

No cold coffee – Angst+Pfister round buffers in professional coffee machines

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Everyday we encounter round buffers virtually everywhere, but they usually go unnoticed. Round buffers from Angst+Pfister work behind the scenes to ensure smooth functioning of a vast array of different machines by suppressing undesired vibrations and noise. But be careful: not every round buffer is suitable for every extreme condition! To avoid a rude awakening, the experts at Angst+Pfister help you in the early planning phase to find the ideal round buffer for your application. Angst+Pfister, for example, has developed a heat-resistant round buffer capable of withstanding the severest of strains for Cafina, the renowned Swiss manufacturer of professional coffee machines for the restaurant industry.

The aroma of freshly ground coffee beans and the enticing sound of foaming milk are an intrinsic part of the ambience of a cozy afternoon in a coffeehouse – the rumbling of a poorly insulated motor or the stench of overheated rubber definitely are not. In close collaboration with the manufacturer Cafina, Angst+Pfister thus developed the ideal round buffers for installation in large coffee machines for the restaurant industry. The fully automatic Cafina coffee makers can be found in many popular cafés and in major restaurant chains and hotels like the famous Kempinski in St. Moritz, Switzerland.

Exact demands...

Together with the engineers at Cafina, Angst+Pfister's antivibration technology experts employed a sophisticated testing procedure to ascertain the demands that the newest generation of coffee machines – the Cafina ALPHA line – places on its components. The "heart" of the coffee machines is their brewing chamber. There, freshly ground coffee is compressed by a piston, then highly pressurized hot water is forced through the coffee grounds and the brewed coffee flows directly into the cups. This piston is driven by a stepper motor that is mounted on four small round buffers.

The round buffers serve to elastically suspend the drive motor and to suppress its vibrations so that the coffee machines run as quietly and vibrationless as possible. At an operating temperature of 60°C and peak temperatures of up to 80°C, resistance to heat is the main challenge that all coffee-machine components must meet. In the case of the Cafina ALPHA line, the round buffers must guarantee proper functioning even at high temperatures.

...require well-thought-out solutions...

In a special series of tests, the engineers at Angst+Pfister documented how the spring characteristics of the rubber-metal buffers change at high temperatures. An exactly calibrated composite mixture of EPDM and CR emerged as the ideal material combination. EPDM stands for ethylene propylene diene M-class rubber and CR stands for chloroprene rubber, which is also called neoprene. EPDM is well known for its excellent thermal resistance properties. The test results were immediately put into practice: today Angst+Pfister supplies the Cafina company with custom-fabricated round buffers that are optimally adapted to the Cafina ALPHA line of coffee machines.



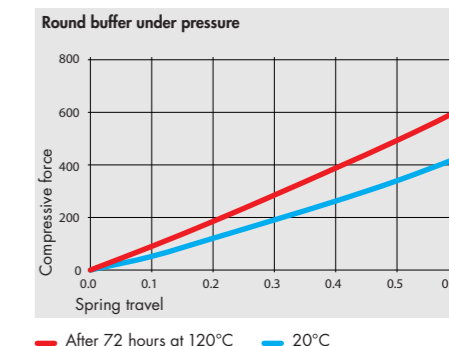
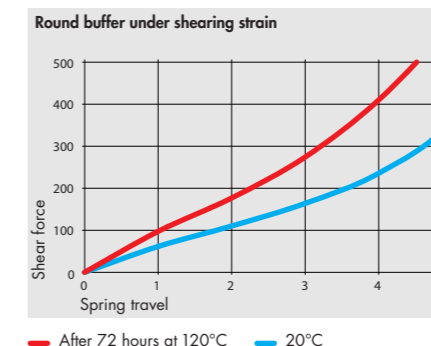
Custom-fabricated round buffers from Angst+Pfister for the Cafina ALPHA models.



The new Cafina ALPHA puts coffee enjoyment at center stage.

Specifications checklist:

- Installation drawing
- Standard and peak strains
- Required vibration isolation
- Operating temperatures, peak temperatures
- Desired corrosion protection, resistances
- Scope of application
- Intended service life of the machine in which the round buffers are to be installed
- Special demands placed on the components



Quality down to the tiniest detail

Complex processes can only function smoothly when all individual components are 100% reliable. We therefore take our customers' wishes very seriously and work together with them to devise the optimum solution for each specific application. Drawing on our close collaboration with manufacturers like Cafina and the resulting empirical experience, Angst+Pfister has developed a specifications checklist for customized antivibration technology components. With this checklist, a little information is all we need to fabricate exactly suited components for you.

Using this specifications checklist, we can rapidly and reliably analyze which industrial components are suitable for your specific application. Our engineers define the precise requirements for all materials, the maximum allowable strains, potentially necessary treatments – for surface protection for example –, as well as the requisite spring characteristics, dimension measurements and tolerances for all components. We prepare an exact fabrication drawing in coordination with manufacturers and customers, and we provide you with test documents as well as shipping and installation instructions.

The APSOvib® buffer assortment has been completely restructured so that customers will now be able to find the right product even more quickly. Selection is also made easier thanks to a consistent declaration of key data.

Don't hesitate to consult with our antivibration technology specialists about your application and to take advantage of Angst+Pfister's experience, comprehensive expertise and innovative spirit!

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