

supfina



曲轴

Crankshafts

LCM
Crank



supfina
LCM
Crank



“Supfina LCM Crank专为中小型规模的曲轴批量抛光而设计。它不仅功能全面，而且经济高效。”

专为曲轴抛光设计

Designed for Crankshafts

“The Supfina LCM Crank is designed specifically to machine crankshafts in small and medium lot sizes. It’s not only versatile, it’s cost-effective.”



德国索菲纳LCM Crank系列曲轴抛光机，是对用于大批量生产的CenPro和CenFlex系列的进一步完善补充。该系列换型快，能够满足多种不同工件的需求。

对于需要对曲轴关键部位进行表面加工（如主轴颈、连杆颈、止推面和油封等）的用户，该系列是进行中小型规模批量生产的最佳选择。

因为LCM Crank系列可以针对不同加工任务，轻松配备相应的加工模块。它最多可同时连接6个抛光附件（可以是永久安装、手动可调或数控型的），包括油石或砂带抛光单元，去毛刺装置和抛光装置。

LCM Crank 采用最新技术，其模块化体系能够满足汽车制造商及其供应商对加工质量和稳定性的迫切要求。

The Supfina LCM Crank was developed to complement the high-production CenPro and the CenFlex series crankshaft finishing machine and can be quickly changed over to accommodate a variety of workpieces.

It's also the perfect machine for those who want to superfinish critical crankshaft surfaces (for example, main, connecting rod, thrust bearings, and oil seal) in small to medium volumes.

That's because the LCM Crank can be conveniently equipped with the right finishing modules for each machining task. Up to six Supfina attachments (either permanently mounted, manually adjustable, or numerically controlled) can be used simultaneously, including stone- and tape-finishing units as well as deburring and polishing devices.

Equipped with the latest machine technology, the LCM Crank's modular system meets the quality and process reliability needs demanded by the automotive industry and its suppliers.

