

# LIST OF UNION MILLS MODELS MADE

Production of the range of Union Mills 'N' gauge model locomotives began in the autumn of 1994 with the first version of the J39. This was fitted with my first design of tender drive in which a can motor drove a longitudinal shaft via a spur gear step down, the shaft having a worm at each end which drove the front and rear axles. This proved noisy due to the initial stage of spur gears and was not fitted with traction tyres. In 1995 a new tender drive was designed in which an initial worm reduction via a steel worm drove a series of nylon spur gears to all three axles which had traction tyres. This continued in use until around 2002 when a new design of tender drive was created using a double shaft motor with a worm on each end driving via an idler shaft to a spur gear on the front and rear axles. The centre axle was not driven. In the first instance Japanese motors were used, but then I went on to custom made Korean Samhongsas motors. Initial experiments were made with carbon brushes but in the end I settled on the metal brush motor that has proved very reliable if used with an electronic controller like Gaugemaster. Brass worms were used with the initial lot of double shaft tender drives, followed by nylon worms. At the end of 2014 another tender drive was designed, this took advantage of modern developments in motor technology in China and used a smaller motor with excellent characteristics for slow running and I reverted to brass worms. This new motor is lower and mounted in an offset position and has enabled the lower GWR tenders to be modelled although it has also been adopted for all the other tender drives.

Below is a list of all the models I have made over the years, but not in the order in which they were made. Some of the older models like the J39, D20 and B12 have either been partly or wholly re-tooled to bring them up to the latest standards. All models were made in both BR and Grouped liveries apart from the City of Truro which only had one livery.

<u>L.N.E.R.</u>	<u>L.M.S.</u>	<u>Southern</u>	<u>G.W.R.</u>
J11 0-6-0	2F 0-6-0	700 0-6-0	Dean Goods 0-6-0
J25 0-6-0	3F 0-6-0	"0395" 0-6-0	Collett 0-6-0
J26 0-6-0	7F 0-8-0	T9 4-4-0	Dukedog 4-4-0
J27 0-6-0	G2 0-8-0		City of Truro 4-4-0
J38 0-6-0	Cauliflower 0-6-0		
J39 0-6-0	2P 4-4-0		
Q2 0-8-0	Price of Wales 4-6-0		
D20 4-4-0			
B12 4-6-0			
D11 4-4-0			
D16/3 4-4-0			