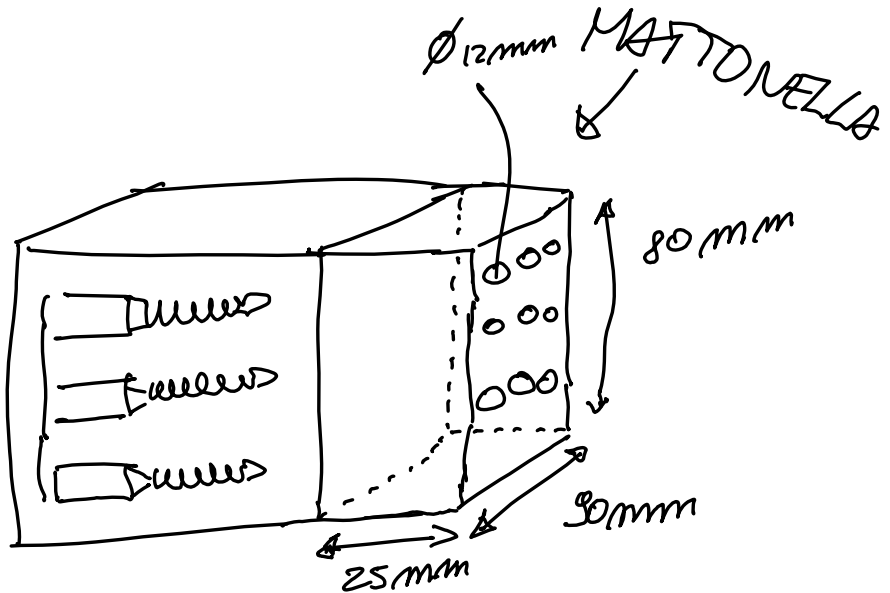




$$1.5 \text{ MW}$$

$$S_{\text{sup}} \sim 7.2 \cdot 10^{-6} \text{ m}^2$$

$$V_{\text{sup}} 2.16 \cdot 10^{-1} \text{ m}^2$$

$$P \sim 6.81 \frac{\text{MW}}{\text{m}^2}$$

$$V_{\text{TOT}} = 5.4 \cdot 10^{-3} \text{ m}^3$$

$$E = \int_0^{2s} P dt \approx 3 \text{ MJ}$$

	$\rho [\text{kg/m}^3]$	$C_p [\text{J/kgK}]$	$k [\text{W/m}^2\text{K}]$
Aisi 316	8000	500	16
Cu	8900	385	400
M _o	10220	250	138

SOL VOLUME

$$\Delta T = \frac{Q}{m c_p}$$

$$\Rightarrow \begin{aligned} \text{AISI} &\sim 140 \text{ K} \\ \text{Cu} &\sim 160 \text{ K} \\ \text{Mo} &\sim 217 \text{ K} \end{aligned}$$

VALUTAZIONE superficiale

Approx solido SEMI-INFINITO

$$T = \frac{2Q}{k} \sqrt{\frac{\alpha t}{\pi}}$$

$Q \rightarrow$ carico termico

$k \rightarrow$ conduttività termica $\left[\frac{\text{W}}{\text{mK}} \right]$

$$\alpha = \frac{k}{\rho c_p} \left[\frac{\text{m}^2}{\text{s}} \right]$$

$$\Delta T|_{t=2s} \begin{cases} \text{AISI} \sim 1000 \text{ K} \\ \text{Cu} \sim 400 \text{ K} \\ \text{Mo} \sim 650 \text{ K} \end{cases}$$