

The new high-pressure unit by Piller Entgrattechnik

Many precision mechanical parts have high requirements for being free from burrs and chips. In addition to the actual chip removal, deburring - manually or on a separate machine with separate medium - is often required as an additional process step. There now is a new, built-in solution. The high pressure add-on module HPU 650 allows for the deburring process to be integrated into a cutting machine.

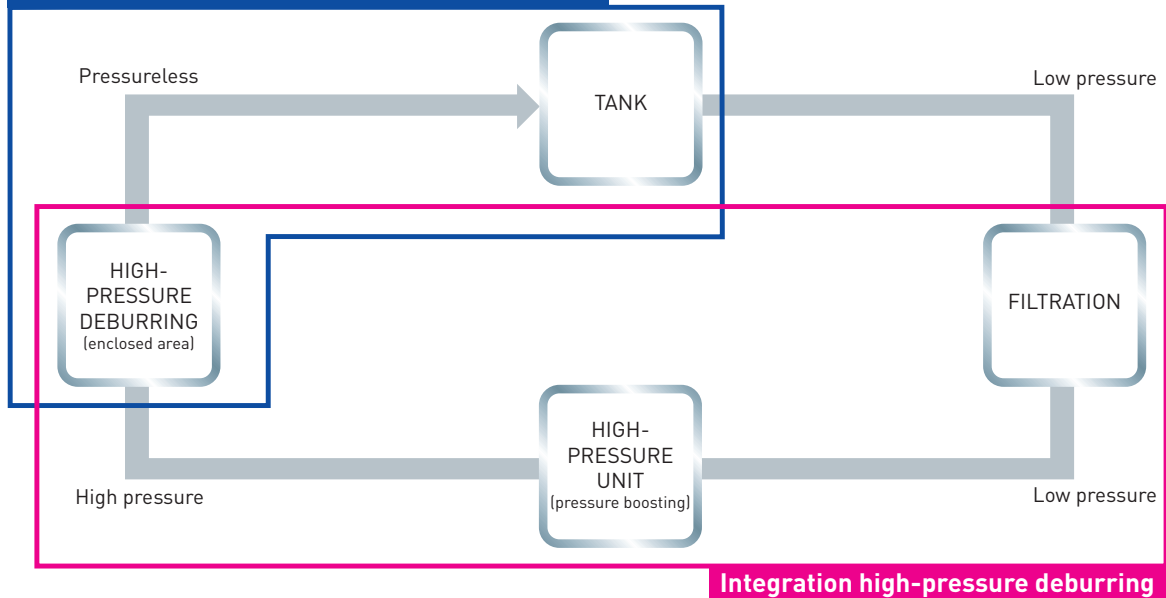
Manufacturers of precision turned parts or hydraulic components, in particular, are familiar with the requirements to be free from burrs and chips. The smallest burrs and residual chips pose a functional problem and require manual or automated deburring for many high-grade components. These additional process steps, however, cost the parts manufacturer time, space and capital.

PILLER has been familiar with these high requirements for quite some time. Advancements in the process resulted in a new, compact high pressure supply which can be integrated into lathes and multi-spindle machines with considerably less expenditure than ever before. Upgrading a cutting machine with the new high pressure module merely requires one free spindle and four square metres of floorspace.

Being able to use the cooling lubricant of the cutting machine (usually cutting oil) as a deburring medium is a special advantage of this process. The components can then be deburred straight in the cutting machine and rinsed to remove any chips.



Multi-spindle machine / Rotary transfer machine



Technical Data

Fluid data

Max. operating pressure	bar (MPa)	650 (65)
Max. oil temperature	°C	40
Max. volume flow rate	l/min	26
Medium		Cutting oil

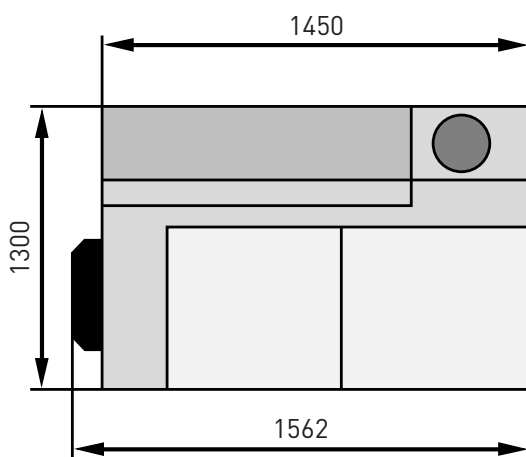
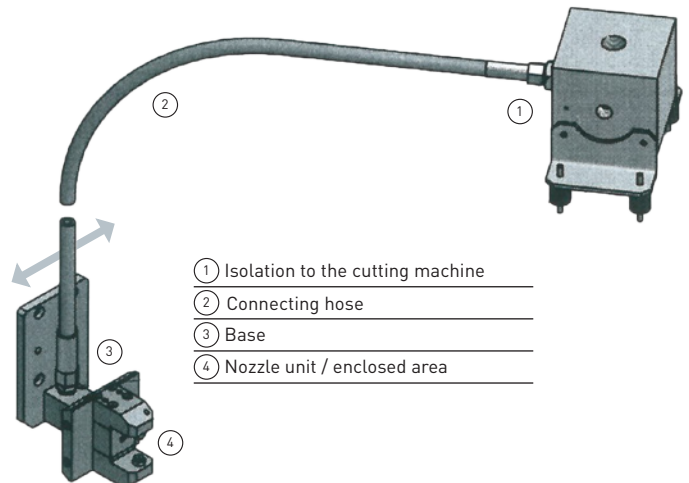
Dimensions, weight and connecting power

Weight	kg	ca. 1050
Length	mm	1562
Width	mm	1300
Height	mm	1500
Connecting power	kVA	55
Power consumption	A	80
Operating voltage / frequency		400 V / 50 Hz

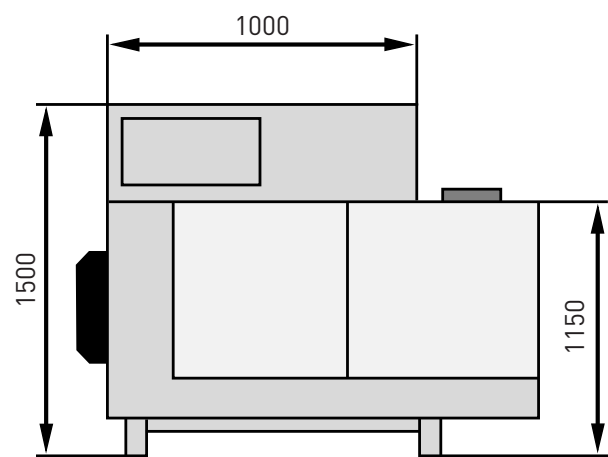
Control

Siemens SIMATIC S7-1200

Project planning of the application



top view



front view

