

The Spindle Moulder: One Machine with Many Applications

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A typical modern carpentry workshop uses a wide range of machines. Almost all carpentries would need a panel saw, a multi spindle boring machine, an edgbanding machine and a spindle moulder for their day to day production. While the first three machines have their job cut out for them, the spindle moulder is an exception to the rule.

Not for nothing is the spindle moulder known as the ‘Swiss knife’ amongst woodworking machines. A skilled operator could produce a wide range of products using the spindle moulder in combination with the right tools, accessories and templates. Some of the common applications are:



1. Profiling: This could be for jobs as simple as a quarter round, half round or bull nose profiles for post formed panels or for cornices, or for wooden beadings.

2. Profiling on curves: A corollary to profiling on straight pieces, with the use of special accessories, profiling can also be made on curves. This is useful in profiling arches, chair handles, chair backs, legs (for example from dining tables), stairs, etc.



3. End Grain Counter Profiling: A counter profile (male) is used to join the rail to the stile, which has the profile (female)

4. Raised Panel Profiling: A raised panel is usually the centre panel of a 5 piece shutter



5. Rebating: Rebate (or as is known in some countries as a dado) is a type of joint which is popular in Northern America. This joint is also used in door frames when working with rebate doors instead of flush doors.

6. Finger Jointing: A finger joint is used for optimum utilization of a large number of small

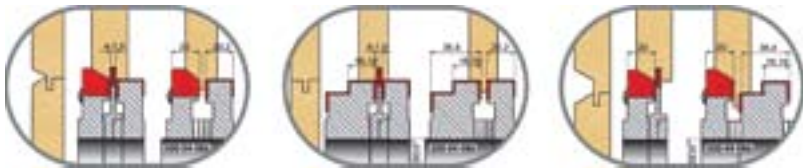




wooden pieces. Since defects are removed from wood this results in a much stronger member. While finger joint in the end grain is very common, this can also be used for joints along the grain. While this is not vital, finger joint along the grain improves the stability of the panel.

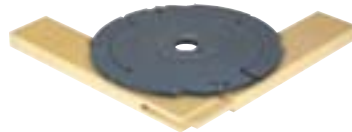
7. Wall Panelling / Wooden Flooring:

Most modern offices use wall panelling for enhancing the aesthetics. Flooring made out of wood has an 'old world' feeling which is very much in demand, especially amongst the top end clients.



8. Grooving: this operation would be on the edge of the panel (for example to insert T beading) or at the bottom (for back panel insertion).

9. Tenoning: A tenon joint is used for frames (for example door frames).



10. Profiling at multiple angles. This is especially useful in production of special parts like wings. A large wing is manufactured by joining lots of small pieces profiled at precise angle. When joined the small pieces form a large wing. A typical application is a wind mill.

11. Pattern Making: Tool and die making and pattern making, considered as highly skilled trades can make use of the spindle moulder very effectively.

In each of the above applications, the ingenuity of the operator plays a very significant role.

Most modern spindle moulders have a spindle which tilts from 90 to 45 degrees. This adds an additional level of flexibility to the machine's capabilities. Unfortunately, most ordinary machines tilt to the front side, which is a very old design and not considered very safe. There are very few manufacturers whose spindle tilts in the rearward direction, which is the modern and safe operating technique.



The right machine with the right accessories would be needed to support this. Hammer, a brand from the Felder Group, has a very strong moulder in its program (see page 28).