

## The Story of TolPro

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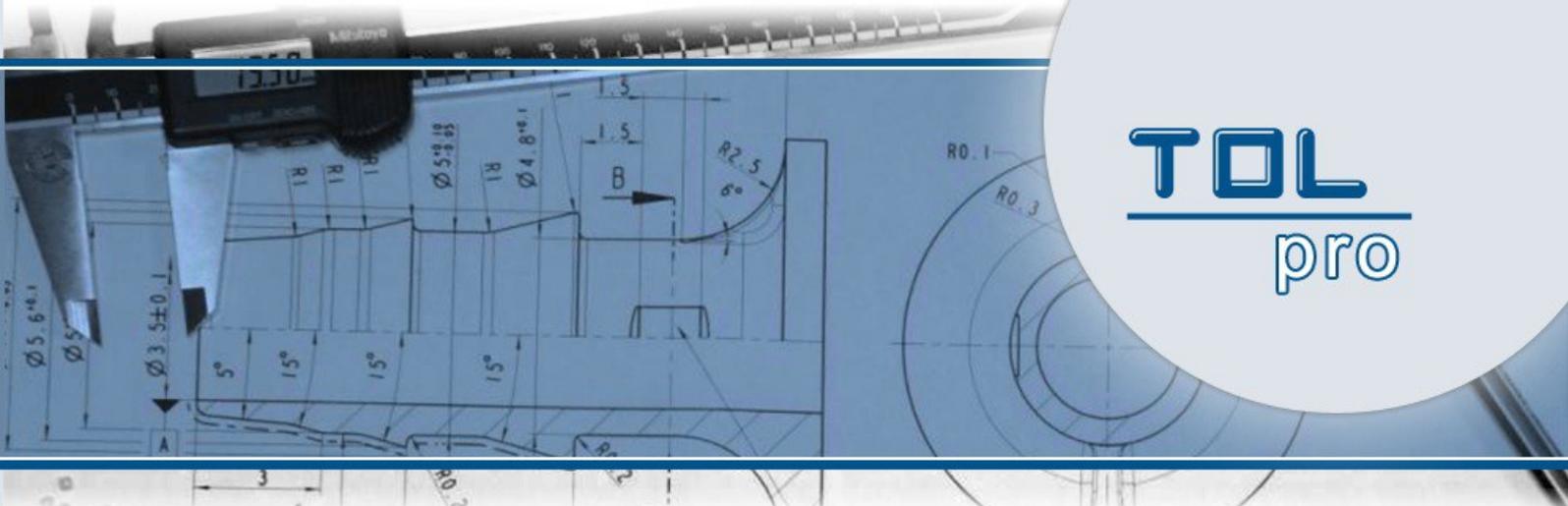
Between the years 1986 and 1995 of my professional career as a process engineer, narrow drawing tolerances have always bothered me.

Many designers, who did not study plastics and are too inexperienced, make mistakes in this area of operation. Being a process engineer, I have received many molding tools for the purpose of examining and sampling in the past. After measuring the molded parts, I have often come to the conclusion that the tolerances were too narrow.

Thus, I had to inform and report through my sampling reports that the tolerance necessary could not be provided. Over and over again, I had observed heated debates and discussions between executives, producers, developers, quality managers and customers due to the non-realization of tolerances that were desired initially.

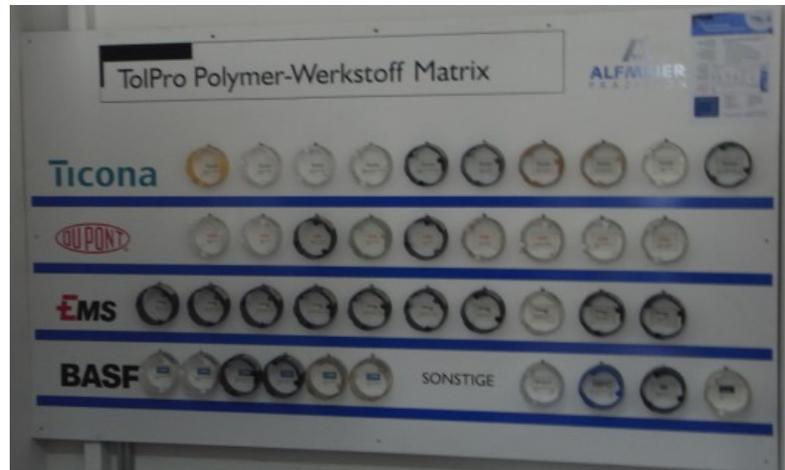
Project managers had to postpone due dates – due to tool offsets, process/machine changes, extension of tolerances, drawing revisions, remeasurements and resampling of tools. Because of these unnecessary processes, the relationship between the customers and the company was ultimately affected in a negative fashion.

