In this thesis we study the possibilities of designing an application to design a production line for bending of profile sheet. We discuss step by step the process of profile design, flower pattern, production line benches and the rollers, that will shape the metal sheet into the final form. We discuss the algorithms used to create different types of points placed in the contour of roller to improve the production of metal profile. As result of our work software was developed, which is able to fully support the whole process of production and it is used in practice.