



isaac

TECHNICAL CARBON

INSPIRED BY NEWTON

2006 FIRST EDITION





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THE STORY

THE ISAAC STORY – ISAAC WAS FORMED IN 2001 AS A PROVIDER OF CARBON-COMPOSITE FORKS AND COMPONENTS. THE NAME WAS TAKEN FROM ISAAC NEWTON, THE INSPIRATION FOR ITS TECHNOLOGICAL DIRECTION. ISAAC'S INNOVATIONS WERE TRULY PIONEERING. THE RANGE OF FORKS QUICKLY FOUND FAVOUR WITH FRAME MANUFACTURERS IN SEVERAL COUNTRIES. *isaac* IN LATE 2001 ISAAC BEGAN INITIAL DEVELOPMENT OF A SPECIALIST CARBON-MONOCOQUE FRAMESET. THIS WIND-TUNNEL DEVELOPED PROJECT BECAME THE JOULE, WHICH WAS PREVIEWED AS A PROTOTYPE AT THE AUTUMN SHOWS OF 2002. AT ABOUT THIS TIME ISAAC WAS REGISTERED IN BRITAIN AS A TOTALLY INDEPENDENT LIMITED COMPANY, WHOLLY OWNED BY ITS BRITISH AND GERMAN DIRECTORS. *isaac* NEW PREMISES WERE OBTAINED IN GERMANY AS A BASE FOR ISAAC'S TECHNICAL-DEVELOPMENT PERSONNEL, STOCK HANDLING AND INTERNATIONAL DISTRIBUTION – WHILST THE FINANCIAL SIDE WAS CONDUCTED FROM ISAAC'S OFFICES IN BRITAIN. ISAAC, AT THIS POINT, DECIDED ON TORAYCA, THE WORLD'S FOREMOST SUPPLIER OF STRUCTURAL AEROSPACE-QUALITY CARBON YARN, AS A SOLE SOURCE FOR THE PRIMARY RAW MATERIALS. *isaac* THE JOULE WAS RELEASED IN 2003, AND QUICKLY BECAME ESTABLISHED AS 'THE' TIME-TRIAL AND TRIATHLON FRAMESET. ISAAC HAD ALREADY BEGUN DEVELOPMENT OF A ROAD-RACING FRAMESET. NAMED THE FORCE, THIS MODEL'S UNIQUE METAL SEAT STAYS SET IT APART FROM ANY OTHER, AND PROVED TO PROVIDE UNRIVALLED MECHANICAL PERFORMANCE IN INDEPENDENT TESTING. ISAAC THEN BEGAN DISTRIBUTING ACROSS THE GLOBE. *isaac* FURTHER MODELS WERE DEVELOPED DURING 2004. IN ADDITION, THE PASCAL FULL CARBON, A COMPLETELY NEW ISAAC DESIGN, WAS ADDED AS A BASE MODEL. AT THE OTHER END OF THE RANGE, THE NEW IMPULSE PROVIDED ASTOUNDING MECHANICAL PERFORMANCE FOR A TRUE SUB-KILO FRAME. THESE DEVELOPMENTS ALLOWED ISAAC TO PRESENT A FULL RANGE OF SEVEN HIGH-PERFORMANCE CARBON, COMPETITION-FRAMESET MODELS FOR 2005. *isaac* FOR 2006 ISAAC CONTINUES TO ADVANCE AND INNOVATE WITH A COMPLETE AND DIVERSE RANGE OF HIGHLY SPECIALIST MODELS - ALL INCLUDING ISAAC'S ORIGINAL FEATURES. ISAAC IS ONE OF THE FEW 'PURE CARBON' BRANDS, AND IS PERHAPS UNIQUE IN THAT ALL OF ITS FRAME MODELS CARRY THE HIGHLY REGARDED, AND TOTALLY INDEPENDENT, EFBE FATIGUE TEST RATINGS. ISAAC'S KEY INNOVATIONS ARE NOW FINDING THEIR WAY INTO THE INDUSTRY IN GENERAL. ISAAC IS FLATTERED BY THIS OBVIOUS COMPLEMENT TO ITS TECHNOLOGICALLY PIONEERING ACHIEVEMENTS.



. : ISAAC_AERO : .





