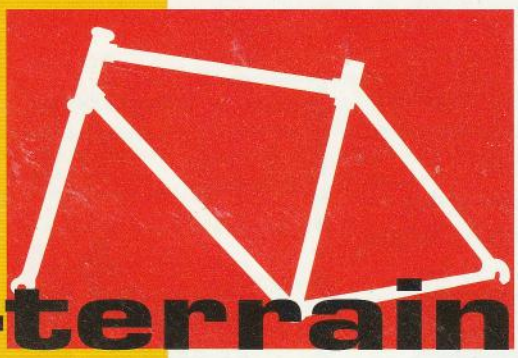
REYNOLDS



all-terrain

racing

touring

energy efficient

technology

FLUFFYCHICKEN – RETROBIKE

Truly the standard by which all others will be measured...

Reynolds 853 is a brand new seamless, high strength, lightweight, butted, heat treated air hardening steel.

Careful control of 853's alloying elements provide enhanced mechanical properties compared with other steel cycle tubes currently available.

The main advantage of Reynolds 853 is its ability to air harden after the jointing process, an attribute absent from from other competitive tubing.

When frames are constructed using T.I.G. welding or high temperature brazing above 850° C (1560° F) the frame joints increase in strength as the frame cools.

A normal chrome molybdeum tube in the heat treated condition jointed using the same method produces lower strength joints and less laterally rigid frames.

The unique air hardening property of Reynolds 853 provides additional stiffness through reduced microyeilding at the joints giving stiffer frames with excellent fatigue strength and ride quality to be constructed.

Reynolds 853 also provides the framebuilder with scope for weight savings dependant on frame application or usage.

An additional advantage of 853 is, as the tube surface is so hard minor denting damage caused by surface impact is significantly reduced.

Mechanical Properties

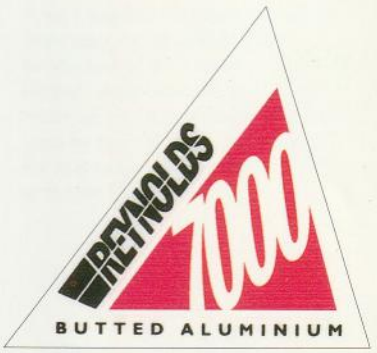
Reynolds can alter the mechanical properties of 853 through computer controlled thermal treatment processing, however, the standard set properties are:

U.T.S. :	81-94 Tsi
	180-210 ksi
	1250-1450 MPa
Elongation:	10% min
Hardness:	400 Hv min
	40 HRC min

Reynolds 853 tube set comprise four main frame tubes only, seatstays and chainstays are supplied in Reynolds heat treated chrome molybdenum material.

Reynolds 2000 (CP2)

A mid range titanium, butted for extra strength and weight saving. Available in a range of sizes for race and ATB frames. 8 tube sets only available.



Reynolds 7000

A high end 7000 series aluminium. Two sets available, race and ATB. Suitable for performance frames. 8 tube sets only available.

REYNOLDS 753

70/83 TSI - 1080/1280 N/mm²

NB:753 material is restricted to Reynolds authorised builders only. Reynolds recommend that 753 frame tubes are not chrome plated.

The material is suitable for road racing frames to be used on any surface. It is particularly strong, but also very light, making it suitable for road and track, time trial frames and especially for low profile cycles. 753 can also make particularly delightful general purpose touring cycles, where cost is not of prime importance, but where customer satisfaction is. Over its life, 753 has been produced in many gauges and, after extensive practical trials with both material specification and tube section, the present gauges and sections have evolved. This evolution has produced frames that have won practically every major professional race in the world. These successes are the real proof of 753 strength and durability, success where the going is the hardest.

REYNOLDS 753 ALL TERRAIN

Many specialist riders have asked for such a set. After exhaustive testing, Reynolds bring to you a set with regular ATB tube sizes, with all the superb strength and resilience of 753. This set is somewhat lighter than its 531 stablemate. However, a real concentration has been made on performance. The fork blades provided are 531, not only because of their excellent resilience, but they also permit the 'Unicrown' design and construction method to be used.

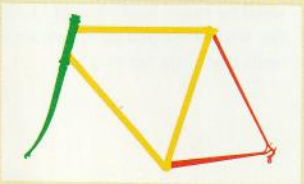
Variable Strength Technology

Developed and proven by Reynolds through extensive professional road race testing:

FORKS: 45/55 TSI strength
for reactive resilience and excellent handling characteristics

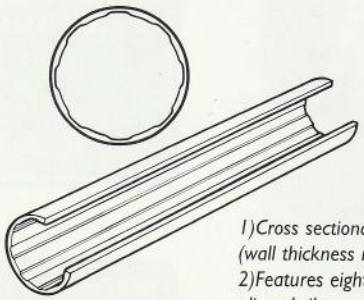
STAYS: 70/83 TSI strength
for ultimate stiffness and maximum power transfer through the drive train
Reynolds recommend these stays are not chrome plated.

FRAME TUBES: 48/60 TSI strength
The ideal strength frame tube to work with the above fork stays.



