In this thesis, we design measures to quantify capabilities and complexity of various translation models. We strive to describe properties of translation models in general, without regards to inner workings of the given translation model. On extreme cases, we determine empirical limits of translation models with regard to the designed measures and also prove usability of the measures with real translation models. The aim of this thesis is to give an idea of which translation models have naturally easier work to do, while keeping good quality of translation. The emphasis is put on choice of the basic language unit into which the translation model tries to decompose the input text.