

8/21 demo description

- Fields numbered 1 to 6 in red cannot, for now, be changed. They deal with setting the exact dimensions of the blocks
- The field G/W₁ numbered 7 in red can be changed. It deals with how much of the lips of the blocks on the next ring out span the gap on the previous ring.
- Filling in field R_s (numbered 8 in red) triggers the calculations that generates the table of intermediate values and the graphic of the results.

Future changes

- This version just calculates for the ring number up to where G/W₁ is exceeded. Future versions will allow any ring up to this ring.
- Allow fewer blocks per ring

Block Calculator

Characteristics of the block -- For now they are not being allowed to be changed

W_f

W_m

W_b

D_m

D_b

D_l

W₁ = 8.895833333333334 = (W_m-W_f)(D_b) / D_m+W_f

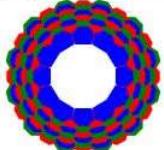
Enter G/W₁ Must be less than 1, 0.85 good choice

Enter R_s This is the closest that the blocks of the inner most ring will be to the center

W_f=8.375; W_m=11.5; W_b=5; D_m=6; D_b=9; D_l=1; W₁=8.89583333333334

B (29.33283822757326 degrees {W_f}) greater than B (29.294750544726 degrees {W_m}). s=29.33283822757326.8 = 30B_T

Blk#	ring	R ₁	R ₃	R ₄	$\eta(\text{eta})$	$\kappa(\text{kappa})$	C	G/W ₁	R _s	Total Dia
12	1	16	17	17.572249789756892	29.32462379731112	0.6753762026868877	0.20713237045388687	0.02328402089433857	17.371944591276417	45.14388918255283
12	2	17.571944591276417	18.571944591276417	19.097148702752786	26.936911300156662	0.603086998433375	0.202830766592343	0.114753809271069	19.090326469485717	48.180652938971434
12	3	19.090326469485717	20.090326469485717	20.576811714260536	24.967370185993897	5.032629814006103	1.806803062230541	0.2031066641701633	20.556970739817388	51.113941479634775
12	4	20.556970739817388	21.556970739817388	22.011064266658124	23.31681537116779	6.683184628832208	2.5659940013351954	0.2884489743889681	21.73640318509634	53.94728063701927
12	5	21.973640318509634	22.973640318509634	23.40025808360732	21.914883304863675	8.085116695136323	3.2993161365010186	0.37088331276926436	23.342038051886522	56.684076103773045
12	6	23.342038051886522	24.342038051886522	24.745075857493397	20.710346252359397	9.289653747640603	4.007650925847153	0.4505087691818813	24.6653808763190687	59.327617526381374
12	7	24.663808763190687	25.663808763190687	26.046401726673	19.665060831777666	10.334939168224334	4.6918497923355895	0.5274210539618461	25.94054122967185	61.881024393437
12	8	26.94054122967185	26.94054122967185	27.305250850850403	18.75006338576066	11.24995614213934	5.35273514817673	0.6017126161897149	27.1737709230775	64.3475401846155
12	9	27.1737709230775	28.1737709230775	28.522715226426563	17.942977960877602	12.057022039123398	5.991101381428266	0.673472754820979	28.364977700452854	66.72995540090571
12	10	28.364977700452854	29.364977700452854	29.6999306634493	17.226251795053212	12.773748204946788	6.607115812746212	0.747877260229934	29.515595895632238	69.03119178726448
12	11	29.515595895632238	30.515595895632238	30.83805369048241	16.3859269210403	13.41407307789597	7.20331961818763	0.8097408468555048	30.62700772262274	71.25401544524455
12	12	30.62700772262274	31.938246353868898	16.010767708016104	13.989232291983896	7.78628713048535	0.8744125954182804	31.700549111886914	73.40109822377383	



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After R_s input, table of results goes here