PHILOSOPHY

ISAAC TAKES INSPIRATION FROM ISAAC NEWTON, THE FATHER OF KINETIC PHYSICS, TO BRING 'INTEGRATED SOLUTIONS AND ADVANCED COMPOSITES' TO THE PERFORMANCE BICYCLE. *isaac* DESIGN INNOVATION AND CUTTING-EDGE MATERIALS ARE COMBINED TO PROVIDE MAJOR ADVANCES IN CYCLE-SPORT TECHNOLOGY – FOR ACTUAL, MEASURABLE, BENEFITS TO THE ATHLETE'S CYCLING PERFORMANCE. ISAAC IS AN ANGLO-GERMAN BASED INTERNATIONAL OPERATION, DRAWING UPON SCIENTIFIC RESEARCH, EXTENSIVE DEVELOPMENT, THE EXPERIENCE OF GRADUATE TECHNICIANS AND USER FEEDBACK – FROM SEVERAL COUNTRIES ACROSS THE GLOBE. ISAAC REPRESENTS THE PINNACLE OF ACHIEVEMENT IN A WORLD OF OPPORTUNITY FOR CARBON-COMPOSITE MATERIALS. *isaac* PURE PERFORMANCE IS THE OBJECTIVE. FASHION IS OF NO CONCERN AT ISAAC. THAT DEFINITE, PURPOSEFUL AESTHETIC OF ALL ISAAC PRODUCTS IS THE RESULT OF A SLAVISH ADHERENCE TO PURELY TECHNICAL ENDEAVOUR. MATERIALS HAVE BEEN CHOSEN ONLY TO MEET SPECIFIC ENGINEERING CRITERIA. EACH AND EVERY FRAME PRODUCED IS INDIVIDUALLY TESTED FOR STIFFNESS AND FATIGUE CHARACTERISTICS. ALL ISAAC MODELS ARE INDEPENDENTLY TESTED AND CERTIFIED TO THE HIGHEST INDEPENDENT STANDARDS THAT THE INDUSTRY HAS TO OFFER. DEVELOPMENT IS A PASSION AT ISAAC AND THE NEW RANGE FOR 2006 IS EVIDENCE THAT ISAAC DOES NOT REST ON ITS LAURELS. ISAAC DELIVERS THE REAL PERFORMANCE BENEFITS THAT RESULT FROM INCREASED EFFICIENCY, REDUCED MASS, OPTIMISED AERODYNAMICS, HIGH STRENGTH AND THE NECESSARY COMFORT. *isaac* THESE, ALONG WITH A CERTAIN MINIMALIST BEAUTY, ARE THE QUALITIES OF CYCLING SUCCESS. ALL OF THESE QUALITIES ARE IMMEDIATELY APPARENT BEHIND THE ISAAC LOGO.

A close-up photograph of a car's body panel, likely made of carbon fiber, showing a woven texture. The word "isaac" is written in a yellow, stylized script font. In the background, a blue structural component of the car is visible, slightly out of focus.

