A Sampling of P&N Woodturning Tools

by Lyn J. Mangiameli

P&N woodturning tools come from the Australian company of Patience & Nicholson. I first learned of these tools from Richard Raffan, who mentioned he regularly used them. I never gave much thought to them after that, as they have never been available in the U.S. from any of the big woodturning suppliers. That changed recently, when first Lee Valley, and more recently Craft Supplies, decided to pick up a moderate selection of unhandled P&N tools (there are also a few small suppliers such as Rich Johnson in California).

I was particularly pleased to see the tools offered without handles. The larger my tool collection grows, the more I appreciate how unhandled tools can be stored compactly. More importantly, I find that matching unhandled tools to a through-bored steel handle allows for greater control of unsupported shaft length, and allows for greater consistency of working characteristics over the tool's life. This consistency is achieved as one initially can seat the long shaft more deeply in the handle, then later seat it more shallowly as the tool shortens with sharpening, thus maintaining a single exposed shaft length over a greater portion of the tool's life. Finally, purchasing an unhandled tool allows the turner to choose handle length, weight and even handle material (steel, aluminum or wood) to suit individual preference.

The only downside I find is that many of the P&N round tool shafts are 12 mm in diameter, which is sufficiently undersized from 1/2 inch (which is approximately 12.7 mm), to make these tools fit rather loosely in steel handles of 1/2 inch bore (e.g., Kelton, Oneway & Jordan). They will work, as the set screws of these handles will take up the slack, but a tighter fit would be desirable. This is also a warning for those who would drill out a store bought or custom wooden handle. Don't use a 1/2 inch drill bit, but instead use a smaller fractional size or obtain a metric 12 mm bit.

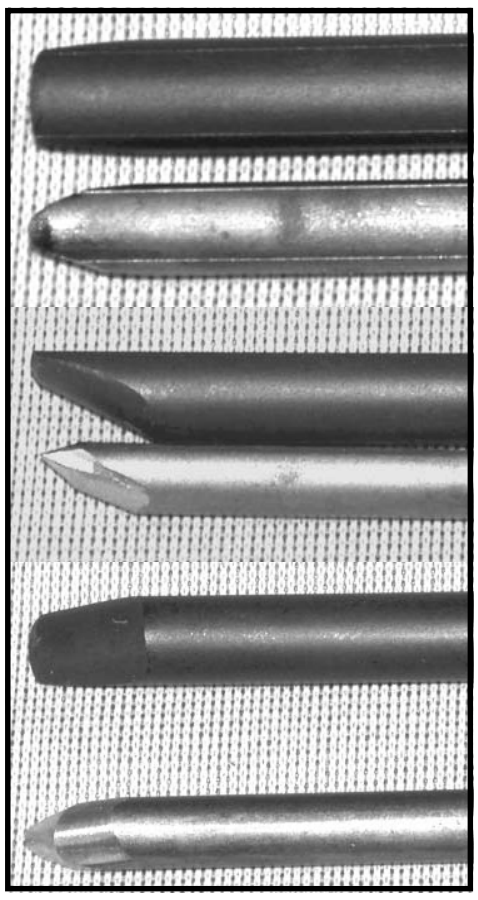
Unfortunately, many of the larger diameter tools, such as the 32mm roughing gouge, 16 mm Bowl gouge and 22mm Supa gouge have the last 2 or more inches of their shafts turned down to 12 mm. It would be great if the North American importers could specify these shafts to be necked down to a 1/2 inch or 13 mm size instead. [After viewing a draft copy of this article, P&N now intends to change to a 1/2 inch shank size to better fit the commercial handles commonly available in North America. These should become available when present stock is depleted.] Indeed, with the 16 mm bowl gouge (which very closely approximates 5/8 of an inch), it would be highly desirable to have this gouge maintain a uniform length throughout its shaft, which would allow it to fit quite well in steel handles of 5/8 inch bore (again, the Kelton, Oneway and Jordan, for example, as well as the Hamlet) and offer greater choice over how deeply the tool could be seated in a steel handle. I would really like to see this happen, but I have less confidence this change will take place, as the 12mm (and future 1/2 inch) diameter will be preferred by some making their own wooden handles.

