

New B/C Series pneumatic tools from SUHNER

On launching its new B/C Series, SUHNER has expanded its pneumatic range by a total of 21 tools.

Modular design

At the heart of these tools is the new multi-disc air motor design. The combination of different noses, centrifugal governors, and gears gives rise to a range of 21 tools in total.

The motors cover a power output range of 250–350 W.

The available tools range in speeds from 4000 to 35,000 rpm.

The tool variants are based on the following basic types:

- Straight grinder (short version)



- Long neck straight grinder



- Angle grinder (short version)



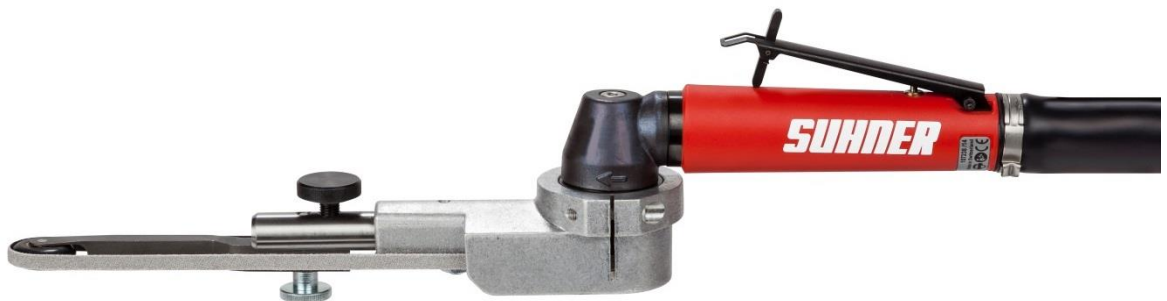
– Long neck angle grinder



– Angle polisher with extremely low head



– Belt grinder



– Drive motor for extension system



Noise emissions

All tools are fitted with a smooth, flexible exhaust air hose and an integrated silencer that minimise noise levels for the user. The sound pressure level varies from 63.8 dB(A) to max 77.5 dB(A) depending on the tool version. K value 3 dB(A).

Measured in compliance with ISO 15744

In workplace assessments, the noise level factor is constantly growing in importance.

Optimisation of weight and measurements

The motor is installed directly in the plastic handle. The resulting reduction to handle diameter is about 10%. Also the weight could be reduced by up to 36% compared with similar tools. This has a very positive effect on the power to weight ratio.

Centrifugal governor

Two thirds of the new B/C Series tools are fitted with a centrifugal governor. This maintains constant speeds and reduces air consumption.

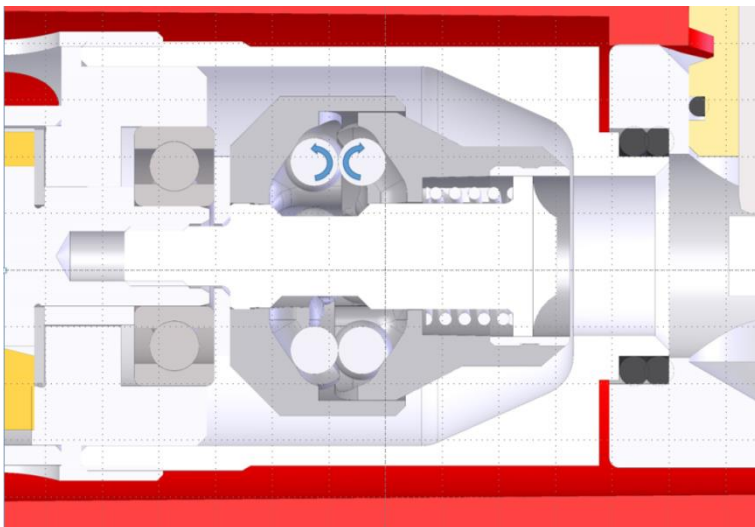
The centrifugal governor opens under load, letting more air through the tool and hence maintaining a constant speed. With no machine load, the governor minimises air consumption.

This is very important because cycles may mean that tools do not often run under full load.

