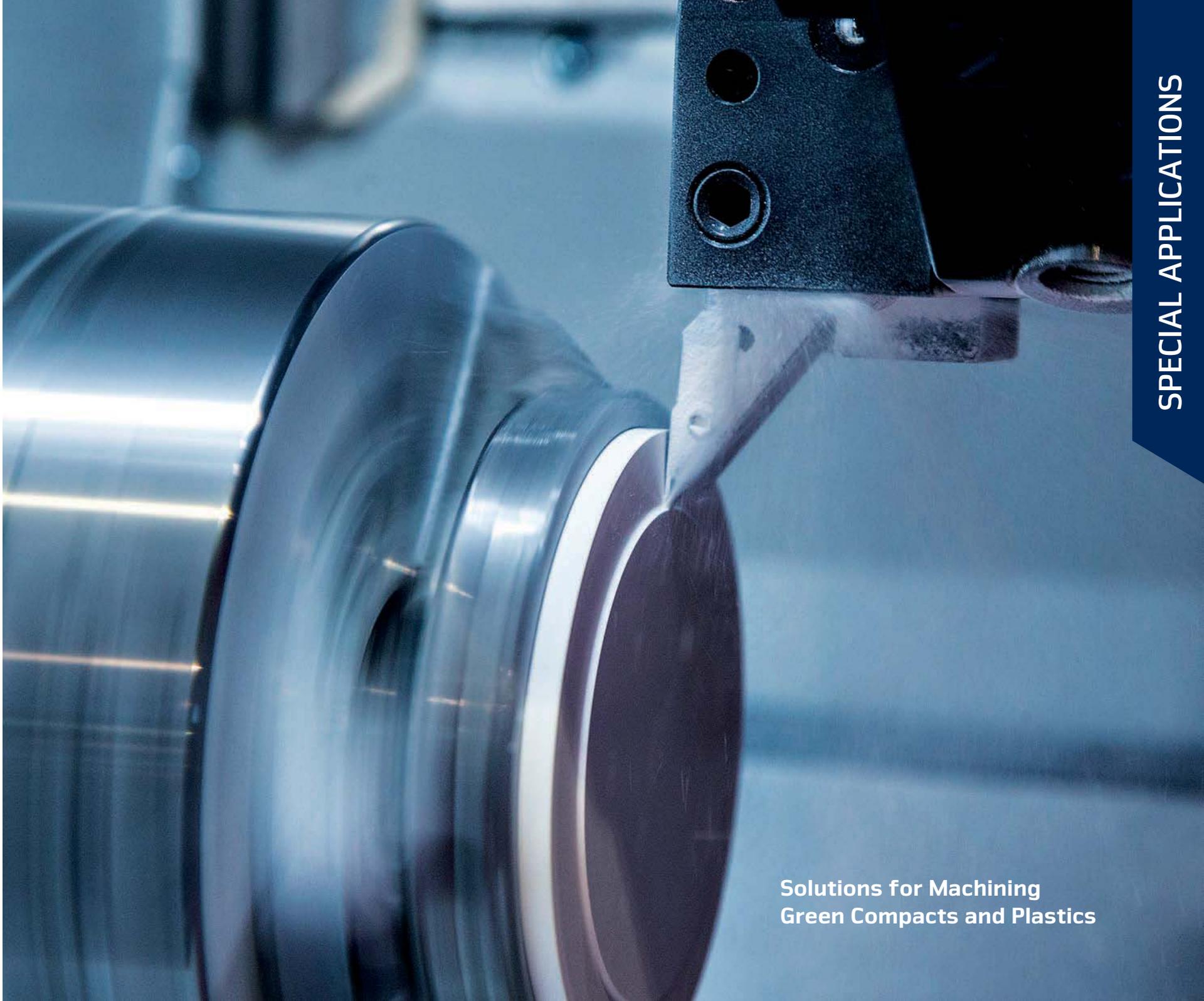


EMCO



SPECIAL APPLICATIONS

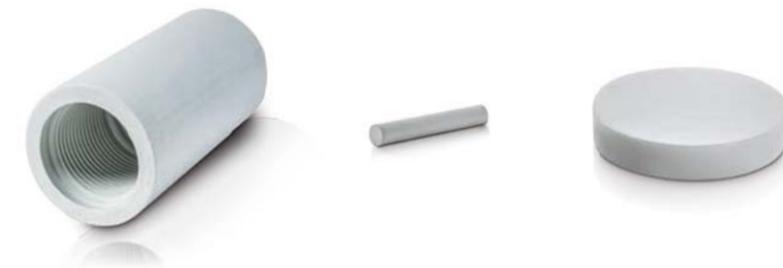
Solutions for Machining
Green Compacts and Plastics

/ CROSS-INDUSTRY SOLUTIONS MADE BY THE SPECIALIST

The applications of EMCO machine tools are as versatile as the sectors themselves. Sometimes, modern materials pose great challenges to the respective machining centre. We take specific measures to ensure that the machine's service life is not compromised and the economic efficiency continues to be guaranteed. Decades of experience in this special area make us stand out as a competent partner.



GREEN COMPACTS



PLASTIC MACHINING



PRODUCTION OF SEALS



AUTOMATION



KNOW-HOW IN THE PROCESSING OF GREEN COMPACTS

When it comes to the machining of abrasive materials such as ceramic, carbide metals and other sintered materials, the machine tool has to fulfil special pre-requisites. For one thing, this is because most of the workpieces are very