All of P&N offerings are credible M2 HSS tools, most being a comparable alternative to the standard M2

Chart Showing the P&N Tools the Author has used.

Tool	Dimensions	Overall Length	Flute Length	Comments	Handles
Parting tool	3mm X 12mm	9-1/4 inch	NA	Flat sided	Fits adequately in Kelton, Oneway, Jordan handles with 1/2 inch bore.
Parting tool	6mm X 12mm	9-1/4 inch	NA	Flat sided	Fits well in Kelton, Oneway, Jordan handles with 1/2 inch bore.
Beading Tool	10mm X 10mm	9-1/4 inch	NA	Square shaft	Fits well in Kelton or Oneway handles with 1/2 inch bore. Very tight fit in Jordan handle unless edges rounded
Skew	30mm X 8 mm ~1-3/16 X 5/16 inch	9-1/4 inch including 2-1/4 inch tang	~6-1/4 inch working length on long point side	Meets Lacer criteria of flat long point edge and rounded short point edge	Fits well in Kelton, Oneway, Jordan handles with 1/2 inch bore.
Roughing Gouge	32 mm ~ 1-1/4 inch	10-1/4 including 2 inch tang	5-25/32	Made from round stock so upper edges curve in slightly	12 mm tang fits loosely in 1/2" bore steel handles*
Detail Gouge	8mm	10 inch	6-5/8 inch	Comes shaped straight across	Fits well in 5/16 inch bore of Kelton KH-1 ("Mini") Handle
Detail Gouge	10mm	10 inch	6-5/8 inch	Comes shaped straight across	Fits well in 3/8 inch bore of Kelton KH-1 ("Mini") Handle
Detail Gouge	12mm	10 inch	6-5/8 inch	Comes shaped straight across	Fits loosly in 1/2 inch bore of steel handles
Spindle Gouge	10mm	10 inch	6 inch	Comes with fingernail grind	Fits well in 3/8 inch bore of Kelton KH-1 ("Mini") Handle
Bowl Gouge	10mm	10 inch	6 inch	Comes ground straight across, parabolic/ U flute	Fits well in 3/8 inch bore of Kelton KH-1 ("Mini") Handle
Bowl Gouge	12mm	10 inch	6-5/8 inch	Comes ground straight across parabolic/U flute	12 mm tang fits loosly in 1/2 inch bore of steel handles
Bowl Gouge	16mm	11 inch	7 inch	Comes ground straight across parabolic/U flute	Last 2 inches of shaft necked down to 12mm which makes it fit loosely in 1/2 bore of steel handles*
Bowl Gouge "Supa Gouge"	22mm ~ 7/8 inch	12 inch including 2-3/8 tamg	7-1/4 inch	Heavy walled U-shaped flute	Last 2-3/8 inches of shaft necked down to 12mm which makes it fit loosely in 1/2 bore of steel handles*

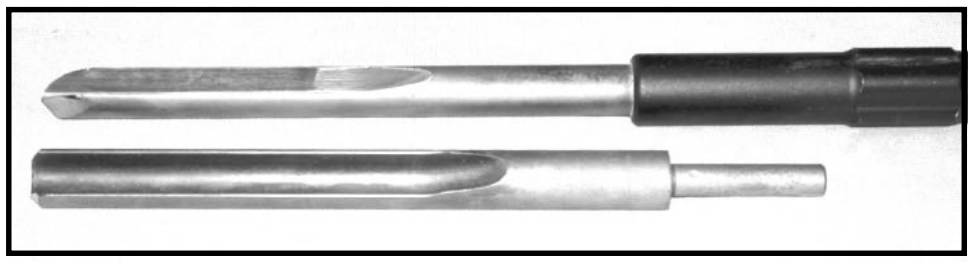
* Future production to use 1/2 inch shank for better fit in commercial steel handles.



