

# Factsheet: Vibratory grinding

## Process and application

Vibratory or centrifugal grinding (also known as trowalising) provides our customers with a very efficient and cost-effective option for edge and surface finishing. In addition to removing burrs and edges, it is also possible to create matt or shiny surfaces, remove dirt particles and oils and provide a certain degree of corrosion protection.

Springfix has an exceptional know-how and prefers to work with equipment, products and engineering from Rösler Surface Technology, the world market leader in vibratory grinding technology.

## Principle

The workpieces to be processed are filled as bulk material into a container with abrasive bodies (so-called chips). An oscillating and/or rotating movement of the working container creates a relative movement between the workpiece and the abrasive particles, which causes material removal on the workpiece, especially on its edges. Process liquid, which is added to the mixture in doses during the machining process, removes abrasion, oils and contamination and feeds this to the water treatment system.



Exemplary illustration of the vibratory grinding of various components

## Process-related, immanent and technical limits of the procedure that must be respected by the client

As with any technical process, there are certain limits and influences that cannot be absolutely eliminated technically. In order to be able to communicate openly here and to meet the customer's expectations, we list the most common error scenarios here:

- Only suitable to a limited extent for large and thin or heavy parts (damage due to dynamic stress or collisions)
- Possible occurrence of imperfections (minor defects) on the edges
- Possible sticking of chips in openings
- No absolute process reliability when separating parts and chips (chips in the delivered goods)
- Higher cleanliness requirements necessitate subsequent cleaning

*See pictures on the following page*