isaac



TECHNOLOGY

D E V E L O P M E N T *isaac* ISAAC MAINTAINS A DEDICATED RESEARCH AND DEVELOPMENT FACILITY IN BRAUNSCHWEIG, GERMANY. COMPUTER-AIDED-DESIGN AND FINITE-ELEMENT-ANALYSIS TECHNIQUES ARE EMPLOYED TO REFINE INITIAL CONCEPTS TOWARDS THE PROTOTYPE STAGE. WHERE PHYSICAL RESEARCH IS NECESSARY, FOR EXAMPLE IN WIND-TUNNEL TESTING, ISAAC WORKS IN CONJUNCTION WITH APPROPRIATELY EQUIPPED GERMAN UNIVERSITIES. HUNDREDS OF HOURS OF RESEARCH, DESIGN AND TESTING WORK PRECEDE THE RELEASE OF EACH MODEL. ISAAC R&D HAS LED TO REVOLUTIONARY MANUFACTURING TECHNIQUES BEING USED FOR THE FIRST TIME. IN FACT, ISAAC'S DEVELOPMENT TECHNICIANS OPERATE AT THE VERY FOREFRONT OF MODERN STRUCTURAL ENGINEERING. **M A T E R I A L S** *isaac* THERE SHOULD NEVER BE DIFFERENCES OF OPINION WHERE MATERIALS ARE CONCERNED. THE BARE FACTS AND FIGURES GIVE ALL OF THE NECESSARY ANSWERS WHEN MECHANICAL PERFORMANCE, ISAAC'S PRIMARY CONCERN, IS CONSIDERED. ISAAC USES JAPANESE-MADE TORAYCA CARBON FILAMENTS OF VARIOUS GRADES ACCORDING TO THE APPLICATION. RESINS ARE THE MOST ADVANCED AEROSPACE-GRADE EPOXY POLYMERS. ALUMINIUM ELEMENTS ARE COLD-FORGED, EXTRUDED, OR CNC MACHINED FROM CERTIFIED AEROSPACE ALLOYS. ISAAC'S MATERIALS ARE PRODUCED WITHIN THE STRICTEST QUALITY ASSURANCE STANDARDS AND ARE IDENTICAL TO THOSE SUPPLIED TO INTERNATIONAL AIRCRAFT MANUFACTURERS AND MOTORSPORT TEAMS. **T E S T I N G** *isaac* THE FINAL ANALYSIS MUST ALWAYS BE WITHOUT OPINION, DEBATE, BIAS OR CONJECTURE. ISAAC SEEKS THE TRUTH IN HARD FACTS AND FIGURES GAINED THROUGH LABORATORY TESTING. THIS IS THE ONLY WAY THAT THE HONEST TRUTH CAN EVER BE FOUND. PROTOTYPES ARE RELENTLESSLY TESTED, IN THE LAB AND THEN ON THE ROAD, PRIOR TO APPROVAL OF A MODEL FOR PRODUCTION. EVERY SINGLE PRODUCTION FRAME IS TESTED FOR HEADTUBE STIFFNESS, REAR END STIFFNESS AND FATIGUE RESISTANCE. EACH MODEL IS CERTIFIED TO THE APPROPRIATE INDEPENDENT INDUSTRY FATIGUE STANDARD, AS REGULATED BY EFBE PRUFTECHNIK, WALTROP, GERMANY. IN FACT, ISAAC IS ONE OF THE FEW COMPANIES CONFIDENT ENOUGH TO SUBMIT ITS RANGE OF PRODUCTS FOR THIS KIND OF OPEN AND COMPARATIVE EXAMINATION. ISAAC'S SUPERLATIVE RESULTS TRANSLATE INTO PERFORMANCE, SAFETY, CONFIDENCE AND, ULTIMATELY, YOUR SUCCESS ON THE BIKE.



930G FRAME (SIZE 57) WEIGHT

TORAYCA T1000G & M30S CARBON FILAMENT

DEIGNED FOR ULTRA LIGHT WEIGHT

ISAAC MONOCOQUE FORK WITH DUAL-DIAMETER STEERER

FSA ORBIT-CARBON ASYMMETRICAL INTEGRATED HEADSET

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE 77,7 NM/°

STW HEADTUBE 85,1 NM/°/KG



SONIC

A SUB-900G (54CM OR SMALLER) MONOCOQUE FRAME. *isaac* CAN A FEATHER-LIGHT FRAME REALLY PASS THE INDUSTRY'S MOST STRINGENT FATIGUE TEST? YES IT CAN. TORAYCA T1000G FILAMENT HAS BEEN USED IN CONJUNCTION WITH PIONEERING ADVANCES IN HAND APPLIED LAY-UP TECHNIQUES TO MAKE THIS FANTASY A REALITY. ISAAC'S SONIC DELIVERS UNMATCHED STATISTICS FOR A TRUE MONOCOQUE FRAME. *isaac* BUT, SUCH HIGH LEVELS OF PERFORMANCE MUST REMAIN EXCLUSIVE, AND THESE SPECIAL ADVANTAGES ARE NOT TO BE OFFERED WITHOUT RESTRAINT. THEREFORE A STRICTLY LIMITED EDITION OF JUST 499 INDIVIDUALLY NUMBERED EXAMPLES WILL BE RELEASED WORLD-WIDE DURING 2006.



