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VARIATIONAL ANALYSIS OF AN ELASTIC
PROBLEM INVOLVING TRESCA FRICTION LAW

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Abstract. This paper deals with the study of a quasistatic problem modelling the contact between an elastic body and a rigid foundation. The friction law considered here is the Tresca friction law. The paper presents two variational formulations of the problem followed by existence and uniqueness results. The link between the solutions of the previous variational problems is also studied, together with their mechanical interpretation.