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INFORMATION SHEET

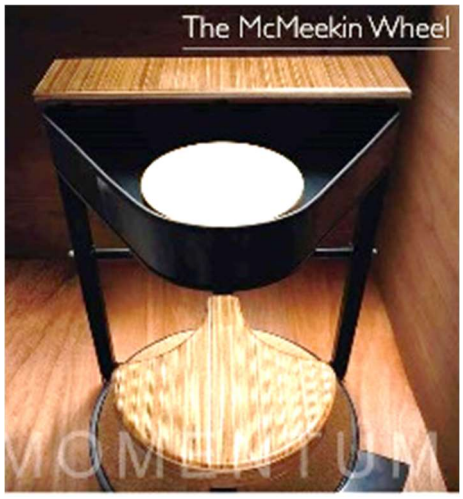
CHOOSING YOUR NEW POTTER'S WHEEL

What should I look for when buying a new potter's wheel?

At Potclays we are able to offer a wide range of wheels ensuring that we have a wheel to suit your throwing requirements and to fit your budget. If you would like to discuss our wheels in more detail please don't hesitate to call or email.

Electric or Kick wheel

Almost all wheels on the market are electric. The exception in our range is the McMeekin Wheel which is one of the classic kick wheels recently revived for Potclays by potter Tom Knowles Jackson. For those who appreciate a quieter, slower pace of life and enjoy the rhythm of working with a kick wheel this wheel is ideal. It is very robustly engineered and possibly unique to kick wheels, it is adjustable in the seat, foot rests and flywheel.



Safety of Electric Wheels

As with all electrical appliances, care must be taken to ensure your potters wheel is safe to use. All Potclays wheels conform to safety standards and are safe to use as long as the safety warnings shown in the instruction manual are followed. When purchasing a new wheel consider where it will be located in relation to the power supply, cauld the cable become a trip hazard? This is especially important in shared studios, school and college environments. Avoid using a socket that already has other appliances connected. If using an extension lead ensure that it is earthed and of the correct size for the power of the wheel.

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Wheel tray configuration

There are two types of wheel tray or splash pan, the large fixed ones as shown on the Rohde HMT500 wheel below left, or the smaller, detachable, split tray as on the Shimpo Whisper RK3E on the right below.

The large tray is more efficient at containing water whereas the smaller detachable trays are easy to clean and more suited to throwing large wide pieces when the tray can be detached. The traditional larger wheels with wooden bodies, with the big tray format have now largely been replaced by compact, lighter wheels with smaller split trays. Consider which tray type would best suit your own style of throwing and the shape of pots you make.

Motor power

Motor size is usually rated in horse power (hp) but sometimes in kilowatts (kW) equivalents for the most common wheel motors are:

¼ hp = .18 kW

½ hp = .37 kW

¾ hp = .55 kW

1 hp = .75 kW

All electric potter's wheels run off a standard UK three pin, 13amp 230v ring main so no special wiring is required. Pure power is not the most important thing, constant torque is more relevant,

a wheel with low torque will slow down when force is applied and may not be smooth going through the speed range. Wheels can be direct drive where the motor is connected directly to the wheelhead shaft, powered through a gearbox or belt driven. Direct drive will generally have more torque.

Noise

A noisy wheel may be acceptable for occasional use but can become a problem when used regularly for long periods. Cone drive wheels are usually the noisiest because the friction of the cone against the drive ring produces vibrations and noise. Cone drive is not used on potters' wheels so much today. Belt drive wheels can also make some noise, as the power is transmitted from the motor to the wheel shaft it generates some noise and vibration. The electronic speed control on some wheels can also generate noise, usually a high-pitched whine from the inverter and wheels with geared motors occasionally have problems with noise. The quietest wheels are ones with direct drive where the motor is directly connected to the shaft, there are no gears involved, the Shimpo wheels such as the RK3E and Whisper T are good examples as they are almost silent to operate.

Clay Capacity

Manufacturers rate their wheel's capacity by how many kilos of clay can be thrown on the wheel, this usually varies from 10 to 50 kgs. This is a somewhat spurious measurement since centring even 10kgs of clay requires a level of skill beyond many potters. It serves more as an indication of the weight of clay that the wheel can support and is a useful indicator of the strength of construction of the wheel. This useful if you are making very large pots, for example by coiling on a rotating wheel where the weight of clay might be considerable.