1,042G FRAME (SIZE 57) WEIGHT

TORAYCA T1000G & M30S CARBON FILAMENT

DEvised FOR LOW WEIGHT AND HIGH STRENGTH

ISAAC MONOCOQUE FORK WITH DUAL-DIAMETER STEERER

FSA ORBIT-CARBON ASYMMETRICAL INTEGRATED HEADSET

ISAAC MONOCOQUE 27.2MM SEAT POST

EFBe TP-R (1.300N) CERTIFIED

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE 79,6 NM/°

STW HEADTUBE 80,6 NM/°/KG



IMPULSE

MASS IS THE ENEMY. *isaac* You can feel it on every ride – that invisible hand tugging at the back of your jersey, hindering a climb or dulling a sprint. In the Impulse we have removed as much of it as is possible in a fully robust racing frameset. This has been achieved through use of the world's finest materials and most advanced manufacturing techniques. *isaac* This frame is truly super-light, but retains the necessary strength and stiffness to give all of the efficiency, safety and handling accuracy that regular, high-level competition demands.



1,192G FRAME (SIZE 57) WEIGHT

TORAYCA T700S & M30S CARBON FILAMENT

DEIGNED FOR STRENGTH AND STIFFNESS

ISAAC MONOCOQUE FORK WITH DUAL-DIAMETER STEERER

FSA ORBIT-CARBON ASYMMETRICAL INTEGRATED HEADSET

ISAAC MONOCOQUE 27.2MM SEAT POST

EFBE TP-R (1,300N) CERTIFIED

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE: 93,40 NM/°

STW HEADTUBE: 78,36 NM/°/KG



FORCE

UNCHALLENGED CONVENTION AND PURE SENSATIONALISM ARE ALIEN CONCEPTS AT ISAAC. EVERY ISAAC FEATURE COMES WITH SOUND, TECHNICAL REASONING. *isaac* THE FORCE, WITH ITS DISTINCTIVE METAL STAYS, IS A PROVEN EXAMPLE OF THIS SIGNIFICANT IDEAL. THE FORCE TRANSFER ALLOY SEAT STAYS ARE CERTAINLY NO GIMMICK. A COMPLIMENT TO THE TORAYCA T700S CARBON MONOCOQUE FRONT TRIANGLE AND CHAINSTAYS, THE HIGH-GRADE ALUMINIUM ALLOY TUBING PROVIDES THE EXTRA LATERAL AND TORSIONAL RESISTANCE THAT THE FORCE HAS BECOME RENOWNED FOR. LARGER, STRONGER RIDERS, SPRINTERS, AND CLIMBERS ALIKE WILL ALL APPRECIATE THE UNIQUE ADVANTAGES OF THIS RUTHLESSLY EFFICIENT PACKAGE.



1,322G FRAME (SIZE 57) WEIGHT

TORAYCA T700S & M30S CARBON FILAMENT

DEIGNED FOR BALANCED CHARACTERISTICS

ISAAC MONOCOQUE FORK WITH DUAL-DIAMETER STEERER

FSA ORBIT-CARBON ASYMMETRICAL INTEGRATED HEADSET

ISAAC CARBON 27.2MM SEAT POST

EFBE TP-R (1.300N) CERTIFIED

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE 93,9 NM/°

STW HEADTUBE 72,7 NM/°/KG



KELVIN

isaac ABSOLUTES ARE A FACTOR, OF COURSE, BUT HAVE LIMITED APPEAL IN THE REAL WORLD. IN COMPETITIVE CYCLING IT IS THE MIDDLE GROUND THAT IS IMPORTANT. THIS IS WHERE MOST OF US SPEND THE MAJORITY OF OUR TIME. WE RARELY VISIT THE UNMANAGEABLE, WILD EXTREMES OF ENDEAVOUR. SO, THE ISAAC KELVIN HAS BEEN DEVELOPED TO PROVIDE A PERFECT EQUILIBRIUM AND SATISFY THE ACTUAL REQUIREMENTS OF A COMMITTED COMPETITIVE CYCLIST - RATHER THAN SOME IMAGINED, FANCIFUL NEEDS. *isaac* WEIGHT, STIFFNESS, ROBUSTNESS, COMFORT AND COST HAVE ALL BEEN OPTIMISED IN PERFECT, HARMONIOUS BALANCE.



