

Disc brush or brush plate



Roller brush



## Disc brush

1. More difficult to replace the brushes. In many cases, the machine must be raised on one side.
2. No balanced control of machines with one brush. The machine tends to constantly move to one side.
3. Working width depends on the diameter of the brush used.
4. Unsatisfactory cleaning results on uneven surfaces, for example, textured plastic floors.
5. Inadequate cleaning in corners.
6. Cleaning under cupboards is virtually impossible.
7. Technical design produces bulky and clumsy machines.
8. Lower brush pressure per square centimetre.

## Disc Brush / Roller Brush Comparison

### Roller brush

1. Easily accessible brush head. Brushes can be easily and quickly replaced.
2. Very good manoeuvrability. The machine goes in the required direction without any problems. (No additional efforts are required).
3. Brush rollers always have the same length. This means: Uniform working width irrespective of the application.
4. Higher contact pressure with smaller bearing area results in very good floor contact.
5. Perfect cleaning in corners and along walls.
6. The shape of the brush head enables cleaning under cupboards and chests of drawers.
7. Compact design, very user-friendly.
8. The water remains under the brush head and is fed to the suction beam at the rear; therefore lower water & cleaning agent consumption.
9. With the roller brush machine, the customer acquires a unit for different types of applications.
10. Some models include a pre-sweeping device, which makes the normally required "sweeping" operation superfluous.

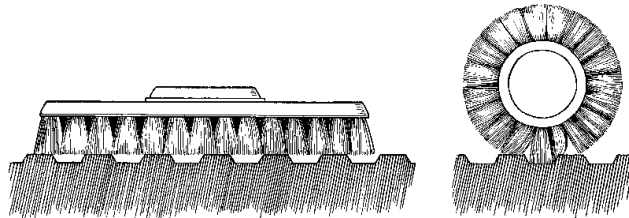
# Disc Brush / Roller Brush Comparison

## Choice of machine

The choice of unit type, disc or roller machine, also depends on the type of floor covering, for example floor covering with a texture or profile.

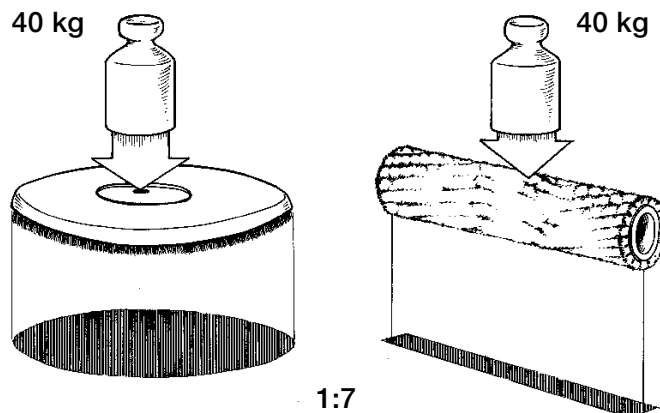
## Safety or chequered (knobbled) floor

With a disc brush, it is not possible to reach the lowered areas of the floor; a brush roller is very well suited to this. The drawing below clearly shows the differences.



## Comparison of brush contact pressure

If we compare two equally heavy (40 kg) and equally wide (40 cm) machines, one a disc machine and the other a roller machine, it can be seen that the contact area between the brushes and the floor of the roller machine is only approximately 1/7 of the contact area of the disc. Since the contact pressure is a result of the force (weight) per unit area, the ratio is inverted, i.e. the contact pressure of the roller machine is 7 times higher than that of the disc.

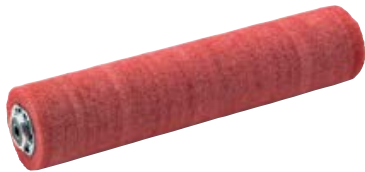


Disc brush or brush plate  
(30 gr/cm<sup>2</sup> or 0.3 N/cm<sup>2</sup>)

Brush roller  
(210 gr/cm<sup>2</sup> or 2.1 N/cm<sup>2</sup>)

# Disc Brush / Roller Brush Comparison

## Brush speed



The speeds of scrubbing machines and scrubbers are variable. Disc machines are available with different speeds:

## Deep cleaning

Sand / chafe	180 rpm
Scrub	230 rpm
Polish	450 rpm
Ultra high-speed polishing	1500 rpm

The brush speeds of Kärcher roller brush machines lie between 1100 and 1500 rpm (compact units) and 500 – 1100 rpm for units with flexible speed adjustment. The **FACT system** has three settings: Power Clean approximately 100%, Whisper Clean approximately 60% and Fine Clean approximately 40%.

The advantage is that such machines can be used to carry out different tasks.

- Deep cleaning
- Scrubbing
- Polishing
- Ultra high-speed polishing (with limitations)
- Crystallising, etc.

# Disc Brush / Roller Brush Comparison

## Summary of advantages and disadvantages

<b>The advantages at a glance:</b>	
<b>Roller brush</b>	<b>Disc brush</b>
7 x higher brush pressure	Uniform heat distribution during ultra high-speed polishing
Deep cleaning of joints	Units with lower speed are less risky to use
Suitable for profiled floors	
Also suitable for heavy soiling	
<b>The disadvantages at a glance:</b>	
<b>Roller brush</b>	<b>Disc brush</b>
Risk of burning floors with elastic floor coverings if the unit runs on the same spot (compact units)	Different machines for different tasks
High-gloss polishing is not possible	




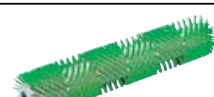



## Disc Brush / Roller Brush Comparison

### Brushes



Different types of brushes are available for different applications. The brush type generally depends on the floor type.

The brushes are differentiated by their colour and have an indicator to tell you when the brush is worn. An overview of the different brush types is given below.

COLOUR	FEATURE	USE
Red 	Standard	Scrubbing, deep cleaning
White 	Soft	Waxing, polishing
Natural 	Very soft	Waxing
Green 	Hard, GRIT	(0.5 mm) scrubbing, deep cleaning, also for crystallising
Black 	Very hard, GRIT	(1 mm) powerful scrubbing, deep cleaning
Blue 	Soft	Carpet cleaning, powder cleaning, iCapsol
Orange 	High/low	Safety floors, textured floors

There are also antistatic brushes, usually black. These are used for special applications, for example for cleaning plastic floor coverings.

# Disc Brush / Roller Brush Comparison

## Pads



While brushes are generally advantageous for textured floors, pads can often achieve faster cleaning results on smooth surfaces. The following table shows which pads are suitable for which applications:

COLOUR	FEATURE	USE
White	Very soft	Polishing
Yellow/beige	Soft	Polishing, waxing, cleaning
Blue/red	Medium-hard	Scrub
Green	Very hard, with abrasive	Deep cleaning/ coating stripping
Brown*/black*	Very hard	With abrasive, deep cleaning / coating stripping
Bronze/silver	Metal pad	Crystallisation

\*not for roller machines