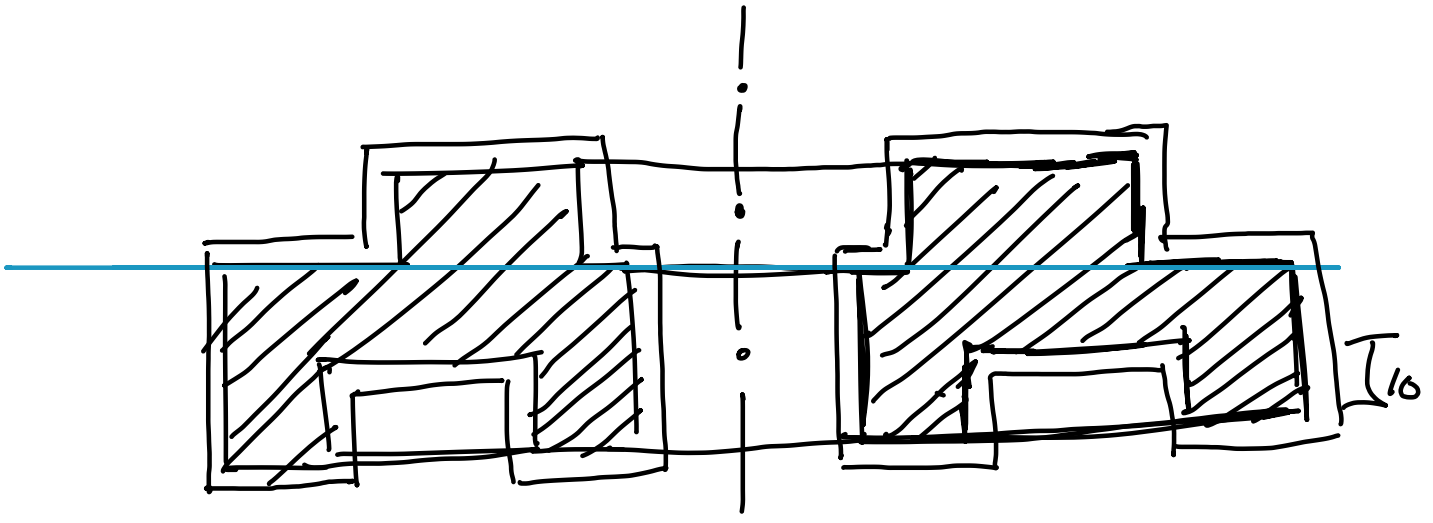
Esercitazione 04 → Progettazione del modello.

pg. 66 studio di fattibilità

Esercizio 7

↳ Alluminio

↳ Tracciamo sistema di alimentazione e sistema di colata



Dato

↳ S → sovrametallo = 1,5 mm

r_e → ritiro lineare = 1,3%

↳ Da tabelle

Dim 0	Sovrametallo (Tutti e due i lati)	Dim 1	Ritiro (r · Dim 1)	Quota Modello	Quota Modello Arrotondata
60	+1,5 +1,5	63	0,819	63,819	64
30	-1,5 -1,5	27	0,315	27,315	27