1370G (SIZE 54) WEIGHT

HAND LAY-UP TECHNIQUES

TORAYCA T300J CARBON FILAMENT

INTERNAL BLADDER MOULDING TECHNOLOGY

DEDICATED ISAAC CARBON FORK

INTEGRATED CARTRIDGE BEARING HEADSET

HIGH PERFORMANCE-TO-COST RATIO

ISAAC CARBON 27.2MM SET PACKAGE

EFBE TP-R (1.300N) CERTIFIED

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹



PASCAL CARBON

WHERE PERFORMANCE IS THE PRIMARY CONCERN, CARBON COMPOSITES PROVIDE THE TECHNICAL SOLUTIONS THAT METALS SIMPLY CANNOT MATCH. *isaac* BLADDER MOULDING METHODS ALLOW TOTAL FREEDOM OF FORM, AND HAND LAY-UP PERMITS PLACEMENT OF MATERIAL, IN SPECIFICALLY ENGINEERED ORIENTATION, EXACTLY WHERE IT IS NEEDED. THE PASCAL CARBON IS PRODUCED AS A MULTI-MONOCOQUE FABRICATION USING ISAAC'S INNOVATIVE 'STREIFBAND' BONDING PROCEDURE. *isaac* EVERY FRAME BENEFITS FROM THE DIRECT INVOLVEMENT OF MORE THAN ONE-HUNDRED-AND-TWENTY HIGHLY SKILLED TECHNICIANS. TRADITIONAL METHODS CANNOT COMPETE. THE ISAAC PASCAL CARBON DELIVERS ALL OF THIS TECHNOLOGY AND CRAFTSMANSHIP AT AN ASTOUNDINGLY ACCESSIBLE LEVEL.



1.245G FRAME (SIZE M) WEIGHT

FULLY WIND-TUNNEL DEVELOPED DESIGN

TORAYCA T1000G CARBON FILAMENT

MONOCOQUE AERO FORK WITH DUAL DIAMETER CARBON STEERER

FSA ORBIT-CARBON ASYMMETRICAL INTEGRATED HEADSET

ISAAC AERO MONOCOQUE SEAT POST

EFBE TP-R (1.300N) CERTIFIED

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE 73,6 NM/°

STW HEADTUBE 56,1 NM/°/KG



JOULE

IN A PERFECT WORLD YOU WOULD DEMAND THE LOWEST POSSIBLE WEIGHT, WIND-CHEATING AERODYNAMICS, GREAT POWER TRANSFER, ACCURATE HANDLING, REASSURING STABILITY AND FEATHERY COMFORT: A VERY TALL ORDER INDEED! WITH THE JOULE, ISAAC HAS FULFILLED THAT ORDER TO THE LETTER. PERHAPS UNIQUELY, THE ISAAC JOULE PROVIDES ALL THAT YOU COULD EVER WISH FOR, BRINGING EVERY DESIRED VIRTUE TOGETHER IN A SINGLE, UNRIVALLED PACKAGE. *isaac* ITS SWIFTNESS REALLY HAS TO BE EXPERIENCED TO BE BELIEVED. NEVER BEFORE HAS A SPECIALIST AERO FRAMESET DELIVERED SUCH A PERFECT MIX OF ALL THE ESSENTIAL QUALITIES.



1,410g FRAME (SIZE M) WEIGHT

FULLY WIND-TUNNEL DEVELOPED

TORAYCA T700S & M30S CARBON FILAMENT

MONOCOQUE AERO FORK WITH DUAL DIAMETER CARBON STEERER

FSA ORBIT-CARBON ASYMMETRICAL INTEGRATED HEADSET

ISAAC AERO MONOCOQUE SEAT POST

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE 68,4 NM/°

STW HEADTUBE 51,9 NM/°/KG



EFFICIENCY

YOUR ULTIMATE CHALLENGE IS TO COVER A SET DISTANCE IN THE SHORTEST POSSIBLE TIME. THIS IS WHAT YOU LIVE FOR. *isaac* THERE IS NO EXTERNAL ASSISTANCE OR ELEMENT OF CHANCE, BECAUSE THAT CRUEL AND UNFORGIVING CLOCK CAN NEVER BE CHEATED. SUCCESS IS ALL ABOUT BASIC EFFICIENCY. IT REALLY IS THAT SIMPLE. EFFICIENCY IN AERODYNAMIC AND POWER TRANSFER CHARACTERISTICS – THE MECHANICAL ADVANTAGES – BECOME TRULY SIGNIFICANT AS THOSE PRECIOUS SECONDS TICK BY. THIS IS YOUR PERSONAL ADVANTAGE AS YOU SPEED ALONG IN A VIVID STREAK OF COLOUR. ISAAC EFFICIENCY – THE NAME SAYS IT ALL.



