

# BLANCHARD SURFACE & PRECISION GRINDING

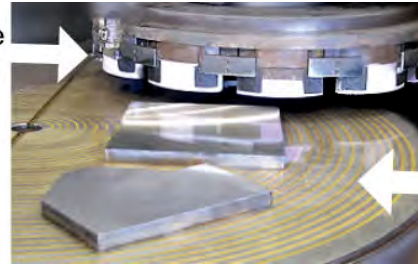
## What is Grinding?

Grinding is a cutting application that is designed to trim and shear away any unwanted sections of a material that will not be apart of the final product. For this reason, grinding generally gets categorized as part of a finishing process by removing material with abrasion. Grinding overall is used to improve the surface quality by using an abrasive action to hone metal parts and components to an exact specification. The general purpose of grinding primarily focuses more on giving a clean and even surface. The three most common machines that are used to complete a grinding process are blanchard grinding, surface grinding, and precision grinding. All in which have the same concept, but different finishes.

## What is Blanchard Grinding?

Blanchard grinding consists of a wheel that is mounted on the machine, as holders are holding the workpiece in place. Blanchard grinding often leaves a distinctive pattern on the side of the work piece that was ground. This process works best for larger workpieces that needs an excessive amount of material removed. This type of machine doesn't allow the finished component to have a precise finishing surface. Typically, a machine shop that would use a blanchard grinding machine would need to have a flexible tolerance of over .001in.

Abrasive Product



Work-piece magnetizes to working wheel



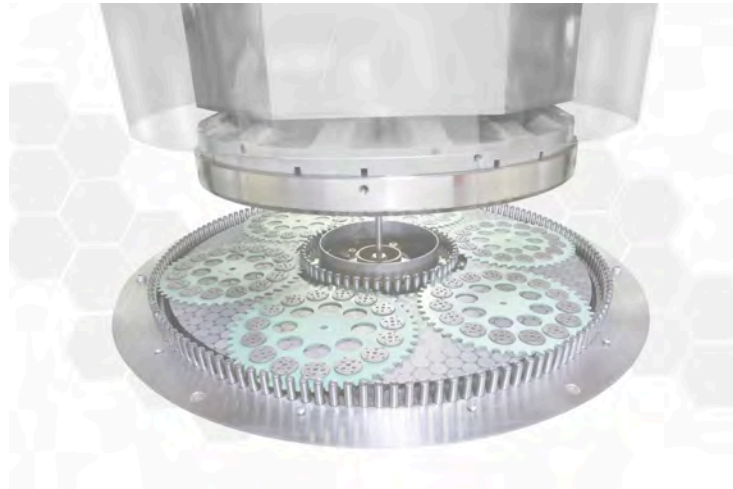
## What is Surface Grinding?

Surface grinding consists of a spinning wheel covered in rough particles that gets lowered onto the workpiece and moves in a front to back motion on the workpiece. This can remove metallic and non-metallic substances from materials. Typically, the table is controlled by magnetic material that's being finished. While there are several ways to have the spindle set up on this machine to finish different types of workpieces to achieve its goals, it is generally a multi-step process. Commonly, the three different ways the spindle can be positioned are horizontally, vertically and then a single- or double-disc plate that would have both a vertical and horizontal spindle. Surface grinding requiring multiple steps often results in needing a polishing application when complete.



# What is Precision Grinding?

Precision grinding is a process of removing material by grinding it down to a specification by using a wheel with abrasive bonded onto it. It produces a smooth unmarked surface when completed while replicating the most specific and minute of measurements down to the finest fractions. You can precision grind a diverse amount of shapes and materials. Precision grinding achieves levels of accuracy that blanchard grinding, or surface grinding can't. Precision grinding allows more flexibility and variety of materials you are capable of resurfacing.



## Why Choose Stahli?

Stahli has been resurfacing component products for over 50 years and has created the latest developments in achieving finishes no other machine manufacturer can match. While we offer single sided and double-sided precision grinding machines, we were the first to develop a generation changing machine that consists of three-wheels. Our machines can be customized to satisfy a wide range of materials in all different sizes. Our latest development of creating an automated three-wheel machine has generated cost saving features and through-put rates that can't be matched.

At Stahli, we go above and beyond to make sure all our customers are satisfied from inquiry to delivery. While purchasing isn't an option for everyone, we also have a production showroom to run your workpieces in house. With our seasoned professional machinists, you will be thrilled to see the results we can offer you in our ISO 9001:2015 certified production showroom. Let us take the weight off your hands and help assist in creating the process that is right for you. Your challenge is our specialty!

