

Case Study 28: Spitfire restoration

Tungum® tubing has been used in the restoration of the Mk IX BR601 Spitfire at Biggin Hill, Kent.

Mk IX BR601 Spitfire

BR601 was the sixth Spitfire Mk.IX, built at Southampton during 1942, first flight at Eastleigh, 16 June 1942

Allotted to 64 Squadron (first unit to receive Mk.IXs) first ops flown with Mk.IXs in 28 July 1942.

1942-1976 Various upgrades, buying, selling and restorations to collectors around the world

In 1976 it was restored by apprentices from the Atlas Aircraft Corporation for static display

1976-2009 Various upgrades, buying, selling and restorations to collectors around the world



2009 acquired by Peter Monk and fully restored for the Collings Foundation, Stow, Massachusetts, USA

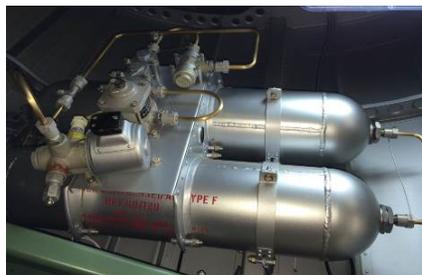
2016 First flight after full restoration again on 31st of August



How Tungum played its part

The Civil Aviation Authority requires items to be made as per the original manufacture of aircraft during World War II and Tungum was used on the hydraulic systems of the aircraft.

Tungum's high strength allows it to be made in thin wall sections, keeping weight as low as possible but strong enough to hold the hydraulic pressures required.





How Tungum played its part

Tungum tubing is an ideal material for this type of application. Its high strength to weight ratio made it a material of choice at the time. Fatigue resistance is another important feature of Tungum as there is a large amount of vibration that hard piping systems have to endure on early aircraft such as the Spitfire.

As the pictures show on this page, you can see the Tungum tubing being used all through the cockpit area for many hydraulic systems, undercarriage, flight control systems, weapon systems etc, to name but a few.

Tungum tubing is easy to bend and install, another great benefit when you need to fit out in very confined areas!



Photographs courtesy of Franco Tambascia at The Spitfire Company (Biggin Hill Ltd).

The Biggin Hill Heritage Hangar is a restoration facility dedicated to putting Spitfires back in the air.

For more information – visit their website: www.bigginhillheritagehangar.co.uk or www.flyaspitfire.co.uk