THE DEVELOPMENT OF THE FLUSHING TOILET
DETAILED CHRONOLOGY  1596 onwards

1596  Invention of the Flushing Toilet
Sir John Harington, “Father of the Water Closet” and eccentric Godson of
Queen Elizabeth 1st invents a flushing toilet and describes the details in his
book  “Metamorphosis of Ajax”. (Ajax is a corruption of “A Jakes” which was
the term used to describe a “privy”).

The WC was essentially a “Valve Closet” and one was installed for use by the
Queen at Richmond Palace. (It was the Queen, remember, who took a bath
once a month whether she needed one or not!)

Water, “but not a whole Thames full”, was used to wash the toilet chamber.
Unfortunately the toilet did not catch on - perhaps it was too complicated and
expensive for its time. Later Royals, James 1st, Charles 1st and 2nd and
James 2nd all preferred “close stools” or chamber pots which, of course,
required emptying into the local river or moat.

Harington was almost two hundred years ahead of his time!
1700 - 1850 “The Age of Awakening

1775 First notable development of the Flushing Toilet
Alexander Cummings, a watchmaker from Bond Street took out the first successful patent for a valve closet. This followed several attempts during the early 1700’s to improve the closet. Cummings’ design was notable for its “S-trap” feature and used swirling water to cleanse the toilet bowl.

1778 Further development of Cummings WC
Joseph Bramah, a locksmith, took Cummings patent and improved it further and perfected a design which became the benchmark for WC’s for the next 80 to 100 years. “A most satisfactory water closet”. Bramah’s products were “quality” pieces and his name gave us the slang meaning “first rate” or “a good one”! 6000 Bramahs had been manufactured by 1797. Even so the closet was complex and expensive and not too hygienic.

1815 John Doulton invests in Lambeth Pottery
John Doulton invests his life savings of £100 in a small pottery in Lambeth, London. John goes into partnership with John Watts and Martha Jones making domestic wares

1827 John Doulton commences production of Stoneware pipes
The first production of ceramic pipes begins at Doulton’s Lambeth factory together with stoneware jars

1835 John Doulton’s son, Henry, joins the business aged 15

The Development of the Flushing Toilet
1837 - 1901  The Reign of Queen Victoria
The Golden Age of Toilets

1842  Publication of “General report on the Sanitary Conditions of the Labouring Classes of Great Britain
Written by Edwin Chadwick he described the sanitary problem of the land in great and sordid glory!

1845  Construction of Henry Doulton’s new Lambeth factory
Production of salt glazed stoneware sewer pipes commences. The Chadwick Report influenced Doulton’s decision to go into mass pipe production. The pipes were glazed inside and out and were formed complete with a special joint.

1848  Cholera Year
14,000 dead in London
55,000 dead throughout the Nation

1848  Public Health Act
The first Public health Act made it compulsory for a fixed sanitary arrangement to be included in every new or refurbished household. The arrangement may have been a “water closet, privy, or ash pit, furnished with proper doors and coverings”.

1848  Doulton expands pipe manufacturing to Dudley and St. Helens
Manufacturing of pipes continues and Doulton began making money from the sanitary reforms. 20% of UK sewers were made of Doulton’s pipes.

1849  Nuisances Removal Act
The Act gave local authorities greater powers to enforce better public hygiene.

1849  Thomas Twyford begins Sanitaryware manufacture
The Twyford family had long been associated with pottery manufacture and the coming of the Golden Age of Toilets inspired him to switch production from domestic wares to sanitaryware. He spotted an opportunity to make money. His entrepreneurial skills were put to good use and he soon began to realise his fortune.

1851  Development of an improved Water Closet
George Jennings continued the development of the WC and his patent described a “wash-out” design of toilet bowl.

The mid 1880s were busy times in the Sanitary Revolution

1858 “The Great Stink”
Sitting of Parliament is suspended due to foul smells from the Thames. “Something has to be done!” was the cry! Similar problems were found throughout the country. The River Cam in Cambridge was an open sewer.

1859 till 1865 Building of London Sewer System
Sir Joseph Bazalgette
Doulton pipes used

1861 Thomas Crapper sets up plumbing business
Thomas Crapper, born a Yorkshire man, sets up his plumbing business in Chelsea, London at just the right time to take advantage of the forthcoming boom in interest in public health and in particular sewage.

1863 Crapper invents Self Rising Seat
Thomas Crapper had an inventive mind and devised a contraption for use with WC’s - the self rising seat. The idea proved unsuccessful - it could slap unsuspecting ladies on the bottom!