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Wheelhead size

Modern wheelheads are almost always made of aluminium alloy, this oxidises quite readily and shows black when a damp cloth is held against the rotating wheelhead. This is quite normal and is not a fault. Wheelheads should be cleaned after use, if damp clay is left on the wheelhead for more than a few hours, the surface of the wheelhead will become pitted. The size of wheelheads varies from 18cm to 35cm, the average being about 30cm. For most pot shapes the average sized wheelhead will be fine but when throwing large platters, the larger sizes are best. Consider the size of your current work and where it might go in terms of size in the future.

Wheelhead batt pins

Throwing with wheel batts is very useful especially when throwing larger or delicate pieces that cannot be lifted off the wheelhead, the easiest way to use batts is to have pins in the wheelhead onto which the batt locates. If you need this facility, check that it is available, not all wheels have them. There are alternatives such as the Potclays' Hex batt system which has detachable batts, alternatively, the Easi-Lift wheelhead is fitted to the shaft in place of the wheelhead and is available for most wheels.

Wheelhead speed

Wheels operate between 230rpm and 280rpm. Potters do not usually need a very high speed so there is no particular reason to choose a wheel based on its maximum speed. What is much more important is how it performs at very low speed. It is worth checking if the wheel slows down under pressure. Does it run smoothly without juddering, and does it have good torque at low speed?

Using the Wheelhead as a Whirler

Most wheelheads are still connected to the motor when turned off so will not turn freely but some wheelheads like the Shimpo Whisper RK3E, disconnect from the motor when the power is

off so can be used as a whirler. This is particularly useful when adding coils to large pots on the wheel.

Reversing switch

Most wheels now have the facility to alter the direction of the wheelhead, traditionally in the UK wheelheads rotate anti-clockwise while in Japan and the far east the tradition is for clockwise rotating wheelheads. Some left-handed people find it easier to throw on a clockwise rotating wheelhead. When choosing your wheel consider if this a facility that you might need.

Body style and construction

Some of the old style, large, wooden upright wheels are still available, but prices are high because of the cabinet. Components used in today's wheels are very much more robust with bearings invariably "sealed for life" and motors designed for continuous non-stop operation in industrial applications rarely taxed by the potters use. A lot of modern wheels have adjustable legs so they can be raised or lowered to suit your comfort. Wheels with remote foot control pedals attached to the wheel by a cable also give more flexibility to the throwing position. Some wheels are offered with attached seats, these are not usually adjustable but they can be altered by raising with bricks or wood blocks perhaps to suit a taller person. An adjustable wheel with a remote pedal is a good choice if you don't have the opportunity to sit at the wheel before purchasing.

Portability

The dimensions and weight of all of our potter's wheels is shown on our website, when making your decision consider how much room you have around the wheel, will you need adjacent work top space or shelving etc.? You may need to store the wheel out of the way and to move it when you want to use it, so check on the weight of wheels, some are quite heavy and not easily moved. For people offering throwing lessons or demonstrations at different locations there are some very good lightweight wheels that are easily transported.

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Second Hand & Cheap Potter's Wheels

There are many "preloved" electric potter's wheels offered on auction websites. Often, they are very old and made by companies that have long since closed down making spare parts unobtainable. Names such as Judson &Hudson, R. W. Ratcliffe, Podmore, Wenger and Harrison Mayer have been out of business for thirty or forty years or more and although they were often very robustly made, it is important to ensure that they conform with current electrical safety standards and that they do not require spare parts. There are also increasing numbers of very cheap electric wheels currently being imported and sold on sites such as Ebay *(one such example shown on the right).* Although we have not had the opportunity to examine them all we have doubts as to the ability of many of them to operate to standards a potter would expect (especially in terms of torque). Again, we advise caution to avoid disappointment. All Potclays wheels come with the assurance of the highest quality backed up by manufacturer's warranty, usually of three years. See individual wheels for details.

Summary

When choosing your wheel think about the shape and size of the pots you make now and what you might be making in future; will you need a larger motor size or will a smaller size suffice? Think about comfort during a long session, would adjustability be necessary; is a quiet wheel important, essential when you enjoy listening to music or the radio while working. Obviously, budget is important but if you are a serious potter you need to carefully consider your requirements, it may not be worth compromising with a lower powered wheel.

We hope that this has helped to guide your choice of wheel. If you have further questions, do not hesitate to call 01782 219816 or email: technical@potclays.co.uk