REINFORCED DOWNTUBE,
BOTTOM BRACKET AND CHAIN STAY AREAS

WIND-TUNNEL DEVELOPED AERO DESIGN

EXCHANGEABLE HORIZONTAL
DROPOUTS - 120 OR 130MM OLN

CLASS-LEADING SUB 1,400G WEIGHT (SIZE M)

TORAYCA T700S & M30S CARBON FILAMENT

MONOCOQUE AERO FORK AND SEAT POST

FSA ORBIT-CARBON ASYMMETRICAL HEADSET

EFBE TP-R (1.300N) CERTIFIED

›STEM NOT INCLUDED IN FRAME SET PACKAGE‹

STIFFNESS HEADTUBE 71,7 NM/°

STW HEADTUBE 54,1 NM/°/KG

CHECK WWW.ISAAC-CARBON.COM FOR FULL SPECIFIC VELOCITY DETAILS.





VELOCITY

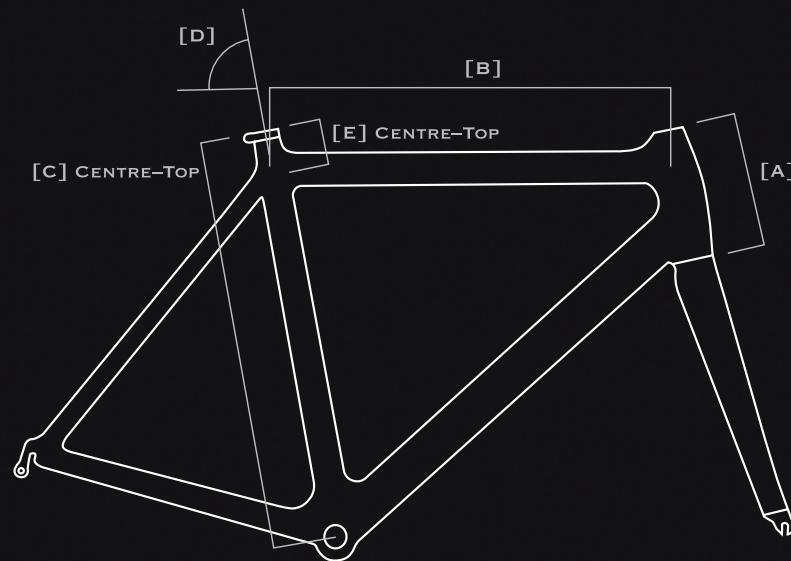
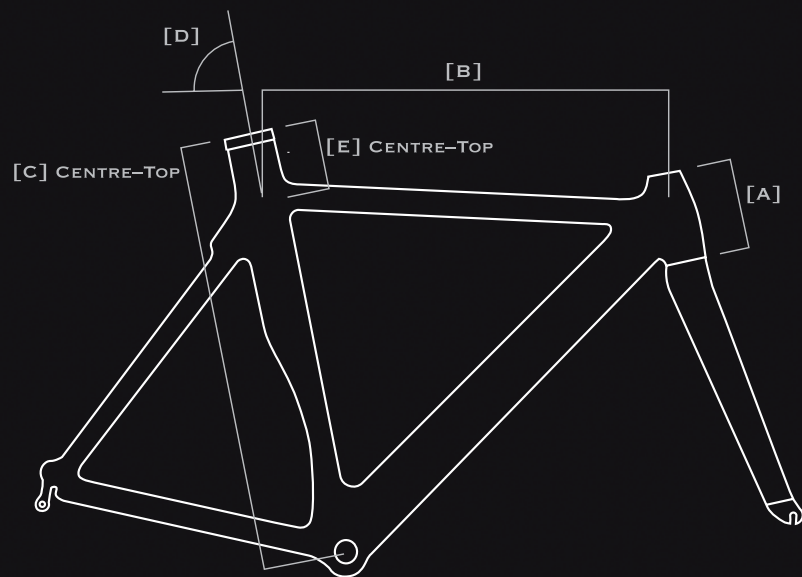
THE VELOCITY'S REINFORCED STRUCTURE IS SUPER STIFF AND WILL REWARD EXPLOSIVE EFFORTS, WHILST BEING LIGHT ENOUGH TO SHRUG OFF THE STRANGLE HOLD OF INERTIA. *isaac* ONCE UP TO SPEED, STILL AIR IS SURGICALLY SLICED BY PRECISE AEROFOIL SECTIONS. EXCHANGEABLE DROPOUTS ALLOW A WIDE CHOICE OF REAR WHEEL, PLUS, IN CONJUNCTION WITH AN EXCHANGEABLE CROWN RACE, THE SELECTION OF STANDARD OR RAISED BOTTOM BRACKET HEIGHTS. *isaac* WHEEL ADJUSTERS ARE INCLUDED FOR ACCURATE CHAIN TENSION AND TO PREVENT THE WHEEL FROM 'PULLING' UNDER LOAD. THE VELOCITY HAS ALREADY WON IMPORTANT TITLES. ITS FUTURE SUCCESS IS ASSURED.





