

# / BACKGROUND TO THE PRODUCTS //

## **VOLLMER** machines are true grinders

With its portfolio of grinding and erosion machines and machine tools for rotary tools, circular saws and metal-cutting band saws, Vollmer Werke Maschinenfabrik GmbH has been a global leader in technology for several decades. The provider of technology and services is supplementing its comprehensive range of machinery for the woodworking and metalworking industries with tailored services for training, maintenance, care and financing. These are an integral part of the VOLLMER machine portfolio. The digital exchange of data between VOLLMER machines also makes IoT (Internet of Things) and Industry 4.0 applications possible.

Whether you need to sharpen a woodworking or metalworking tool, you will always find the sharpening machine you are looking for in VOLLMER's product portfolio. This medium-sized company develops state-of-the-art erosion machines for PCD tools (polycrystalline diamond), grinding machines for carbide tools, metal-cutting band saw blades and circular saw blades manufactured from carbide (carbide-tipped) or high-speed steel (HSS). VOLLMER is a solution provider and partner to tool manufacturers, sharpening services, furniture makers, saw mills and the production industry.

"Our Development department engineers innovative solutions that can be used to great effect both from a technological and economical perspective," says Dr Stefan Brand, CEO of the VOLLMER Group. "Our international presence means that we are available to provide our customers with help and support at a local level, and that we can ensure a high level of machine availability thanks to fast service-engineer deployment times and preventative maintenance work."

#### Service and support for sharpening services

VOLLMER is a technology and service company that has more to offer than just high-performance sharpening machines: It also offers its customers a range of advice and services. The company is bringing together its range of services to form an integral part of the VOLLMER machine portfolio. The services start with business analysis and consultation, and also cover the reorganisation of operating sequences and service concepts, as well as individual financing and insurance models.



Customers can take advantage of financing concepts, such as leasing, hire-purchase financing or credit financing. For sharpening machines, VOLLMER offers inspections and maintenance with easy access to VOLLMER engineers, teleservice agreements, remote advice by telephone, on-site servicing and express delivery of spare parts. Highly qualified trainers offer a broad programme of training options. Regular updates and individual software packages round off VOLLMER's range of services.

#### Perfect face and back grinding for the circular saw

VOLLMER technologies, ranging from manual sharpening machines to handling systems for fully automated complete machining, ensure that carbide-tipped circular saw blades are ground to your requirements. For example, the CHD-series sharpening machines have CNC-controlled axes with multi-processor technology and integrated software programs. CHD machines fulfil all the requirements for grinding even complicated tooth geometries in a single cycle on faces and backs. To achieve high productivity with circular saw blades, perfect face and back grinding is required. In conjunction with an intelligent robot system and a number of loading carriages, saw blades can be completely machined around the clock.

Even greater precision is attained with the CM series. The fully automated CM 200 and CMF 200 sharpening machines can be used to sharpen carbide-tipped circularsaw teeth on tooth faces and tooth tops, as well as sides. Nine CNC-controlled axes ensure precision on both machines. It goes without saying that the sharpening processes they perform each take place in a single set-up. The CM series allows for precise grinding of high-quality thin-kerf circular saws and cermet circular saws, which possess high hardness and stiffness properties that afford long service life in metal machining.

#### Sharpening service for the cutting edge

Sharpening centres for carbide-tipped and high-speed steel circular saw blades are able to perform fully automated complete machining of up to 650 saw blades. VOLLMER has special sharpening and soldering machines for repairing circular saw blades. Flexible universal tool-grinding machines undertake a large number of sharpening tasks that must be performed on a daily basis.

VOLLMER sharpening machines are user-friendly, have intelligent software programs to facilitate rapid data input, and boast high safety standards with all functions. These benefits can also be found in the machinery for machining high-



speed steel saw blades. In addition, VOLLMER has developed a range of machinery for sharpening carbide-tipped band saw blades for metal machining.

#### The right grinding for tool production

Metals and lightweight materials are essential in many industry sectors, such as the automotive construction and aerospace industries. These materials, as well as highly abrasive laminates and other materials in the woodworking industry, can only be machined economically by particularly high-performance, high-precision tools. The tools used for this machining are manufactured from carbide or PCD blanks, or are equipped with PCD cutting edges. VOLLMER offers sharpening machines that are controlled accordingly by CNC technology for all tool types. The VGrind 360 grinding machine for carbide tools is VOLLMER's offering in the tool grinding sector. Its groundbreaking kinematics allow tool manufacturers to produce a variety of milling and drilling tools precisely and quickly with the VGrind 360.

#### PCD-tipped tools are eroded

For machining PCD tools, VOLLMER's portfolio includes wire and disc erosion machines, such as the VPulse 500 and QXD 250, which are lightweight and easy to operate. With the unique Vollmer operating concept, you can carry out complex machining tasks quickly, safely and reliably after just a short period of training. The clear VOLLMER symbols allow for intuitive programming. In addition, the modular ExLevel PRO software package offers tool manufacturers greater versatility and flexibility than ever before when using the QXD 250 erosion machine. The external software permits hybrid sharpening (eroding and grinding) of cylindrical slugs with sintered or soldered-in PCD to produce drills, mills and reamers.

### Connecting sharpening machines using V@dison

Based on a bottom-up strategy, VOLLMER is developing IoT solutions as part of the V@dison initiative. The aim is to make it possible to exchange data between sharpening machines and different Industry 4.0 platforms. VOLLMER has already developed the IoT gateway for this purpose in order to visualise and process data from VOLLMER machines. VOLLMER offers its customers, such as tool manufacturers and sharpening specialists, a gradual and practical introduction to the topic of Industry 4.0.

"Our 100 employees in the Technology department work intensively on developing new processes, technologies and applications – particularly when it comes to



Industry 4.0 – in order to consistently provide our customers with the best grinding and erosion quality," states Dr Stefan Brand. "We invest eight to ten per cent of our turnover annually in research and development as a whole."

(Approx. 7400 characters)

#### About the VOLLMER Group

With its comprehensive range of machinery, the VOLLMER Group – which has sites in Germany, Austria, Great Britain, France, Italy, Poland, Spain, Sweden, the USA, Brazil, Japan, China, South Korea, India and Russia – enjoys global success as a tool machining specialist in terms of both production and service. The technological leader's range of products contains the most advanced grinding, erosion and machine tools for rotary tools and circular saws in the woodworking and metalworking industries, as well as for metal-cutting band saws. In offering this, VOLLMER relies heavily on the company's tradition and its strengths: Local contacts for efficient communication channels, quick decisions and rapid action by a family-run company. The VOLLMER Group currently employs approximately 800 workers worldwide, with around 580 of these at the main headquarters in Biberach alone, including more than 75 trainees. The company invests around eight to ten percent of its turnover in the research and development of new technologies and products. As a provider of technology and services, the VOLLMER Group is a reliable partner to its customers.

Further information and relevant images are available at: https://www.vollmer-group.com/en/company/press/press-releases

Link to VOLLMER's Facebook fan page: https://www.facebook.com/vollmergroup

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