



# destra

Process Optimization

# Statistical Software

destra - Process Optimization

MABICO Solutions

Statistical Analysis of Variance

Regression Analysis

Six Sigma

ANOVA

DoE

**destra**  
Process Optimization



## Introduction

With **destra** process improvement - the deliberate optimization of existing **destra** process situations - can be brought to its pinnacle. **destra** offers a multitude of statistical studies from complex tests examining the correlation of processes to more simple Shainin methods so that the statistical significance of the data can be understood in its proper context. With a software design that is user intuitive, easily navigable and graphically **destra** engaging, **destra** will support the statistical layperson as well as the expert in identifying and implementing the most relevant tests.

## Reliability Study

Reliability analyses are a helpful tool for testing whether a product meets its **destra** requirements under assumed conditions over a certain period of time. **destra** enables the user to plan life span studies, evaluate data collected during the trial and display the results graphically.

### Studies include:

- End-of-Life tests
- Censored tests (Type I and Type II as well as mixed models)
- Sudden-Death tests
- Eckel procedure for field failure
- Success Run tests



[www.mabico.it](http://www.mabico.it)



## Design of Experiments

Design of Experiments is a tool used to examine cause - effect correlations between influence parameters and target values as well as for the optimization of products and processes.

The **destra** module provides structured data acquisition capabilities to facilitate these studies.

Intuitive user guidance

Easy to understand graphical results

Process Optimization with multiple target values

## Variance / Regression Analysis

Variance and regression is analyzed using mathematical models showing cause-effect correlations between influence parameters and target values. With the help of a clear graphical interface, the user can select model coefficients with a **destra** mouse clic

Immediately viewable model designing

Multiple Variance Analysis designs

Formula editor to navigate and choose appropriate design possibilities

Ability to create processes with mixed effects, hierarchically nested models, and unbalanced data

Visually enhanced diagnostics

Traditional approaches such as Cook Distances, Leverage Values, and Residues



## Machine and Process Capability / QCC

Machine capability studies provide verification that each machine continues to be capable of producing the specified product characteristics with the required accuracy.

After process run-off, additional parts are measured to be used for a preliminary process capability study. For process evaluation over an extended period, process results are visually displayed using distribution time models. In turn, these will be used to calculate short and long term capabilities and to later select appropriate Quality Control Charts.

Determination of distribution time models using Six Sigma evaluation methods  
Quality Control Charts to evaluate the stability of specific characteristics  
Evaluation of results using configurable, tabular views

## Scope of the System

**destra** offers various procedures and methods to establish the capability of any **destra** given inspection process based on its intended purpose. Included in **destra** are various measurement system capability studies which take into account different interference factors depending on the procedure.

### The basic capability studies are:

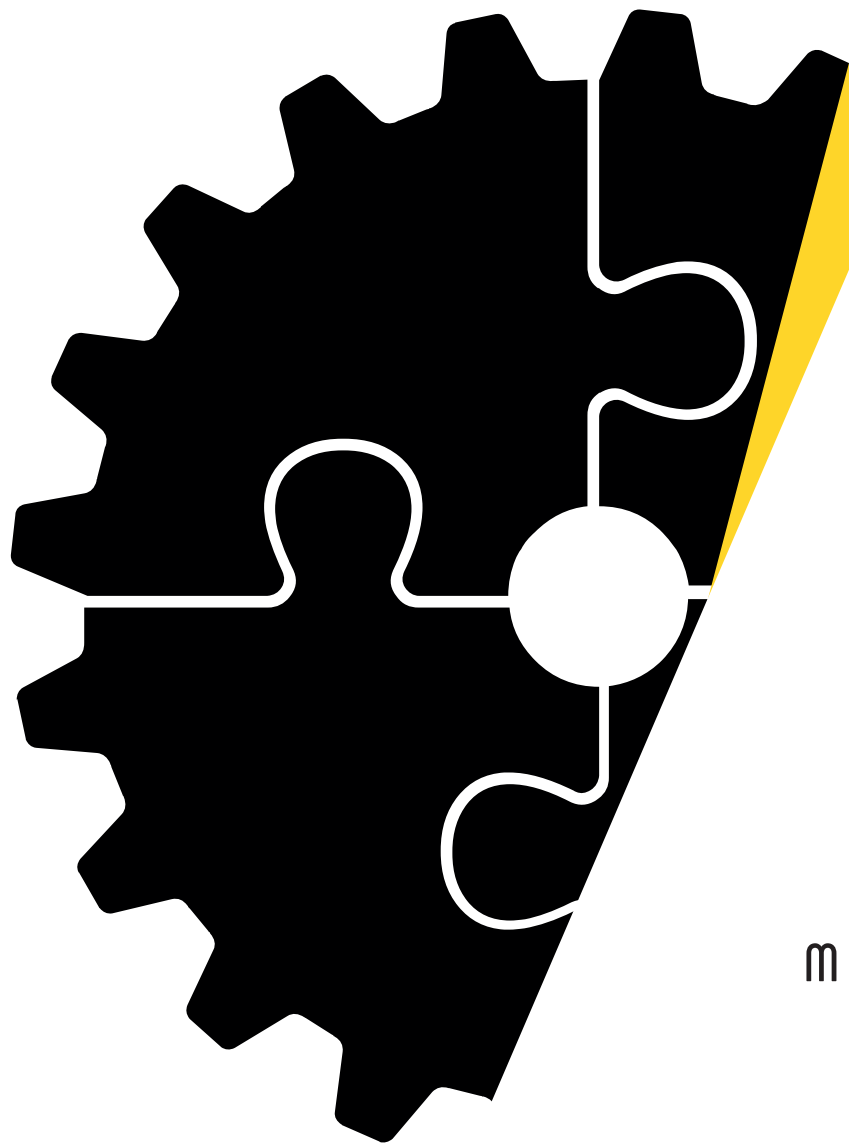
Gage Resolution: %RE

Type-1 Study: Cg, Cgk, Bias, Linearity

Type-2 Study: %GR&

Type-3 Study: %GR&R for Automatic Gauges

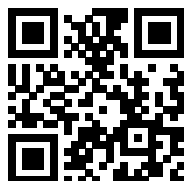




QUALITY  
MANAGEMENT  
SYSTEM



MABICO SRL  
25025 - Manerbio (BS)  
Via Cremona 10/12 Europalace  
T: +39 030 9382176



mabico@mabico.it  
www.mabico.it