Top, side, and bottom views of the Detail Gouge.

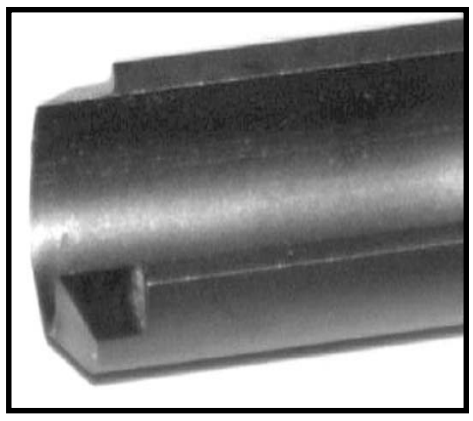
Crown, Hamlet, Henry Taylor and Sorby fare. P&N follows the North American convention of sizing all gouges according to the external diameter of the tool shaft, regardless of flute style. The detail gouges have very shallow flutes, the spindle gouges are slightly deeper, and the bowl gouges have deep flutes which to my eye appear slightly parabolic in shape, though P&N calls them U shaped. The flutes are adequately finished, about the same as a Glaser, though not as polished as a Sorby. Of course, any flute will soon become polished if you regularly maintain it with a slipstone. Hardness varies from 58 to 65 Rockwell depending on intended use. Some of the older P&N tools have a sandblasted finish (much like you'd find on a Glaser), but most recent production goes though a final "straw tempering" process and comes with a black oxide finish.

Of the several tools I have from the P&N line, three strike me as exemplary in design and performance. The first of these is the roughing gouge. To my knowledge, P&N is unique in offering roughing gouges milled from round bar stock, rather than the usual practice of forging from flat stock. This allows for a much heavier than average roughing gouge (relative to others of the same size) and a very sturdy transition from side walls to tang. The round tang is far stronger than the narrow flat tangs of other roughing gouges, and allows the gouge to fit into the round bores of steel handles. Milling from round stock also allows for side walls of a constant radius, unlike most roughing gouges where the upper portion of the flute is flared. The potential down side of this approach is that with the deep flute ground below center, the upper section of the side walls curve in slightly. I have not found this to be a problem, as I don't tend to cut in that area of my roughing gouges. For those that are concerned, one can lightly grind down the upper corners until the



Glaser and the Supa Bowl Gouge are compared in this photo.

The P&N Roughing Gouge. Ground from solid stock it represents a very solid tool.

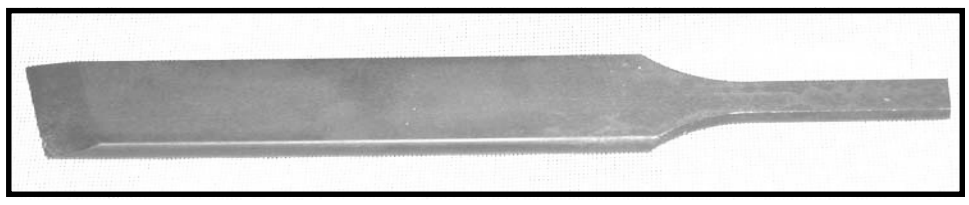


A Michael Hosaluk ground roughing gouge.

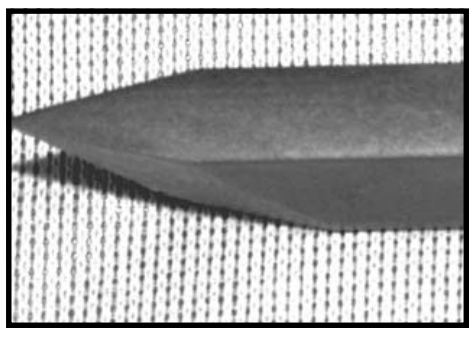
front profile is exactly a hemisphere. You can also try a tip from Michael Hosaluk (one of the first North American P&N importers) who notches the upper corners (going back about 3/8 of an inch) of the gouge (see attached photo). Michael does this so that he can get a clean cut on the side of details (such as square shoulders on tenons) with this side bevel when the gouge is held with the flute parallel to the tool rest.

