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Flow measurements on a low speed wind tunnel DIANA GARCIA, ROBERTO MARTINEZ, Universidad Nacional de Colombia — The design and performance of a wind tunnel are tested with its characterization, that implies a detailed study of the pressure losses and the velocity profiles, which will provide knowledge of the behaviour of the flow in the tunnel. Among the results achieved, it was obtained a maximum velocity of 72 Km/h in the test section, also it was determined that its essential to implement various improvements in the design of the tunnel. It is found through the present that it is not possible to calculate the net loss in the tunnel. However, having into an account experimental parameters of the construction of the tunnel one can estimate a percentage of loss flow comparing it to the one calculated in the test section. It must also be mentioned that the losses found relative to the test section and the diffuser are negligible compared to the one relative to the contractor. This suggest a number of improvements in the design of the tunnel, mainly in the joints between sections.

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