WAR FINISH to TOOLS

By Neil Searle

The term "War finish" was coined to define machines and tools constructed for the war effort, these were sometimes painted dark grey or black. The use of nickel was restricted by the government during the war due to its importance in producing stainless steel, hence the “war finish” stamp.

All non-essential parts that would normally be aluminum or brass were cast iron if at all possible. There were many tools, machines and some firearms that had “War Finish” cast or stamped on the tool in the UK. In particular “Record” tools are more often found with the casting than other manufacturers in the UK. Other manufacturers simply did not state War Finish on their tools.

Fig.1.

This particular tool has the trade mark ‘Britool’ which indicates it was made by the British Tool and Engineering Company, who had copyrighted that term back in 1920.

War Finish was never an officially government sanction economy procedure, but most tool manufacturers could not get hold of their usual high quality raw materials to coat tools in either paint or chrome to stop them rusting. Other changes made might include not cleaning up castings as well as pre-war standards or reducing the number of processes needed to finish the tool so it could be made quicker at the expense of looking more crude. The term ‘War Finish’ was applied to indicate to customers that this tool was not to the grade one might expect pre-war, but the company was working under wartime conditions and trying to save labour and materials in its manufacture. It must be said that there was never anything wrong with these tools in how they functioned, but rather in how they were finished.

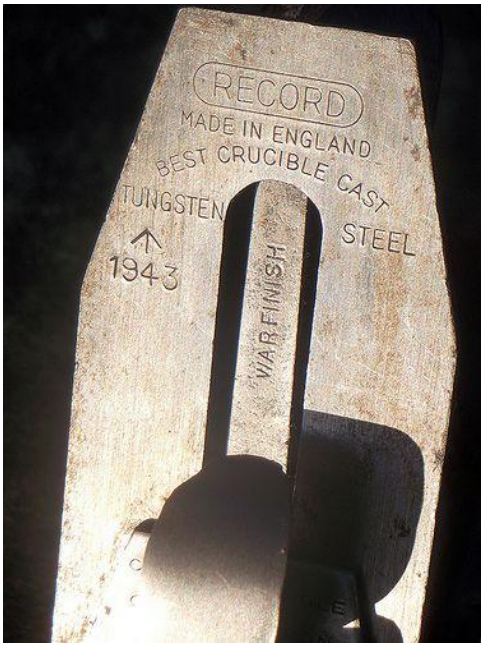

Fig.2.

A vintage smoothing plane made in Sheffield between 1939 and 1945. The lateral adjustment lever is stamped "War Finish" to explain the replacement of Brazilian rosewood with English beech handles and nickel plating on the lever cap instead of chromium.

Fig.3.

"The Ministry of Supply Order 1951 No. 1048 prohibits the use of Nickel Plating on planes, and an alternative Metal Plating is now used"

In Record Tools catalogue No. 14 (1935) it lists all of the planes as being "Rustless Plated" This is believed to have been a dull grey metal coating that may have been cadmium plating.

USA

In January 1942 — a mere month after the attack on Pearl Harbor, Hawaii — President Franklin D. Roosevelt ordered the establishment of the War Production Board. Its purpose was to convert the factories of peacetime industries into manufacturing plants for weapons and military equipment for the fight. The second goal was to conserve materials like metal, which soldiers, sailors and Marines would need for the fight in such things as guns, ordnance, tanks, ships, aircraft, tactical vehicles and so on. War Production Board lasted until just after the end of World War II in October 1945.

Fig.4.

Other items considered essential for war included petroleum products, rubber, paper and plastic. That meant strict rationing for civilians, such as limiting vehicle usage and the purchase of luxury items.The War Production Board lasted until just after the end of World War II in October 1945.

In the USA they also had war finish. There were also tools from this era that had W.F. stamped on the tool, this apparently stood for Wright Field as it was a major contract destination during WWII. The tools that had “War Finish” were for the civilian market and again this was an indication that the materials used in the tool’s manufacture were of a lesser quality, due to wartime scarcities. Production of machine tools tripled in the United States in the war. No war was more industrialized than World War II, and it has been written that the war was won as much by machine shops as by machine guns.

After nickel- and chrome-plating were restricted in late 1941/early 1942, there were only a couple finishes possible: cadmium plating, which was already being used on economy line tools, japanning, and lacquer, and of course, natural steel, which could be polished or not. Chemical treatments such as black oxide and phosphate were actually invented during the war by steel consortiums in response to nickel- and chrome-plating restrictions.

Fig.5.

A “Plomb Tools 1216” wrench made from using slightly inferior materials. The Plomb Tool Company was a major supplier to the war effort. Some Stanley planes from 1942-1945 War production, were often without the frog adjustment.

In the US the “War Production Board” directed conversion of industries from peacetime work to war needs, allocated scarce materials, established priorities in the distribution of materials and services, and prohibited nonessential production.[3] It rationed such commodities as gasoline, heating oil, metals, rubber, paper[4] and plastics. It was dissolved shortly after th

A study from the US War Production Board published during the war that states that “*machines painted green were easy on the eye and tended to reduce eye fatigue and operator error.”*

Ref: Record Hand Planes. Wikipedia.