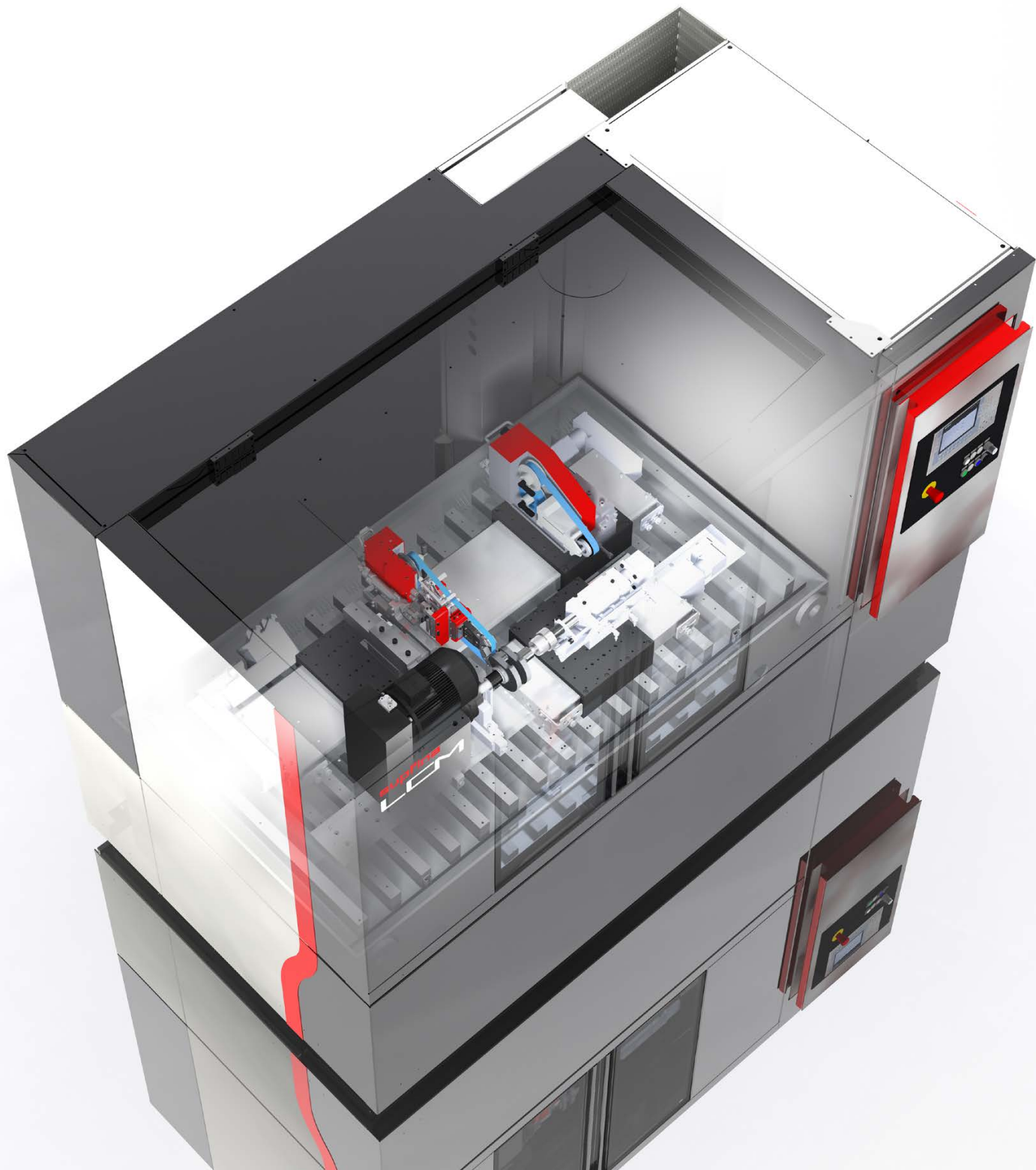
精抛光工艺

经济高效、功能全面、模块化

Superfinishing

Cost-effective, versatile, modular





supfina LCM Crank

工件长度 Workpiece length	最大 500mm max. 500 mm
工件摆动直径 Workpiece diameter swing	最大 160mm max. 160 mm
上止点到下止点距离 Stroke of the connecting rod bearing, upper to lower	最大 80mm max. 80 mm
主轴颈和连杆轴颈最大直径 Maximum bearing dimensions of the main and connecting rod bearing	最大直径 Ø 60mm, 最大宽度则取决于轴颈直径和硬度 max. Ø 60 mm, maximum width dependent on the diameter and hardness of the bearing
最小开槽宽度 Minimum groove width	最小 14mm min. 14 mm
抛光刀具 Superfinishing tools	砂带; 其他工件也可采用油石、杯型砂轮, 去毛刺装置和抛光轮等 Tape; for other workpieces also stone, cup wheel, deburring, and polishing wheel.
抛光附件最多可安装数量 Number of superfinishing attachments	曲轴设备, 最多4台; 或标配设备, 最多2-4台 Maximum 4 crankshaft devices or maximum 2 to 4 standard devices

外形和功能
理想的机床易接近性

Form and function
Ideal accessibility

除了传动、平衡装置、凸轮和偏心轴等简单加工，该机床还能够轻松满足曲轴主轴颈和连杆轴颈的抛光要求。加工对象包括软铁和硬化钢在内的各种材质。

德国索菲纳LCM Crank系列曲轴抛光机可连接桁架机械手或机器人，进行手动、自动上下料。因此，无论是单机生产还是小型联机运行，均可保证工件加工的高效性。

如果您正在寻找最经济高效的解决方案，请联系我们。

In addition to “simple” shaft geometries such as transmission, balancer, cam, and eccentric shafts, a crankshaft’s main and connecting rod bearings can also be easily machined. Just about any material—from soft iron to hardened steel—can be finished.

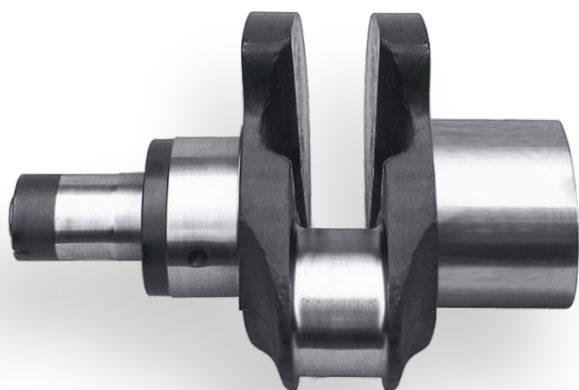
LCM Crank series machines can be loaded and unloaded manually, by gantry loader, or by robot—thus guaranteeing cost-effective part handling for single-unit or small-run production.