The second is the 22mm Supa Gouge. This is a very ruggedly designed tool with a deep U shaped flute and thick sidewalls. Mine is almost 7/8 inches in outside diameter. One could also get by with using this gouge as a small spindle roughing gouge, and several turners have reported preferring it over a traditional roughing gouge. Most will choose it for initial roughing out of bowls, or use its diameter (and thus strength) to get by with long extensions over the tool rest when working with very deep bowls. For those of you who just can't justify the expense of a 3/4 inch V-15 Glaser, but would like a large rugged bowl gouge, the P&N Supa is very affordably priced. I keep mine with a traditional straight across grind, which works very well with the large deep U shape of the flute.

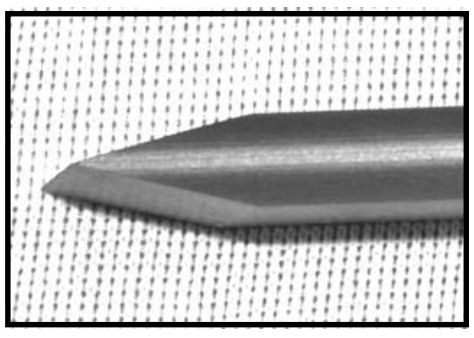
The third is their skew. Many are familiar with the excellent video prepared by Alan Lacer where he demonstrates the use of the skew, and recommends how to form the edges of the skew for optimal use with either the long or short point. Lacer describes how to round the edges of the short point side, and leave the long point side with a flat edge with lightly radiused corners. Fans of this configuration will be pleased to know that the P&N skew comes from the factory in this configuration, and apparently has always been provided this way. I find it a very effective configuration (all the reasons for which I won't go into here, but instead refer you to the Lacer tape available from most major woodworking suppliers), and appreciate that little of my time was required to make the P&N skew ready for some serious use. I must have near a dozen skews, including five different Glasers, but this P&N skew has instantly become one of my favorites. For me, it has just the right combination of width (30 mm), length, and bevel angle to make it an excellent general purpose skew. Its width makes it a particularly good choice for both beginning and experienced skew users. It is also a significantly thicker skew than most others (8 mm compared to a more usual 6 mm), which adds to its weight and stability. P&N also offers a narrower 24 mm skew from the same thick 8mm steel.



The P&N Skew Chisel.



Skew tip on the long point side.



Skew tip on the short point side.

Finally, I should comment a bit more on their Detail Gouges. Many gouge manufacturers offer one or two sizes of detail gouge, but P&N offers four, ranging from 8 mm to 16 mm (roughly 5/16 to 5/8 inches). The gouge normally comes delivered with a blunt fingernail shape which is functional, but not my preferred. I was fortunate in that the North American P&N rep, Greg Jensen, sent me an 8 mm detail gouge he had personally ground based on some ideas of Stewart Batty that both Greg and Mike Mahoney have adopted. (see photo). Basically Greg freehand sharpened the gouge with a spindle gouge fingernail profile, putting a 40 degree bevel all around the tool, then ground off the bevel to give a convex shape. Stuart Batty contends you prevent bruising the wood with this grind, and Greg also has found it is easier to control the tool when the bevel is short (and thus provides less leverage to come out of the cut). Greg notes that Batty actually grinds the bevel off all his Spindle, Detail and Bowl gouges, making his cuts with the gouge flute as close to a 12 o'clock position as possible, contacting the wood with the left side of the gouge. I have had only limited experience with this grind, but have found it effective. However, I have a lot more trouble maintaining the geometry (most know I am not fond of freehand grinding) and so for me find it best saved for a single, special use tool. In this context, I found the 8mm P&N Detail Gouge to have been a good platform for this grind, as also would be the 10 mm.