

Projeto Didático: Forno de Indução

Uma abordagem didática baseada na literatura

Rodrigo Nascimento | 4 de fevereiro de 2023

INSTRUMENTAÇÃO PARA O ENSINO DE FÍSICA II



Rodrigo Nascimento

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- PCM, Citation: **becker2008a**

- Bullet point 2

- ...

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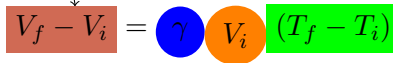
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$$\Delta V = \gamma V_i \Delta T$$

- Dif. de volumes – ΔV


$$V_f - V_i = \gamma V_i (T_f - T_i)$$

- Propriedade do material – γ
- Volume inicial – V_i
- Diferença de temperaturas – ΔT

$$V_f = V_i [1 + \gamma (T_f - T_i)]$$

Section 1

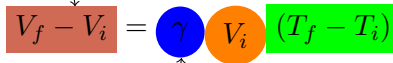
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$$\Delta V = \gamma V_i \Delta T$$

- Dif. de volumes – ΔV



The diagram shows the equation $V_f - V_i = \gamma V_i (T_f - T_i)$. The terms are color-coded: $V_f - V_i$ is in a red box, γ is in a blue circle, V_i is in an orange circle, and $(T_f - T_i)$ is in a green box. An arrow points from the text 'Dif. de volumes – ΔV ' to the red box. Another arrow points from the text 'Propriedade do material – γ ' to the blue circle.

$$V_f - V_i = \gamma V_i (T_f - T_i)$$

- Propriedade do material – γ
- Volume inicial – V_i
- Diferença de temperaturas – ΔT

$$V_f = V_i [1 + \gamma (T_f - T_i)]$$

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$$\Delta V = \gamma V_i \Delta T$$

- Dif. de volumes – ΔV



The diagram shows the equation $V_f - V_i = \gamma V_i (T_f - T_i)$ with color-coded components and arrows. A red box contains $V_f - V_i$, with an arrow pointing from the text 'Dif. de volumes' to it. A blue circle contains γ , with an arrow pointing from the text 'Propriedade do material' to it. An orange circle contains V_i , with an arrow pointing from the text 'Volume inicial' to it. A green box contains $(T_f - T_i)$, with an arrow pointing from the text 'Diferença de temperaturas' to it.

$$V_f - V_i = \gamma V_i (T_f - T_i)$$

- Propriedade do material – γ
- Volume inicial – V_i
- Diferença de temperaturas – ΔT

$$V_f = V_i [1 + \gamma (T_f - T_i)]$$

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$$\Delta V = \gamma V_i \Delta T$$

- Dif. de volumes – ΔV


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The diagram shows the equation $V_f - V_i = \gamma V_i (T_f - T_i)$ with color-coded components: $V_f - V_i$ is in a red box, γ is in a blue circle, V_i is in an orange circle, and $(T_f - T_i)$ is in a green box. Arrows point from the list items below to these components: from 'Dif. de volumes' to the red box, from 'Propriedade do material' to the blue circle, from 'Volume inicial' to the orange circle, and from 'Diferença de temperaturas' to the green box.

- Propriedade do material – γ
- Volume inicial – V_i
- Diferença de temperaturas – ΔT

$$V_f = V_i [1 + \gamma (T_f - T_i)]$$

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$$\Delta V = \gamma V_i \Delta T$$

- Dif. de volumes – ΔV


$$V_f - V_i = \gamma V_i (T_f - T_i)$$

The diagram shows the equation $V_f - V_i = \gamma V_i (T_f - T_i)$ with color-coded components: $V_f - V_i$ is in a red box, γ is in a blue circle, V_i is in an orange circle, and $(T_f - T_i)$ is in a green box. Arrows point from the list items below to these components: from 'Dif. de volumes' to the red box, from 'Propriedade do material' to the blue circle, from 'Volume inicial' to the orange circle, and from 'Diferença de temperaturas' to the green box.

- Propriedade do material – γ
- Volume inicial – V_i
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$$V_f = V_i [1 + \gamma (T_f - T_i)]$$