fragile, and secondly because very fine material dust is generated during the machining process. That is why the machine tool's service life strongly depends on the measures taken to protect the guides, spindles and mechanics.



SPECIAL CLAMPING DEVICES

equipped with enclosing jaws guarantee distortion-free machining of thin-walled workpieces.



FINELY ADJUSTABLE DIFFERENTIAL CLAMPING SYSTEM

for clamping thin-walled workpieces.



AUTOMATIC TAILSTOCK

with finely adjustable manual quill.



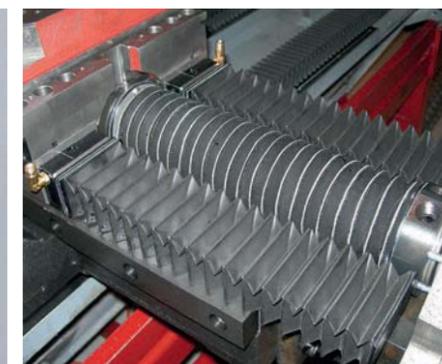
PNEUMATIC OR VACUUM CLAMPING SYSTEMS

for clamping fragile green components.



SEALING AIR

for the protection of machine components, control, electric cabinet, etc.



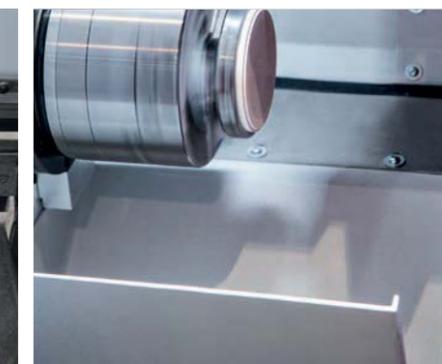
BELLOWS AND PROTECTIVE EQUIPMENT

for the linear guides and ball screws.



ADDITIONAL PROTECTIVE COVERS AND WIPERS

on the cover plates.



EFFECTIVE EXTRACTION SYSTEM

for reducing the dust formation in the working area.