IMPACT

isaac ISAAC'S DEPTH OF TECHNICAL EXPERIENCE HAS NOW BEEN APPLIED, FOR THE VERY FIRST TIME, TO AN ADVANCED OFF-ROAD DESIGN. MANY HUNDREDS OF HOURS OF DEVELOPMENT, AND MONTHS OF RELENTLESS TESTING, HAVE BEEN INVESTED IN THIS PROJECT. *isaac* THE IMPACT DELIVERS EXACTLY WHAT IS DESIRED IN A COMPETITION CROSS-COUNTRY FRAME – LOW WEIGHT, GREAT EFFICIENCY, FAULTLESS HANDLING AND A COMPLIANT COMFORT THAT TAKES THE STING OUT OF THE TRAIL. ONLY A TRUE MONOCOQUE FRAME CAN POSSIBLY FEEL SO TAUT AND LIVELY, AND YET DISSIPATE THOSE NASTY LITTLE BUMPS THAT WOULD OTHERWISE SPOIL THE FLOW.



SONIC
IMPULSE
FORCE
KELVIN

SIZE	[A] HEAD TUBE	[B] TOP TUBE	[C] SEAT TUBE	[D] ANGLE	[E] SLOPE	INSEAM LENGTH
48	124MM	510MM	480MM	75.0°	30MM	- 79
51	144MM	525MM	510MM	74.5°	30MM	77 - 82
54	164MM	545MM	540MM	74.0°	35MM	80 - 83
55,5	176,5MM	557,5MM	555MM	74,0°	35MM	82 - 85
57	189MM	570MM	570MM	73.5°	40MM	84 - 87
58,5	201,5MM	582,5MM	585MM	73,5°	40MM	86 - 89
60	214MM	595MM	600MM	73.5°	45MM	88 - 93

PASCAL
CARBON

SIZE	[A] HEAD TUBE	[B] TOP TUBE	[C] SEAT TUBE	[D] ANGLE	[E] SLOPE	INSEAM LENGTH
49	125MM	525MM	490MM	74.5°	45MM	- 79
52	142MM	531MM	520MM	74.0°	45MM	77 - 82
54	160MM	540MM	540MM	73.8°	45MM	80 - 85
56	175MM	550MM	560MM	73.5°	45MM	84 - 87
58	190MM	570MM	580MM	73.5°	45MM	86 - 89
60	205MM	585MM	600MM	73.5°	45MM	88 - 94

JOULE
EFFICIENCY
VELOCITY

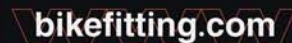
SIZE	[A] HEAD TUBE	[B] TOP TUBE	[C] SEAT TUBE	[D] ANGLE	[E] EXTENSION	INSEAM LENGTH
XS	116MM	525MM	510MM	76.0°	50MM	- 83
S	116MM	539MM	540MM	76.0°	50MM	80 - 86
M	135MM	557MM	560MM	76.0°	50MM	84 - 88
L	158MM	575MM	580MM	76.0°	50MM	88 - 95

GEOMETRY

THE GEOMETRY OF ISAAC FRAMES HAS BEEN SPECIFIED FOR YOUR EFFICIENCY, SAFETY, COMFORT AND CONVENIENCE. YOUR POSITION AND FRAME FITTING SHOULD BE CAREFULLY CONSIDERED. EACH ISAAC GROUP HAS ITS OWN, UNIQUE GEOMETRICAL PROTOCOL AS SHOWN ABOVE. *isaac* AN AUTHORISED ISAAC STOCKIST WILL HAVE THE NECESSARY EXPERT KNOWLEDGE AND EXPERIENCE TO ADVISE YOU FULLY ON ALL SIZING ISSUES. A COMPLETE GEOMETRICAL DIAGRAM FOR EACH MODEL AND SIZE CAN BE FOUND AT WWW.ISAAC-CARBON.COM. ISAAC RECOMMENDS USE OF THE BIKEFITTING.COM SYSTEM.