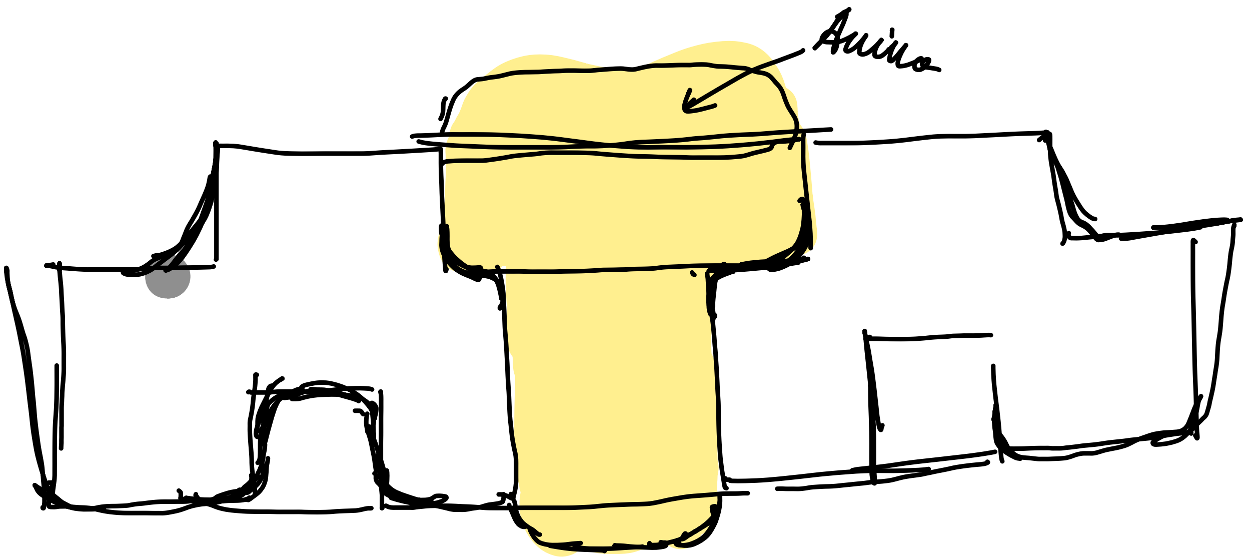
Perdo interno

Interni

20	-1,5 -1,5	17	0,221	17,221	17
40	+1,5 +1,5	43	0,559	43,559	44
70 −	-1,8 -1,5	67	0,871	67,871	67
90	+1,5 +1,5	93	,209	94,209	95
10	-1,5 +1,5	10	,13	10,13	10
20	+1,5 +1,5	23	,199	23,199	23
30	+1,5 +1,5	33	,429	33,429	34

Sottostima per interni

Sovrastima per esterni



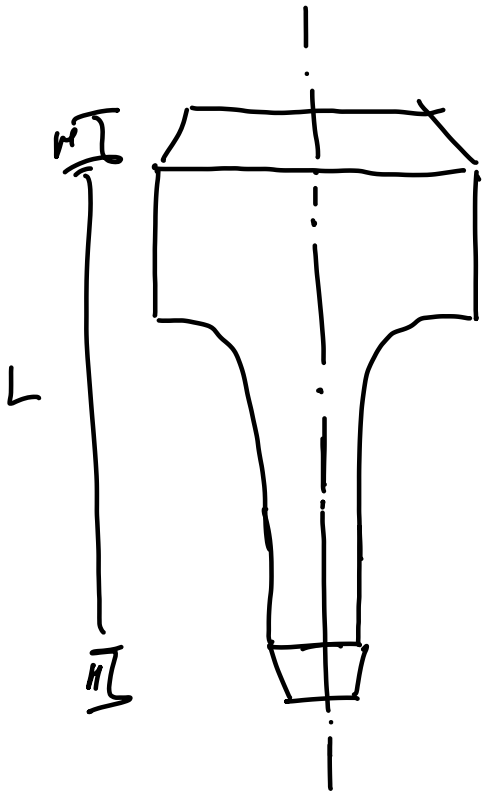
Addolcingiamo gli angoli 'distorno e raggi di raccordo'

