

## Technical Articles Coordinator.

The Committee have requested that I take on this role. This is no doubt because I have been quite outspoken about the extremely low incidence of technical articles in Tappet chatter. This is not to denigrate the excellent contributions of Mark Randell and Peter Daw in the last 12 months. I hope I am not missing any one else.

The core business of this club is "restoration" I can't recall when I last saw a restoration of either an engine or a vehicle written up in our magazine.

It would be desirable if part of the culture of AHMRC was for us as a matter of course to write up our restorations and techniques for achieving them.

There are plenty of other subjects which can come under the blanket description of Technical articles.

Descriptions of a certain Marque of engine or vehicle, use of certain tools, rust removal, spray painting, and home casting, would also be appropriate. The list is endless and would be of great interest and use to our members.

I will troll back through old copies of Tappet Chatter for appropriate articles and suggest that the **library establish an indexed file of Technical articles**, and wrinkles which we can now add to.

I would also like to suggest here that our committee look at **establishing an annual prize** for the best Technical article.

I'm aware that some members, although of considerable technical expertise and skill may not feel confident to put pen to paper, or have a computer to write up an article.

We still need your contributions, I am very happy to **help** get your jottings or ideas into a form for publication, and can possibly help with photos.

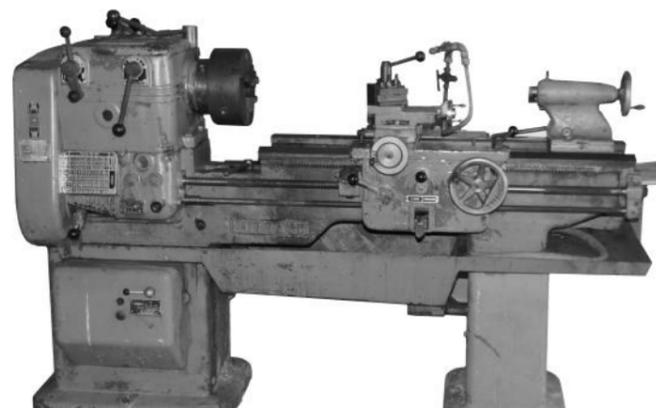
Please don't be shy in approaching me.

From now on I will be approaching members whom I know have skills or special knowledge for articles.

I have written the following article on choosing a lathe to get things under way. Most will know I have no engineering back ground at all.

I welcome any criticism of this effort as I am well aware we have members who have used lathes most days of their working lives, and may wish to add advice or correct my misconceptions but please do it in print for the magazine.

One final thing every time you have to suffer a technical article from myself you will know I am feeling very let down.



The Clubs lathe in the Chook shed

## Choosing a Lathe

The most significant and useful addition to my workshop, was my purchase of a lathe.

It is more good fortune than good judgement that I can still consider it a good choice for a hobbyist, as when I bought it I was rather ignorant of what to look for.

I purchased a 2<sup>nd</sup>. Hand Myford ML7. An English lathe.

It is nearly as old as myself so I think it can be regarded as an antique or at best a vintage item.

If like my self, you have no engineering back ground I would suggest that a first best step would be to buy a copy of "The Amateurs Lathe" by L H Sparey available on line or from Dymock's. Then become familiar with the various components and how they work, this will greatly help you assess any lathe you are considering.

But to get you started!

**1. Size:** For a while I thought I might buy one of the mini lathes available. I am now very glad I didn't go that way. For one, I was told that whatever lathe I bought it would eventually be too small for some job or other. This has proven true, because one day you will need to turn something too large for your own lathe.

For this reason alone the club's purchase of a large lathe will prove to be very significant for restorers, even those with their own lathes. The message is buy the largest lathe practical for your workshop and purse.

