## Sheldon Lathe Nomenclature, Model Designators, Serial Numbers, Special Codes, and Other Tidbits

Sheldon lathe model numbers and serial numbers generally consisted of two series of number and letter designators. The serial number was stamped on the tailstock end of the bed and the model designator and serial number were stamped on the gearbox plate. The last 2 digits of the serial number were stamped on the machined area for the witness mark on the base and also the top of the tailstock when there were several lathes of the same size being made (to avoid tailstock mix-up). These numbers and codes provide identifying information for the machines.

For example, the number stamped on the gearbox plate of a particular lathe produced in 1973 reads "ES-46-P" and the number stamped on the tailstock end of the bed is "ES-32633." Together, these numbers identify this lathe as a late model 11" swing lathe with 46" bed (20" between centers) and an "E" type drive (coincidentally, with 8 speeds), mounted to a pedestal type base.

Sheldon used a fairly consistent nomenclature system, with some variation. They began the combined model/production order system in approximately 1940. Previous to that, there was less consistency.

### Model Identification (Tag on Gearbox) generally included

- 1. The **Swing and Type of Drive** with one or two letters, e.g., **SE**,
- 2. Then the **Bed Length in Inches**, e.g., **56**,
- 3. And how the lathe was **Mounted, i.e., P** for **Pedestal** or **B** for **Bench**, e.g., **SE56P** or sometimes **ES56P**.

#### **Size/Capacity (Model) Designators**

- L 10" swing #4MT spindle taper; 1-3/4" x 8 TPI spindle thread
- XL 10" swing, "short" #5MT spindle taper; 2-1/4" x 8 TPI spindle thread
- **K** Early 11" swing, "short" #5MT spindle taper; 2-1/4" x 8 TPI spindle thread
- **S** Later 11" swing (clearance measures at an actual 11-1/4" over the bed and carriage wings), "short" #5MT spindle taper; 2-1/4" x 8 TPI spindle thread
- M 12/13" swing, "short" #5MT spindle taper; 2-1/4" x 8 TPI spindle thread (This lathe was designed to swing 13" but was advertised as having a 12" swing)
- R The most modern, sophisticated, and heavy duty lathes of the Sheldon line. The R series includes 13", 15", and 17" swing lathes

### **Drive Type Designators**

- **E** 4 -speed under drive with 4 step pulleys (or possibly 8 speeds if the primary pulley has two steps instead of 1). A very reliable drive.
- **U** 4-speed under drive using 2 levers & dog clutches
- **Q** Quick-change feedbox, generally used with a **W** indicating something non-standard at that time, usually a feed clutch in the apron
- Was also used later to indicate the **Worthington** variable speed spindle drive

## Spindles

The smaller Sheldons (L, XL, K, S, and M series) were available with three types of spindles – threaded, L-00, and D1 (camlock). Threaded spindles were the standard and were the most common. Spindle styles were not part of the model/serial number system and were only mentioned on the shop order when the lathe was being built. On the larger (R-series) lathes the D1 spindle became the standard, with the L or the A spindle nose as options.

For your information, the large 32" swing Sheldon CNC lathe, built to be shown at the 1982 IMTS but which never left the plant, had a D1-8 spindle as standard equipment. It had a 30 HP variable speed DC spindle drive and was scheduled to go to Texas right after the show but National Acme changed all that! For more Sheldon history, see the Sheldonlathe history file in the Yahoo *Sheldonlathe* group Files section.

#### **Common Bed Length Designators**

L and XL Series (10") came in 38", 46", and 56" lengths

K and S Series (11") came in 46", 56", and 70" (special order) lengths

M Series (12/13") came in 46", 56", and 70: lengths

R Series (13", 15", and 17") lathes came in 5 ft., 6 ft., and 8 ft. bed lengths. The 8 ft. bed had a third support pedestal in the center.

## Less Frequently Used Letter Designators (Usually on older model Sheldon lathes)

- R Sometimes used for rear drive on a bench lathe. Also sometimes used to indicate tapered roller spindle bearings
- T Indicated a taper attachment or tapered roller spindle bearings
- **M** Sometimes used at the end of a serial number on Government orders to indicate the order included a **m**etric end-gear attachment.
- **O & H** Both used to indicate a flat belt **o**ver**h**ead spindle drive
- **B** Occasionally used to indicate **b**all bearing spindle bearings (very few were made)

# The Numerical Portion of the Sheldon Lathe "Serial Number" (Order of Production, Stamped on the tailstock end of the lathe)

The "serial number" is stamped in the tailstock end of the bed, sometimes preceded by the model number, e.g., "ES-32633." This is a system of sequential serial numbers, in order of machine production, started before 1940 and continuing through all the Sheldon lathes, including the NC and CNC lathes. NC and CNC were numerical controlled lathes. The system was continued to the end of Sheldon production. The database of these serial numbers is only approximate as the original production records are no longer available. I am attempting to reconstruct the database, so if you have known production data on your lathe (the preferred document is the signed and dated test sheet that accompanied the lathe; second in

preference is an original bill of sale; etc.), please contact me so I can include this information in my database reconstruction project and fill in the gaps. Here is a list of what I have thus far.

<b>Production Date</b>
1939
August 27, 1940
1943
1944
October, 1945
1946
1952
1953
1954
December 14, 1955
November 10, 1956
February 17, 1960
September 20, 1969
January, 1971
May, 1971
February, 1972
November, 1972
November, 1973
November, 1973
November, 1973
June, 1974
January, 1975
July, 1975
June, 1976
January, 1977
October, 1977
April, 1978
Marcy, 1979
February, 1980
May, 1980
April, 1981
August, 1982

The first Sheldons were produced in 1932 or 1933. I believe these lathes had "Sheldon" cast into the beds. The oldest "model/serial number" I know of is **L-243**, which was probably built in 1933, 5 years before R.S. Dean sold the Sheldon line to the Armstrong brothers and George Caroline in 1938. The sequential serial numbering system was used until production ended. The oldest verified, recorded, dated serial number produced by the Sheldon factory is **549**, dated **1939**. The last I have knowledge of is #**33511** produced in **1982**. Over 33,500 Sheldon lathes were produced.

I hope this helps decipher the "alphabet soup" in Sheldon lathe serial numbers.

John Knox 2/22/2013