Con anime

Dim	Modello
ϕ30	27
ϕ20	17
30	34

Altezza → 30

} Dimensioni minore per anima per pezzo sovradimensionato

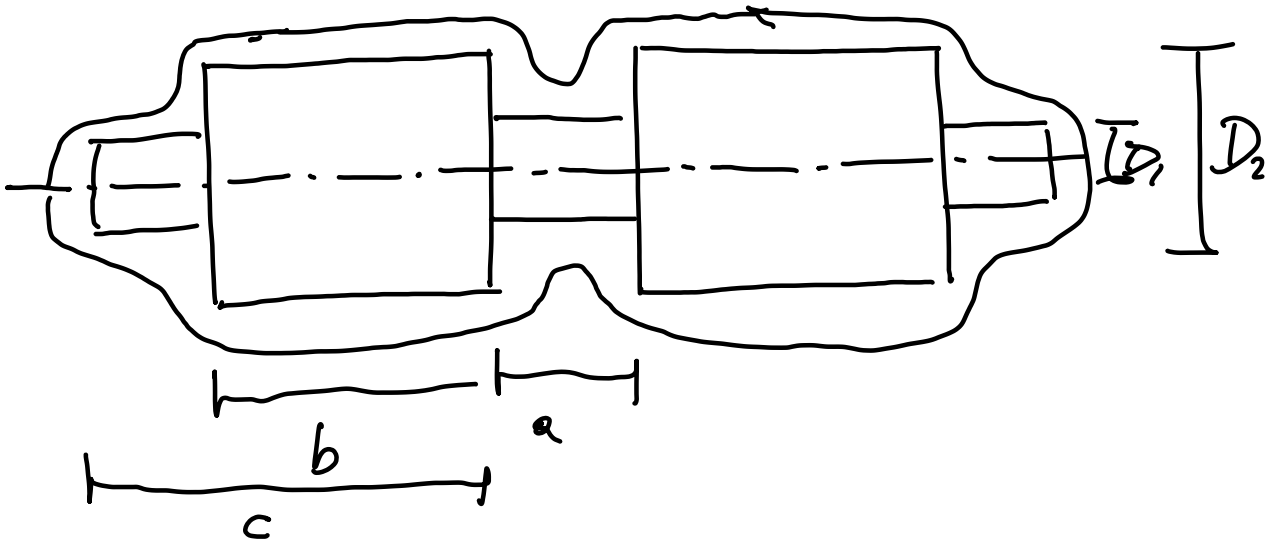


$L = 34\,mm$

$H = \frac{1}{3} \cdot L = 11{,}3\,mm$

$H = 12\,mm$

Esercizio 8 -



$D_{1\,NEW} \rightarrow (D_1 + S + s)(1 + 0{,}04) = 255{,}33 \approx 256\,mm$

$D_2 \rightarrow (D_2 + S + s)(1 + 0{,}01) = 508{,}3 \approx 509\,mm$

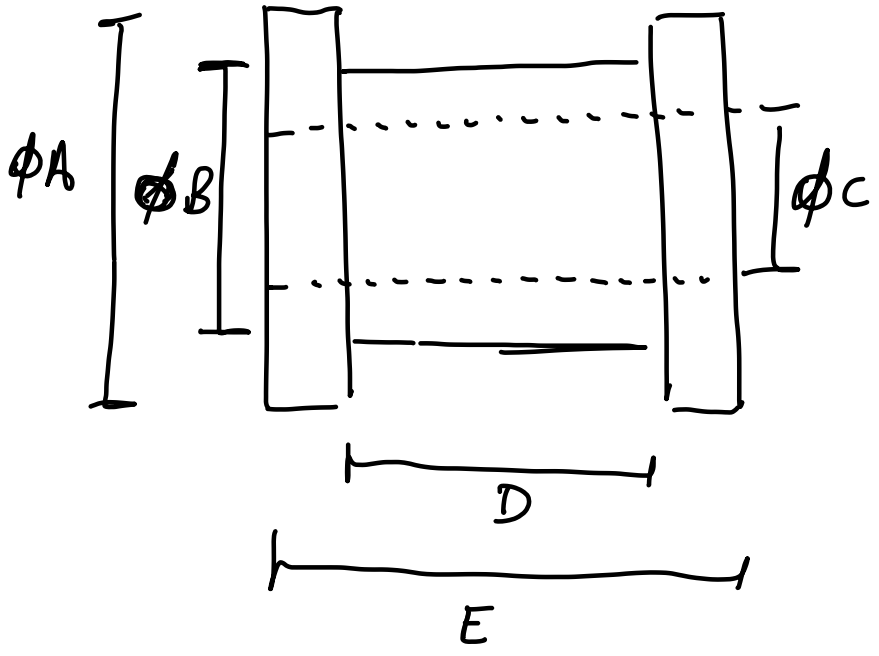
$a \rightarrow (a - s - s)(1 + 0{,}03) = 198{,}97 \approx 198$

