



A Guide to the Selection of Rotary Floor Cleaning Machines (Single Disk Type)

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1 Introduction

The user needs to identify the specific tasks that the machine is required to perform before reading these guidance notes.

It will be particularly useful to refer to the reference table at the back of the publication.

This table identifies the typical application and the types of machines suited to the particular tasks. (Appendix A.)

A pictorial guide is also provided to allow for the identification of suitable Pad types for particular machines and associated cleaning tasks.

One machine is rarely capable of undertaking all potential cleaning tasks, mostly they are task specific, however, there are some machines available that have a capability of multi-task operation, this type of machine is identified in the reference table.

Machines can be categorised into 4 specific types

- slow speed
- high speed
- ultra high speed
- dual speed

It is strongly recommended that, for safety reasons any operator should commit to being trained in the use of this type of machine PRIOR to use.

The British Institute of Cleaning Science can recommend suitable training

www.bics.org.uk or Email info@bics.org.uk or refer back to your supplier.

2 About this Document

This document is intended to cover the Operating Characteristics and Performance of Rotary Floor Cleaning Machines (Single Disc Type)

The parameters covered are as follows:

- Length of Cable
- Motor Power
- Voltage
- IPX Rating
- Weight
- Pad/Brush Characteristics
- Accessories
- Speed
- Type of Drive

3 Length of Cable

Measured from the base of the plug to where the cable enters the appliance.

The cable, for general use, should not be less than 10 metres long.

If longer cable lengths are required or the cable specification is 'high visibility' enquiries should be addressed to the manufacturer (www.icmma.org.uk)

Note:

Where machines with electric cables are not permissible (e.g. some daytime Cleaning regimes) battery powered machines are available.

4 Motor Power

This is shown on the rating plate of the machine. Before using the machine it is advisable to check that the motor power does not exceed the capability of the available supply (e.g. from a 230 volt, 50Hz electricity supply the motor power should NOT exceed 3kW).

If the machine under consideration is battery powered then care should be taken that the battery charger and charging pattern conforms to the machine manufacturers operating instructions.

5 Weight

The following factors should be considered:

- Ease of transportation on the site where a risk assessment associated with operator care will need to be undertaken, particularly in respect of potential musculoskeletal injuries.
- The weight of the machine and associated accessories is a significant factor in ensuring that the projected cleaning task can be achieved effectively and at levels of reasonable productivity. The heavier the machine selected to achieve good cleaning, the more account needs to be taken of the transportability around the site.

6 Noise

Noise is measured in dB(A) but the noise level of the machine is not the noise level to be expected when in use.

The noise generated when the machine is undertaking a specific cleaning task will be the overriding factor in assessing the operational level of noise generated.

7 Pad/Brush Selection

Generally machines are NOT supplied with these essential components.

BUT machine use is always in conjunction with either a brush or selected pads with an associated pad drive plate.

The selection of either a pad or brush system will depend upon the particular application proposed.

Most machines are categorised by their pad/brush diameter and selection will depend

upon application.

A colour code is in place for basic pad selection and care needs to be taken in selecting the correct type for the particular application task (see Chart in Appendix 2).

Similarly, brushes are available to suit various cleaning tasks.

8 Accessories

There are a wide range of accessories for Rotary Floor Cleaning Machines, typically:

- Pads/Brushes
- Solution Tanks
- Dust Extraction Units
- Foam Generators
- Weight Kits
- Spray Attachments

But there are many more for mainly specialist applications, it is recommended that manufacturers advice be sought in these circumstances (www.icmma.org.uk).

9 Speed

The choice of speed associated with product selection is dependent upon anticipated application.

Typically speed variants are:

- Low Speed
- High Speed
- Ultra High Speed
- Dual Speed

If specific advice is required reference should be made to your machine supplier.

10 Type of Drive

There are 3 types available:

- Direct
- Belt
- Gearbox

All have specific benefits but they are all a means of achieving the operational speed.

11 User Guidance Notes

All machines should comply with BS EN 60335-2-62

This should be clearly stated in the manufacturers' instruction handbook and should be verified prior to purchase of a product.

The most frequent use of a rotary floor care machine will be in undertaking the following cleaning tasks:

- Stripping
- Wet Scrubbing
- Spray Cleaning
- Buffing
- Burnishing
- Carpet Shampooing
- Scarifying

This is not an exhaustive listing of applications but the above listing should help determine the type of machine selected.

Specialist Rotary Floor Cleaning Machines are available for use where hazardous and combustible material is present, please refer to ICMMA website www.icmma.org.uk to identify suppliers of these machines.

12 Application Table

A table is attached to this publication to assist in selecting machine types against particular applications – see Appendix A.

13 Pad Selection Guide

A guide to pad types and their application is shown in Appendix B.

Pad manufacturers supply to the specific colour as indicated in the Appendix.