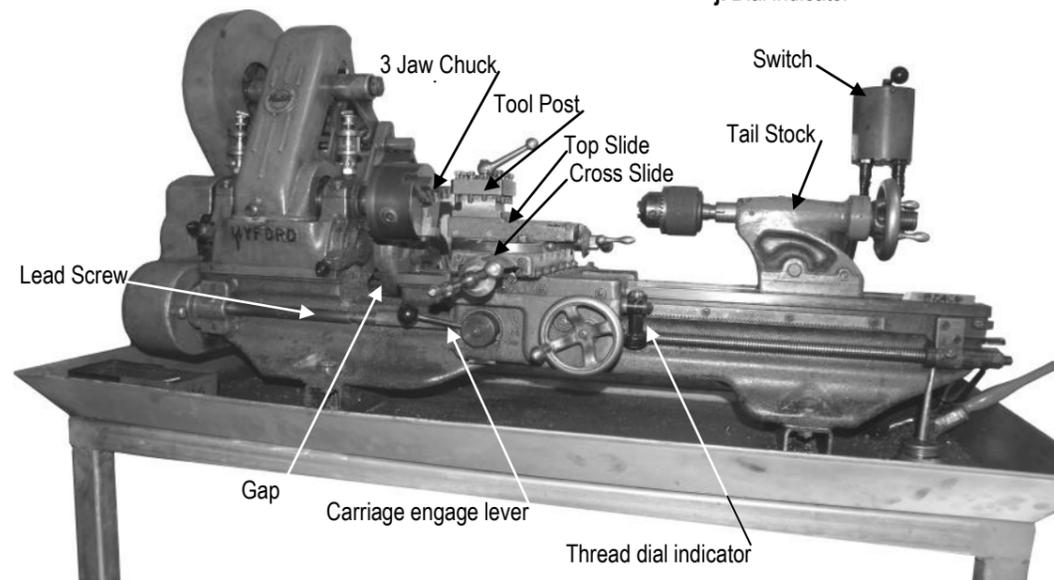
Secondly as a novice I have made mistakes, which have been quite dramatic in their suddenness and the amount of force involved. I doubt a mini lathe would have survived my learning period.

**2. Gap bed or other wise:** A gap bed lathe allows larger diameters to be turned than would other wise be possible on a lathe of the same bed length. The clubs lathe is gap bed as you can see from the photo

**3. Combined Mill and lathe:** Although possibly handy at times, I can not see that these would replace a stand alone milling machine.

**4. New or Second hand:** This is a difficult decision. The availability of relatively inexpensive Asian imports is tempting.

Never having explored this market, I can not give any advice apart from considering warranty periods, and on going availability of replacement parts and accessories. If possible seek out others who have purchased the brand you are interested in. I know of one buyer who keeps breaking half nuts, this is the nut which locks the carriage onto the lead screw and which in this case seems to be an inferior metal. I believe these are not cheap to replace.



**5. Condition:** From here on I will largely be considering second hand lathes.

**a. Bearings:** Check that there is no significant play in any of the bearings particularly the head stock bearings.

**b. Lead screw:** Check that there is no obvious wear or damage. Damage here will prevent the cutting tool from progressing smoothly along the work.

**c. The bed:** Inspect to make sure there is no significant damage, from hack saw cuts and other abuse.

**d. The tailstock:** Make sure that the tail stock slides freely along the bed with no lateral movement as this is essential for centring and that it has a centring adjustment.

**e. Top slide:** Ensure there is no undue play in its movement.

**f. Cross slide:** Again ensure there is no undue play in its movement

**g. Electrics:** The switch should include a reverse and be able to be fitted close to the L hand. On later lathes this will be built into the machine, but on mine it is a separate unit which I had to mount high on the R side due to room constraints.

**f. Belts:** If present, should be in reasonable condition. (some lathes have all geared drives to their motors.)

### Essential Accessories

**a.** Full set of change wheels these are gears for speed adjustment of the lead screw and thread cutting.

Essential if the lathe is and older type like my own

**b.** 3 jaw (self centring) chuck and key

**c.** 4 jaw chuck and key

**d.** Face plate and carriers

**e.** Fixed steady.

**f.** Cutting tools. These come in a variety of forms, high speed steel, carborundum tipped, and indexed (interchangeable) I find High speed steel OK for just about everything I do.

**g.** Callipers the electronic ones are much easier to use than the old vernier type and give the added advantage of being able to instantly change from metric to the old inch based system

**h.** Lathe centres.

**i.** Bench grinder for sharpening cutting tools

**j.** Dial indicator

### Desirable accessories

**a.** Thread dial indicator for thread cutting.

**b.** Running steady.

**c.** Points that fit the tail stock a ball bearing type lathe centre and a half point for finishing right across to the centre of the end of a piece being turned. (easily made)

Some very useful accessories can be made once you have your lathe.

**d.** Taper turning attachment to fit the tail stock

**e.** A dye holder to fit the tail stock this assures perfectly centred threads.

**f.** Tables showing metric conversion, drilling and threading information.

Obviously the more accessories you can get with your lathe at purchase will save a lot of money. Also be sure that you can still get spare parts for your lathe. Fortunately I have found that Myford are still functioning in the UK and all parts are readily available from them and also a firm in Brisbane. (Minitech)

I have also found that lathe tools and accessories can be bought on line from a firm called Ozmestore on ebay. I find their prices are largely unbeatable. They have a depot at Port Adelaide and don't mind you picking up the items from there which can save a lot in postage.

I hope this helps some one get started.

Dick Turpin

## Some of the accessories