KNOW-HOW IN PLASTIC MACHINING

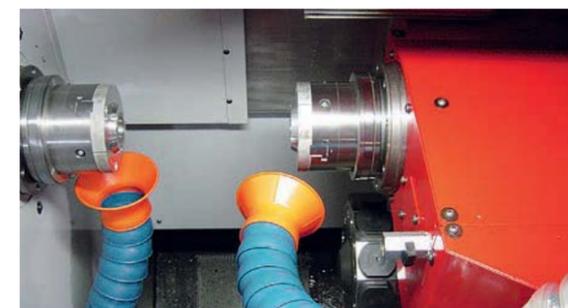
Chip formation and the removal of long chips often pose a special challenge to the economic machining of different plastic materials. In order to be able to implement unmanned production or at least with less manpower, special prerequisites have to be fulfilled.



Stationary extraction unit for removing the plastic chips



Thanks to the **differential pressure regulation** it is possible to fine-tune the clamping pressure for thin-walled workpieces



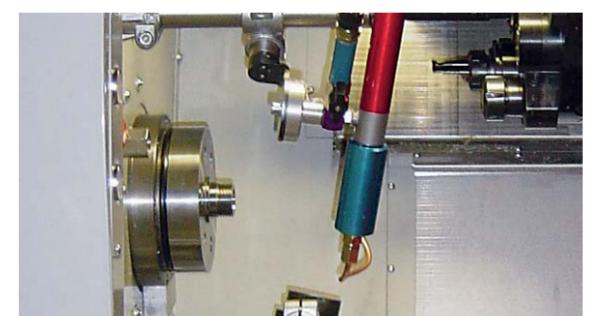
Flexible extraction system in the work area



Balluff's "Easy Tool-ID" tool identification system makes it possible to start with automated tool management



Using the barcode reader it is possible to scan and process job data



The cold air nozzle can be used for pin-point cooling during dry machining



Compressor (PA6)



Front cap (POM)



Fan flange (POM)

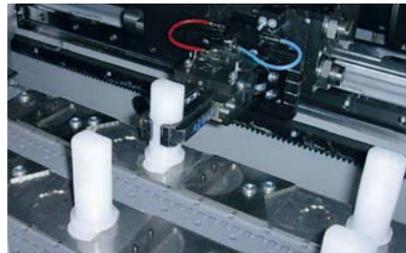
SPECIAL MACHINES FOR THE PRODUCTION OF SEALS

We have been cooperating with our partner company DMH for many years. The synergies resulting from the know-how in the areas of machine tools as well as gaskets and plastics guarantee customised systems for the manufacture of precise top-quality seals. Special DMH software with more than 140 seal profiles makes the programming of the machines significantly easier.

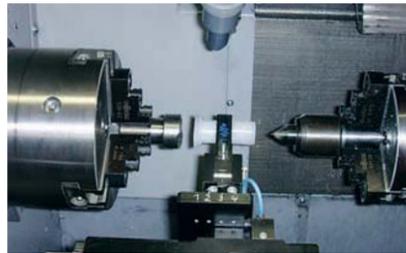


EVERYTHING FROM A SINGLE SOURCE

Apart from providing top quality machines machines for turning and milling operations involving the machining of workpieces, EMCO also offers the matching automation solutions. Fully-automated loading of smaller components into the 45-type machines is possible thanks to the EMCO Swing Loader. Larger components can be loaded with the EMCO Gantry Loader, and, apart from that, also be palletised, measured, cleaned, signed, etc. In the process, the additional handling axes are controlled via an additional channel of the machine control. Interface problems are thus excluded, while programming and operation is made significantly easier for the machine operator.



EMCO Swing Loader with raw-part gripper



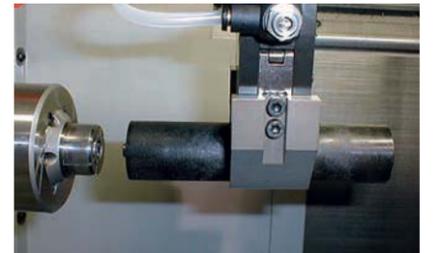
Automatic loading into the turning machine's clamping device



Blank feeding with indexing conveyor



Vacuum suction gripper for fragile blanks



Shaft gripper for the automatic loading of long workpieces



Space-saving magazine for finished green compacts

beyond standard /