14 Floor Area

Consideration of the total floor area and type of floor to be cleaned will determine the machine size, specification and accessory selection.

As examples:

- An hotel kitchen may require a low speed machine equipped for wet scrubbing
- An hotel reception area with a polished floor, may require a high speed machine with spray attachment.

15 Maintenance

It is recommended that a planned maintenance regime be adopted to ensure long life and reliability in use.

16 IP Rating – Ingress Protection

Prior to purchase, it is essential that the buyer checks that the machine has ingress protection to IPX 4 standard as a minimum – this will be found on the machine rating plate.

The IP rating significance is that it identifies the ability of the machine in preventing ingress of dust and moisture into electrical enclosures.

17 Storage

In selecting the machine to suit the cleaning task, take note of the on-site storage facilities available.

Ideally, the correct rotary floor cleaning machine to match the cleaning task should be selected and suitable storage provided to suit the machine, not the other way round.

It is recommended that prior to storage of the machine the drive pad or brush should be removed or the machine stored in such a way that the brush/pad assembly is NOT in contact with the floor.

Any solution tanks should be drained and cleaned prior to daily storage of the unit.

18 Application

From the Application Table (Appendix A) it will be seen that one rotary floor cleaning machine is rarely suitable for a multitude and variety of applications.

Before the selection of a machine consider the following:

- Working Environment (taking note of inclines)
- Number and location of power points
- Rated Voltage
- Floor area to be cleaned
- Type of flooring
- Stairway negotiation
- Required mobility over floor
- Presence of obstructions
- Location of waste disposal points
- Likelihood of special applications

The above list is not exhaustive.

19 Selection of Machine

By reference to the website www.icmma.org.uk a wide range and variety of rotary floor cleaning machines (single disc machines) suppliers will be identified with products that will meet with ALL requirements.

20 Appendix A

Guide to Applications and Selection of Rotary Floor Cleaning Machines.

Speed	Low Speed (L.S.) 150-200 rpm.	High Speed (H.S) 230-400 rpm.	Ultra-High Speed 1000-1500 rpm	Dual Speed 150-400 rpm
Application				
Carpet Shampooing	X			X (LS only)
Hard Surface Maintenance Cleaning	X			X (LS only)
Hard Surface Scrubbing	X	X		X
Hard Surface Polishing		X	X	X (HS only)
Hard Surface Burnishing		X	X	X (HS only)
Hard Surface Stripping	X			X (LS only)

‘X’ Indicates that this type of machine is suitable for the application

This tabulation is a guide only, if any doubt exists refer to the Manufacturers listed in the body of the Website www.icmma.org.uk

NO LIABILITY CAN BE ACCEPTED FOR THE SELECTION OF ANY CLEANING MACHINES FOR A PARTICULAR CLEANING TASK.

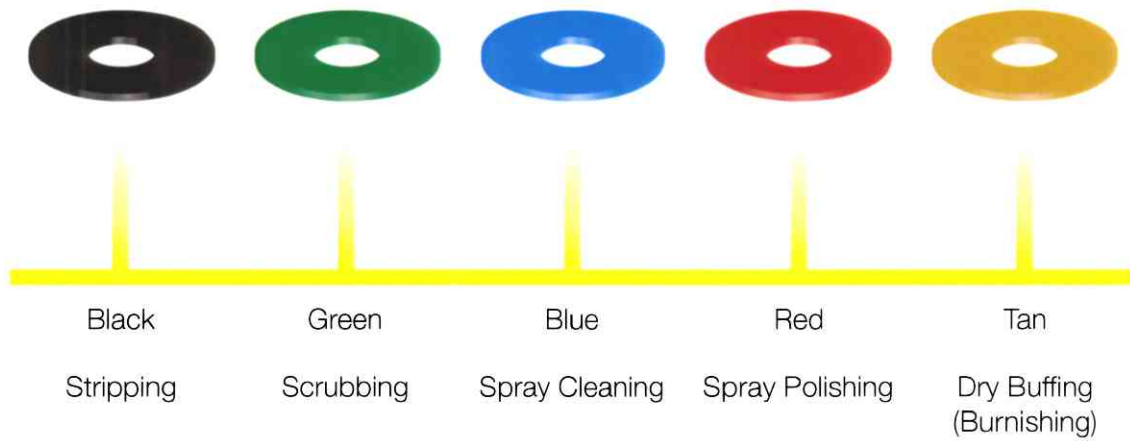
There are many accessories available for Rotary Floor Cleaning Machines that extend their use.

If the simple tabulation above is not providing the information you are seeking, manufacturers may have an accessory available to meet your requirements.

Reference to the Website www.icmma.org.uk will lead you to the Manufacturers of Rotary Floor Care (Single Disc) Machines.

21 Appendix B Pad Uses

High Speed Rotary Machine



Standard Speed Rotary Machine