45/55 TSI - 700/850 N/mm²
48/60 TSI - 750/920 N/mm²
70/83 TSI - 1080/1280 N/mm²

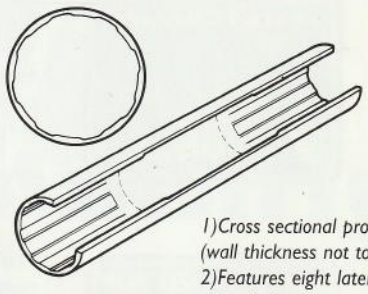
REYNOLDS 708 CLASSIC



1)Cross sectional profile (wall thickness not to scale) 2)Features eight laterally aligned ribs

A recent development from Reynolds, the name describes the purpose. The main tubes of this set have a new and ingenious internal profile. The profile is designed to maximise lateral stiffness and strength in the directions of the known loadings, which result from the punishing road surfaces and the extreme rider applied deflection loadings experienced on the brutal classic racing courses.

REYNOLDS 731 OS RACE



1)Cross sectional profile (wall thickness not to scale) 2)Features eight laterally aligned ribs

This brand new racing tube set introduced in 1992 features doubled butted, oversized main frame tubes, with laterally aligned stiffening ribs on the butt sections to maximise stiffness and tortional rigidity, as with the 708 Classic set. 731 OS race is approximately 10 % lighter than comparable competitive tube sets, and is suitable for road, track and time trial frames at professional level.

REYNOLDS 653

A comparative newcomer to the Reynolds portfolio, but a specification that has already enjoyed the success of winning the 1991 Tour de France. 653 provides much of what 753 does, but is a more widely available specification and is highly recommended for road racing under most conditions. It will give the best results if used with premium frame components as recommended for 753. It is probably the optimum value-for-money material available for road, track and time trail use, including low-profile frames. 653 is not intended for load-carrying touring cycles, but is ideal for a light "day tourer".

REYNOLDS 653 ALL TERRAIN

The All-Terrain version of the 653 conventional set which has been adapted for competition ATB racing. 653 All-Terrain is tough enough to stand the stresses and strains metered out by the most powerful riders, yet the set retains its lightweight and superb handling characteristics.

The doyen of road racing and general purpose track frameset materials, 531 C is so readily suited to most designs that it makes many of its competitors redundant. Its general suitability is such that constructors can easily forget that in the wide Reynolds range it is not the lightest available, it is not the stiffest for load carrying tourers or tandems. But, for all other general road and track purposes, it provides the yard-stick by which other materials are judged.

Developed as a result of field experience with a number of world-wide touring expeditions, this material has been 'stiffened-up' in the top tube and seat tube, to meet the additional loadings imposed by the current trend to greater pannier and other carrying capacity demands. It is to be noted that the traditional oval fork blade has been retained. This is to provide the correct pivot spacing for brazed-on cantilever brakes, so that wheels with 35mm section tyres can be fitted and removed without clearance problems.

A real super ATB material, virtually unburstable. This well known set has been further enhanced by embodying 531 Unicrown fork blades. As an alternative to welding, Reynolds have an investment cast 'Unicrown' for brazing, or silver-soldering, specially suited to the profile of the Reynolds fork blade.

An upgraded development of 501 SL, this Chrome-Moly tube set is a high performer. It is very similar in many respects to competitors' mainstream lightweight tube sets. It was developed to withstand the slightly higher process temperatures of machine brazing but built and jointed with craftsmanship. Used as a production material, it is suitable for the manufacture of excellent bicycles for most purposes. Used with the care afforded to more expensive materials, it produces strong and high performance framesets, of exceptional cost effectiveness.

This 'three main tube' set provides the manufacturer of production of sports and touring cycles with a "performance" double butted main frame triangle in 501 Chrome- Moly material. Sets may be augmented by using Reynolds forks and stays.

Although slightly heavier than its 531 relative, this is still a light set, and ideal both for lug-built and welded designs. This comes as standard with the 'Unicrown' fork blade. This set is suitable for the slightly higher temperatures of machine brazing found in the volume production

This plain gauge 'three tube set' is designed to provide the cycle manufacturer with a superior material for the three main tubes of sports and leisure frames. The chrome-moly steel alloy used stands up to machine brazing temperatures, and is not difficult to combine with carbon steel forks and stays, due to its well considered specification.

A very popular chrome-moly 'three main tube set' specification for production of All-Terrain or city bike frames. Adaptable and flexible in its make up, this frame specification is used by many leading manufacturers for mid-range priced mountain bikes with that little bit extra.

The new Reynolds seamless CROMOLY specification provides a three tube, main frame set combining economy and ease of production characteristics, with a superb material specification and a new butt profile for performance, strength and weight saving. The ideal frame set for the rider who aspires to greater things in the street, touring and sports and leisure cycling.

The mountain bike frame tube set variant of the new Reynolds CROMOLY conventional frame material, adapted superbly for on or off road frames. This set is destined to be a popular addition to the Reynolds range.

REYNOLDS

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