S.C. Milestone S.R.L. Câmpina
Tel.: +(40) 726 250 216
Email: office@toc.ro

OfeFor

Technical and commercial overview

Forged product configurator and quotation process automation

Technical quotations linked to manufacturing preparation

OfeFor supports forged component manufacturers in preparing commercial quotations and defining the manufacturing data needed for production. The application brings customer data, product characteristics, dimensional calculations, and prices together in a shared working system.

Starting from product requirements, users determine intermediate dimensions, weights, and material requirements, calculate prices by manufacturing stage, and prepare the quotation. If it becomes an order, the information already entered can be used for production release and export to other applications.

Benefits for quotation preparation

Capability	Customer value
Automated technical calculations	Reduces quotation preparation time and repetitive calculations.
Centralised data	Provides rapid access to commercial and technical quotation information.
Data validation	Reduces data entry errors and supports information accuracy.
Information reuse	Limits repeated entry of the same data during quotation preparation and production.
History and traceability	Enables entered data to be tracked and responsibilities to be identified.

The solution addresses commercial and technical activities involved in quoting forged products and preparing their release to manufacturing.

Preparing quotations and defining products

The process starts by opening a quotation and entering general information. Multiple products can be included in one quotation, each with the information needed for calculations and manufacturing.

Commercial information

The quotation brings together the customer, date, requested quantity, delivery dates and terms, discounts, and other information needed to issue the commercial document.

Technical information

For each product, users enter the material grade, name, drawing number, and dimensional data needed to calculate rough-machining and forging allowances. Dimensional descriptions can be generated automatically.

Product codes can be generated automatically. Unique identification by dimensions and material supports consistent product records and reduces the risk of defining the same configuration repeatedly.

Manufacturing operations

The manufacturing structure can include cutting, forging, rough machining, heat treatment, and machining. Materials and operations defined during quotation preparation form the basis of the production routing.

Managing customer-specified dimensions

The application calculates rough-machining and forging dimensions. Where these are specified by the customer, users can enter them manually so that the quoted configuration meets specific requirements.

Identifying similar quotations

When a product is entered, the application can warn of an earlier quotation with the same finished dimensions. Users can consult existing information before proceeding.

This check provides a reference for analysing recurring requests and helps reuse information accumulated in commercial and technical activities.

Technical calculations and pricing

OfeFor links commercial calculations to product manufacturing data. Intermediate results support pricing based on the manufacturing configuration, material, and relevant production stages.

Results of technical calculations

Result	Use in quotation preparation and manufacturing
Rough-machining and forging dimensions	Determining intermediate dimensions or using customer-specified values.
Manufacturing allowances	Calculating rough-machining and forging allowances and the manufacturing allowance coefficient.
Weights by stage	Determining finished, rough-machined, forged, and cut weights.
Material length	Determining the material length needed for cutting.
Product identification	Linking dimensions and material to a product code.

Prices by manufacturing stage

Prices are calculated by manufacturing stage. The original quotation documentation identifies forging, rough-machining, heat-treatment, and quotation prices separately.

Stage-level breakdowns help users follow price formation and link the quoted value to the operations required to manufacture the product.

Versioned price tables

The application supports versioned price tables. This organises changes to rates used in quotations and provides context when reviewing quotations prepared at different times.

Generated documents

Entered and calculated information is used to generate the commercial quotation, reports, and files required by the process. Production routing includes the materials and operations defined for the product.

Quotation management and production release

A shared base for all quotations

Quotations are stored centrally in the database. Searching by different criteria and duplicating quotations simplifies the preparation of similar requests. Reports and statistics support monitoring of quotation activities.

Depending on quotation status, users enter additional information such as conversion to an order and delivery dates. The quotation can therefore be tracked throughout its commercial progress.

Attachments and traceability

Unstructured documents can be attached to a quotation. They are associated with its file alongside the data used to prepare it.

Auditing records the user who creates a record and the user who last modifies it. Centralised information and modification tracking support the traceability of entered data.

Full or partial production release

A quotation can be released to manufacturing in full or in part. The system retains the link to the original quotation, supports re-release, and, where necessary, issues a product traveller.

Transfer to the customer’s information system

Data entered during quotation preparation already defines the materials and operations required for manufacturing. Reusing it at release reduces re-entry effort and the risk of differences between the quoted configuration and the one sent to production.

Production releases can be exported for import into the customer’s information system. The original documentation explicitly mentions PriTo as an example of an application receiving manufacturing data.

For each implementation, the export structure and data import rules are defined according to the receiving application and customer requirements.

Architecture and operation

The architecture described in the original technical proposal is client-server, with a Windows application and SQL Server database. The technical configuration for a new implementation is defined during analysis.

Component	Described technology
User interface	Rich-client Windows application.
Database	Microsoft SQL Server.
Reports	Crystal Reports.
Use	Simultaneous access for multiple users.
Working at a distance	VPN connection to the database server.

Access control

User access is authorised by application function. Rights can be organised according to the activities users need to perform.

Data integrity

Database operations are encapsulated in transactions. This supports consistent execution of data-changing operations. Application validation aims to maintain the accuracy and integrity of entered information.

Record auditing

Audit data identifies the record creator and the user who last modified it. This information provides a reference for checking responsibilities in application use.

Remote access and administration

Remote working is provided through a VPN with access to the database server. The original solution aims to keep network bandwidth consumption low and simplify installation and updates.

Access arrangements, available infrastructure, and connectivity conditions are clarified before installation according to the customer’s working environment.