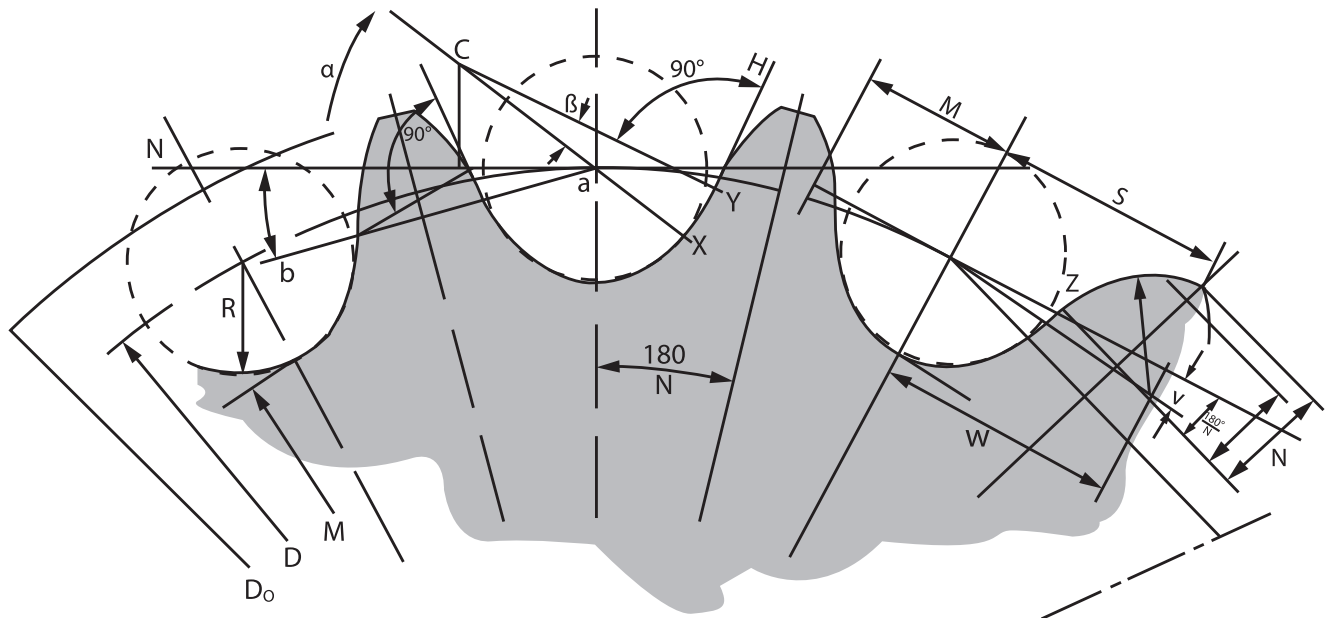


DESIGN FORMULAS FOR ASA ROLLER CHAIN & SPROCKETS



Symbol	Description	Formula	Result
N	# of teeth	Given	20
P	Chain pitch	Given	.750
Dr	Roller Diameter	Given	.4690
CI	Pitch Line Clearance min.	$.07(P - Dr) + .002$	.0217
CIM	Pitch Line Clearance max.	$CI + .003(Dr) + .005$	.0281
Rm	Seating curve radius min.	$.5025(Dr) + .0015$	.2372
RM	Seating curve radius max.	$Rm + .0015(Dr) + .0025$	.2404
D	Pitch Diameter	$P / (\sin(180/N))$	4.7943
MM	Minor diameter max.	$D - Dr$	4.3253
Mm	Minor diameter min.	$MM - (.001 \cdot P \cdot \sqrt{N}) + .003$	4.3190
J	J Dimension	$.3 \cdot P$	.2250
DO	Outside Diameter	$P(6 \cot(180/N))$	5.1853