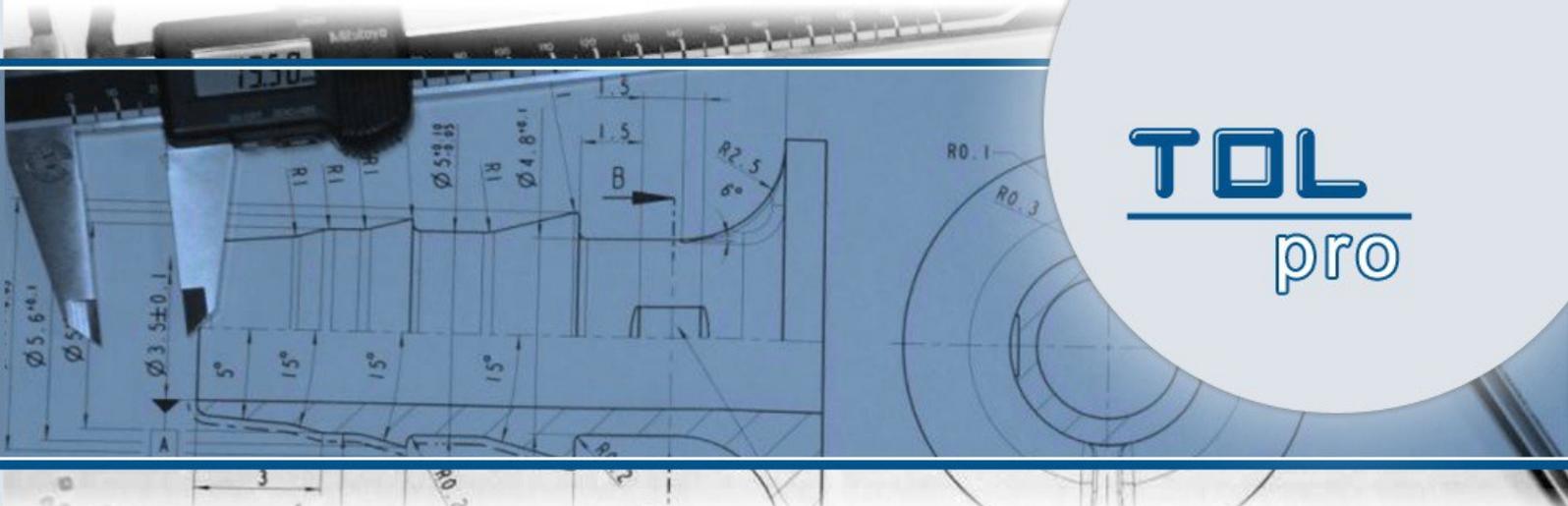
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In early 1995, I have decided to write a tolerance program which aimed at fixing the above-mentioned issues. For the first time with TOLPRO 1.0, a software program quickly providing information on the maintaining of drawing tolerances upon submitting necessary data was introduced. The software was presented to Prof. Dr. Georg Menges who instantly recognized the importance and the value of the program and recommended it to the KI-Verlag (publishing company). The KI-Verlag got the program tested by another publishing house “Kunststoffe” in 1996. Unfortunately, KI-Verlag refused to introduce my program to the market.

Not having given up, I have written, produced and managed to release the first TolPro software in the year 2001 in close cooperation with the Steinbeis Transfer Center, Professor Peter Wittenbeck, Ticona, BASF, EMS, Du Pont and others. Shortly thereafter, a TolPro article in the prestigious magazine "Kunststoffe" was published and the product was very well received. At my current company "Alfmeier Group", the initial degree of acceptance amongst some developers could have been classified as rather reluctant. After presenting and assessing the advantages, benefits and savings involved, I have convinced everyone at the company of the necessity of TolPro – all the way from employees up to the CEO.





One of the primary premises contributing tremendously to the development of TolPro was and is the lack of diligence when it comes to processing, since this in turn can affect the performance of polymer materials in severe ways. That is why TolPro, as a tool for tolerance prediction and orientation, is constituted in the way most convenient and up to the highest standards of propriety. The tolerances presented in the program are primarily those which are based on years and years of work and gathering and approving of internal information or are based on the results generated by the tolerance calculation.

TolPro got implemented into our PROSA-system and the part drawings at the Alfmeier Company are not allowed to be released without passing the TolPro check first.

As part of the joint venture formed with the company Redlingshöfer Software GmbH, Version 4 of TolPro got newly conceptualized, developed and enhanced by incorporating web-based technologies at the end of 2012.

The new reliable, intuitive and cost-effective TolPro 4.0 (Update) with ten new additional materials will be available on the market beginning 2013. Demo versions are already available at [www.tol-pro.de](http://www.tol-pro.de). The Redlingshöfer Software GmbH will play a pivotal role in further developments of TolPro and will publish the software in the future.

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