1872 Metropolis Water Act
The Act required Water Saving Measures to prevent the shocking waste of water throughout the capital. WCs at this time were fed water using valves. these were notoriously leaky and in some circumstance users would prop the open permanently to ensure their WC’s remained sweet.

1872 Invention of “Valveless Waste Water Preventer”
Spurred on by the Metropolis Water Act Thomas Crapper put his mind to devising a system to prevent the waste of water from a toilet cistern. He designed the successful “Syphon” and in effect made water flow uphill!

Crapper went on to install the sanitary provisions at Sandringham in Norfolk

1872 Thomas Twyford dies. He was just 46 years old
Thomas’s eldest son, Thomas William, at just 23 takes over the business.

1875 Public Health Act, from the Disraeli government
This act required that "Every local authority shall provide that all drains, water closets, earth closets, privies, ash pits, and cell pools within their district be constructed and kept so as not to be a nuisance or injurious to health".

1875 Appearance of first “Wash Out” Closet
Daniel Bostel’s “Excelsior” wash out closet makes its first appearance. The ancestor of modern closets since Bramah’s valve arrangement is superseded

1877 Doulton purchases share in Nile Street, Burslem, factory
Partnership with Pinder Bourne and Co. manufacturing tableware and sanitaryware.

1882 Doulton wholly owns Burslem factory

1883 Launch of “Unitas” - 1st one piece ceramic pedestal closet
Thomas William Twyford designed the first one piece closet which was a vast improvement on previous designs. It was hygienic and cheap. It was free standing and the entire appliance was fully exposed. “No filth, nor anything causing offensive smells could accumulate or escape detection”. It was a “Perfection of Cleanliness”.

The toilet also featured a remarkable wooden seat which was hinged so that it could be raised to allow the use of the toilet by gentlemen as a urinal. Vast quantities were manufactured and exported. Installations were made in Buckingham palace. The Unitas was shipped into Russia and the name UNITAS became the Russian word for WC!

1884 International Health Exhibition
Twyfords “Unitas” featured and becomes a “star” product together with the “India Rubber connection”
Henry Doulton wins 21 medals for his exhibition of products. William de Morgan describes Doulton as “The Big Potter”

1885  Henry Doulton awarded Albert Medal of the Society of Arts

1887  Building of Twyford’s “model” factory at Cliffe Vale, Stoke. 
The factory was designed around a courtyard so that “every worker could have a window”. Twyfords Hanley and Bucknall factories moved to Cliffe Vale

1887  Henry Doulton knighted by Queen Victoria

1880  British Patent Perforated Paper 
Prior to the introduction of perforated loo paper cut pieces of paper were the norm. Twyford furnished his WCs with paper holders.

1896  Twyfords is registered with Companies House as a Limited company

1898  Doulton launches the ”Combination” closet 
Similar to the Twyfords Unitas it remained in production for another 60 years

1899  Twyfords TWYCLIFFE 
This was the first “syphonic” WC and the most perfect yet

1900  Twyfords WALL HUNG 
Twyfords wall hung WC makes an appearance

1901  Doulton granted Royal warrant
Doulton wins the right to use the word Royal in its title.

1908  The casting process developed

1910  Death of Crapper
January 17th 1910
1924  Production of sanitaryware still in Earthenware body
Sanitaryware was still either in the earthenware body or in fireclay. Earthenware was twice fired (just like tableware) in "bottle ovens" and this was an eight day process for first fire and 6 days for second (or glost) fire.

1930  Twyfords Double Trap Syphonic WC

1937  Doulton purchases Whieldon Road Sanitary Pottery, Stoke
When Winkle and Wood’s Sanitary Works at Whieldon Road, Stoke had been purchased the transfer of sanitary ware production from the Nile Street works began.

1956  Doultons Lambeth Works finally closes
By 1956 the Doulton empire consisted of four divisions:  
Doulton Fine China in Burslem
Doulton Industrial Porcelain, manufacturing, insulators, chemical wares and filters in Wilencote and Tamworth.
Doulton Sanitaryware at Whieldon Road, Stoke
Doulton Vitreous Pipes at Erith and Dudley

1959 - 1963  Twyford changes from Earthenware to Vitreous China body
Also mechanical casting and Tunnel ovens make their appearance

1968  Doulton acquires factories in Queenborough and Stoke to expand production

1996  400th BIRTHDAY OF HARINGTON’S FLUSHING TOILET