



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH
Escola Superior d'Enginyeries Industrial,
Aeroespacial i Audiovisual de Terrassa

CFD studies and experimental validation of the convective heat transfer coefficients in non fully developed flows. Application to conventional geometries used in particle accelerators.

Document:

Budget

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BACHELOR FINAL THESIS

Budget

The estimated budget of the project is the following:

Item	Quantity	Frequency	Unit Cost	Total Cost
Personnel	people	hours	euro/hour	euro
Project Coordinator	1	60	30 (1)	1800
TFG Directors	2	20	20 (7)	800
Engineering Technician	1	60	15	900
Engineering Intern	1	500	6	3000
Intern	1	20	5	100
Subtotal				6600
Equipment and software	unit or licence	months	euro/year	euro
Desktop computer	1	3	160 (8)	40
Laptop	1	4	275 (8)	91,67
ANSYS Workbench	1	3	30000 (2)	7500
Microsoft Office	1	3	425 (4)	106,25
Experimental setup	1	3	20 (6)	5
Subtotal				7742,92
Energetic consumption	kWh/h	hours	euro/kWh	euro
Desktop computer	0,3 (3)	500	0,145 (5)	14,5
Laptop	0,2 (3)	160	0,145	4,64
Subtotal				19,14
Total				14362 €

Table 1: Project development Budget

For the price of the computers and the experimental components, amortisation values of 20% and 10% respectively, have been used on the estimated original prices.

The cost of the experimental setup was around 22000 euro but has already been amortised by ALBA, so it is not depicted in the table. The specified price in the budget is an approximation of the cost of the components that have been bought for the project.

References

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