Tuteno arrotondi

$b = (b+s+s)(1+0,01) = 508,63 \approx 509$ diminuendo aumenta o metalon mínimo

$c = (c+s+s)(1+0,05) = 912,3 \approx 913mm$

Esercizio 9



$s = 1,5$

$r = 2,5\%$

$A \rightarrow A(1+0,025 = 204,2 \approx 205$

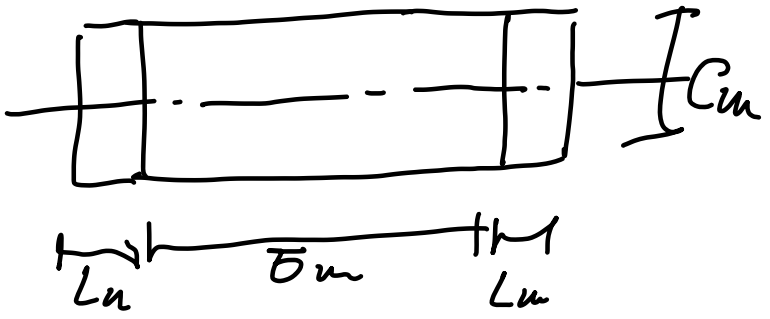
$B \rightarrow B(1+0,021) = 163,36 \approx 164$

$C \rightarrow C(1+0,021) = 122,52 \approx 122$

$D \rightarrow D(+0,021) = 102,5 \approx 102mm$

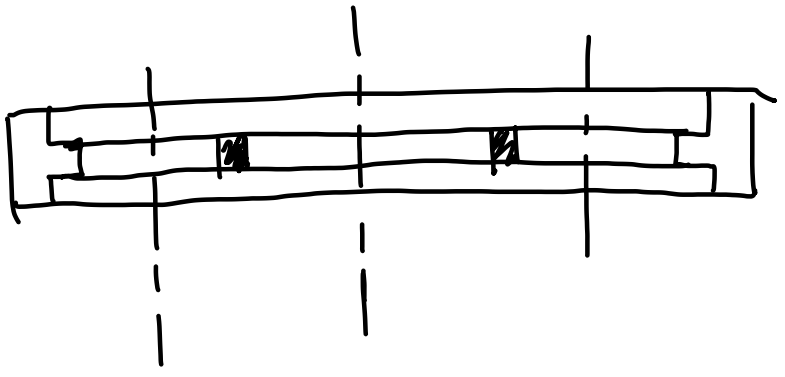
$E \rightarrow (E+s+s)(+0,021) = 146,003 \rightarrow 147$

Anima:



$L_m = \frac{1}{3} E_m = 49$

Esercizio 10



$a_m = (a+s+s)(1+r) = 6084,088 \approx 6085\ mm$

$b_m = (b-s-s)(1+r) = 5566,322 \approx 5565$

$c_m = (C-s-s)(1+r) = 2019,922 \approx 2019$

$d_m = d(1+r) = 2152,625 \approx 2153$

↳ non cambierà con sovrametallo

$e_m = (e-s-s)(1+r) = 1005,922 \approx 1006$

$f_m = (f+s+s)(1+r) = 1019,078 \approx 1020\ mm$

$g_m = (g+s+s)(1+r) = 512,576 = 513$