.198"	2.083"	2.458"	2.405"	2.838"	2.945"	3.476"
		52.00"	1.350"	1.641"	1.423"	1.729"	1.510"	1.834"	1.614"	1.961"	1.743"	2.118"	1.909"	2.320"	2.135"	2.594"	2.465"	2.995"		3.669"
448	65,000	78.00"	1.370"	1.727"	1.444"	1.820"	1.532"	1.931"	1.637"	2.064"	1.769"	2.230"	1.937"	2.442"	2.166"	2.731"	2.501"	3.153"	3.063"	3.862"
		104.00"	1.386"	1.813"	1.461"	1.911"	1.550"	2.027"	1.657"	2.167"	1.790"	2.341"	1.961"	2.565"	2.192"	2.867"	2.531"	3.311"		
N/mm²	PSI	130.00"	1.403"	1.865"	1.479"	1.966"	1.568"	2.085"	1.677"	2.229"	1.811"	2.408"	1.984"	2.638"	2.218"	2.949"	2.561"	3.405"	3.137"	4.174"
		260.00"	1.429"	1.900"	1.507"	2.003"	1.598"	2.124"	1.708"	2.271"	1.845"	2.453"	2.021"	2.687"	2.260"	3.004"	2.609"	3.468"		
High Yield		28.60"	0.796"	1.114"	0.840"	1.174"	0.891"	1.245"	0.952"	1.331"	1.028"	1.438"	1.126"	1.575"	1.259"	1.761"	1.454"	2.034"	1.781"	2.491"
		33.80"	0.871"	1.197"	0.918"	1.262"	0.974"	1.339"	1.041"	1.431"	1.124"	1.546"	1.232"	1.693"	1.377"	1.893"	1.590"	2.186"	1.947"	2.678"
		39.00"	1.062"	1.253"	1.119"	1.321"	1.187"	1.401"	1.269"	1.498"	1.371"	1.618"	1.502"	1.772"	1.679"	1.981"	1.939"	2.288"	2.375"	2.802"
		52.00"	1.089"	1.323"	1.147"	1.394"	1.217"	1.479"	1.301"	1.581"	1.405"	1.708"	1.539"	1.871"	1.721"	2.091"	1.987"	2.415"	2.434"	2.958"
689	100,000	78.00"	1.104"	1.392"	1.164"	1.468"	1.235"	1.557"	1.320"	1.664"	1.426"	1.798"	1.562"	1.969"	1.746"	2.202"	2.016"	2.542"	2.470"	3.113"
		104.00"	1.118"	1.462"	1.178"	1.541"	1.250"	1.635"	1.336"	1.747"	1.443"	1.887"	1.581"	2.068"	1.767"	2.312"	2.041"	2.669"	2.499"	3.269"
N/mm²	PSI	130.00"	1.131"	1.504"	1.192"	1.585"	1.265"	1.681"	1.352"	1.797"	1.460"	1.941"	1.599"	2.127"	1.788"	2.378"	2.065"	2.745"	2.529"	3.363"
		260.00"	1.152"	1.532"	1.215"	1.614"	1.288"	1.712"	1.377"	1.831"	1.488"	1.977"	1.630"	2.166"	1.822"	2.422"	2.104"	2.796"	2.577"	3.425"

Important Remarks

Bending capacies valid for multisteps bending method. Technical datas can be changed without notice . Reproducing and releasing without getting permission are prohibited.

Numbers in BLANK are theoretical capacity, (machine may not open wide enough to accept material and usually are not recomened.

The diameters (especially the tightest) are approximate and do not commit the manufacturer, as they are calculated on the machine power only.

The material spring back could in fact re-open the rolled cylinders to diameters larger than calculated, but out of the machine control, depending from the physical material spring-back.

The thinner is the plate and the more its spring back will re-open the rolled diameters. That's why the thinnest stated capacities can more likely re-open to larger diameter than calculated (because of their higher spring back) even if tightly "wrapped" around the top roll.

Thinner thicknesses than the minimum herewith stated, or harder materials may re-open more than the minimum diameter indicated because of their higher spring back.