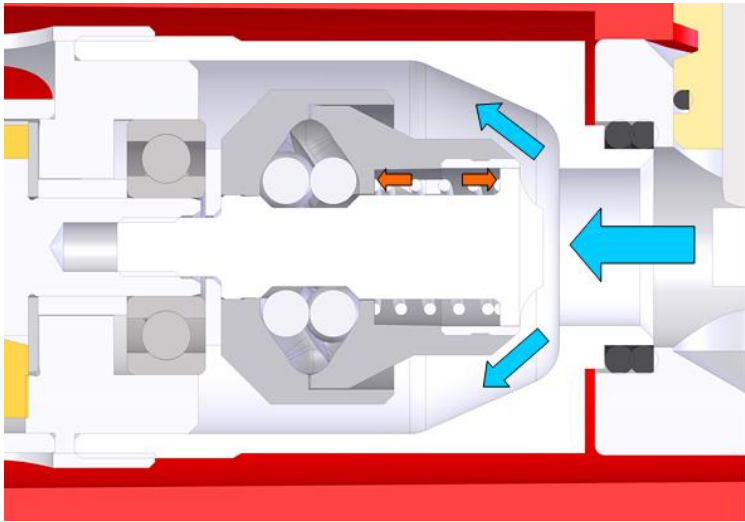
One special feature of the SUHNER designed centrifugal governor is that its round masses roll over each other. Conventional governors are designed with round masses that slide at least on one side, thereby generating high friction losses.

Masses rolling over each other reduce this friction drastically.

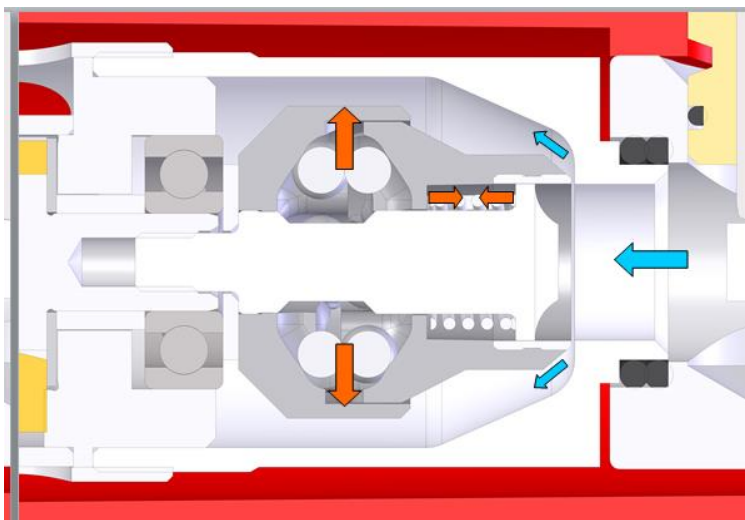
Also the response behaviour and wear resistance are enhanced.



SUHNER image: Operating principle of round masses in the centrifugal governor



SUHNER image: Governor open



SUHNER image: Governor closed

Flexible bearing

All straight grinders are fitted with a flexible bearing in their front sections. This reduces harmful vibrations, making it considerably easier for users to work e.g. with carbide cutters. Chatter marks are reduced greatly.



SUHNER image: Position of the flexible bearing in long neck straight grinders



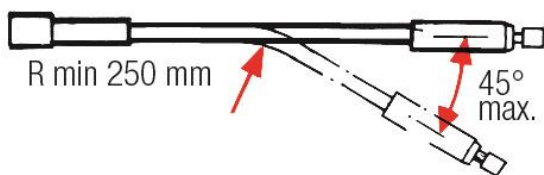
SUHNER image: Position of the flexible bearing in straight grinders

Drive motor with extension adapters

Components of ever growing complexity are posing ever greater challenges to users having to work on virtually inaccessible places. Often, these places are highly constricted and can be accessed only through narrow channels.

These applications have now found a solution in the LRC 20, a development coming with five different extensions in total. The motor outputs 350 W of power at a speed of 20,000 rpm.

The extension (VSC) consists primarily of stainless steel and is available in the lengths 125, 250, 500, 1000, and 1500 mm. The VSC diameter is about 13 mm.



The VSC extension can be bent once.
Minimum bending radius R 250 mm.
Maximum angle 45°.

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