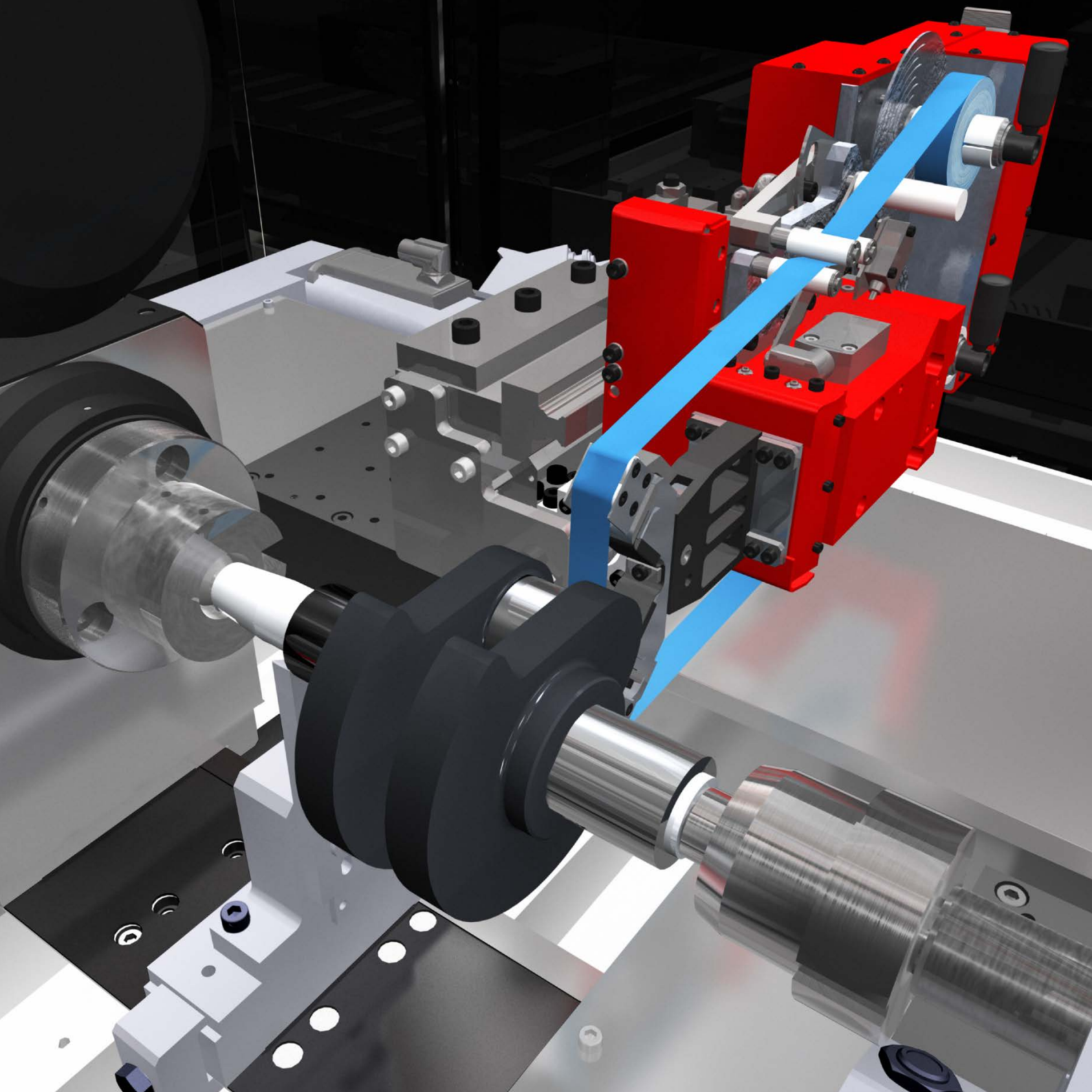
Contact us for the most economical solution for your needs.

适合小型生产规模的曲轴抛光加工

Superfinishing

for small runs





- 新型操作面板设计提供舒适的操作控制, 运行方便, 工装设置可在很短时间内完成;
- 过滤系统经过重新设计, 提高了泵的功率;
- 数控滑轨最多可以安装6个抛光附件; 直线滚珠轴承及导轨、或燕尾导轨, 也都可以坚固地固定到机床床身上。
- 我们提供不同加工过程所需的工件夹紧系统。工件换型快捷方便, 且成本经济实惠。
- 工件可以进行手动上料, 通过调节工件支撑即可实现; 或进行自动上料, 从机床上方、前方或侧面均可连接上料系统。即使全自动化(即与生产线集成), 实施起来也极其方便。

- A new comfort-control panel allows easier operation and fast tooling setup.
- The redesigned filter cart has increased pump capacity.
- Up to six Supfina attachments can be installed on an NC slide; a linear ball bearing and guideway assembly; or a dovetail guide. They also can be rigidly mounted to the machine bed.
- We offer the right workpiece clamping system for every manufacturing process. Changeover is quick and inexpensive.
- Workpieces can be placed manually in the adjustable workpiece supports, or they can be placed automatically by using an optional feeding system from above, from the front, or from the side. Even complete automation (for integration into a production line) is easily implemented.

细节 重要特性

Facts Key Features



Supfina Grieshaber GmbH & Co. KG
Schmelzegrün 7 · 77709 Wolfach / Germany
Phone +49 7834 866-0 · Fax +49 7834 866-200
info@supfina.com · www.supfina.com



Supfina Machine Company, Inc.
181 Circuit Drive · N. Kingstown, RI 02852 / USA
Phone +1 401 294-6600 · Fax +1 401 294-6262
info@supfina.com · www.supfina.com



德国索菲纳有限公司北京代表处
北京市朝阳区东三环北路辛2号迪阳大厦1202B室
电话 +86 10 84536-669 · 传真 +86 10 84536-670
supfina@126.com · www.supfina.cn

Surface Finishing Systems
www.supfina.com