ISAAC JOULE GEOMETRY HAS BEEN CONCEIVED FOR A TRI-BAR RACING POSITION.
JOULE SEAT TUBE LENGTH DOES NOT CORRESPOND TO TRADITIONAL NUMERICAL SIZING.

THE GIVEN INSEAM MEASUREMENTS ARE APPROXIMATE SUGGESTIONS ONLY. THEY ARE PROVIDED TO GIVE A SIMPLE OVERVIEW OF SIZING.
ISAAC RECOMMENDS USE OF THE [BIKEFITTING](http://BIKEFITTING.COM) SYSTEM FOR A CORRECT DETERMINATION OF SPECIFIC FRAME SIZE AND OPTIMUM CYCLING POSITION.





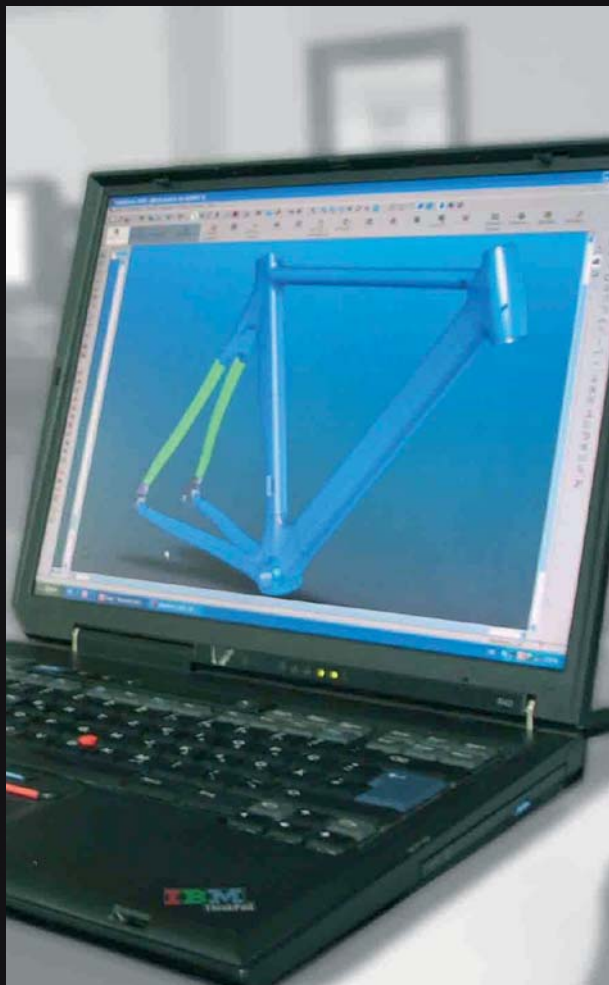
ISAAC

DESIGNED WITH COMPUTERS BUT CRAFTED BY HAND

EVERY ISAAC MODEL STARTS OFF AS A CREATIVE IDEA WITH A SET OF DESIRED VALUES. *isaac* THESE VALUES ARE NOT IMAGINED; THEY ARE SIMPLY THE REAL DEMANDS OF THE COMMITTED COMPETITION CYCLIST. STRENGTH, WEIGHT, EFFICIENCY, HANDLING, ROBUSTNESS, COMFORT, AESTHETICS AND COST ARE THE MAJOR ELEMENTS THAT HAVE TO BE CONSIDERED. SUCCESS COMES WITH A FRAMESET THAT DELIVERS THE OPTIMUM BALANCE OF THESE ELEMENTS. THIS IS ISAAC'S MISSION.

isaac THE PROCESS BEGINS WITH SIMPLE HAND SKETCHES WHERE IDEAS BECOME VISIBLE FOR THE FIRST TIME. THESE INITIAL VISUALS ARE TRANSFERRED TO A COMPUTER AND RENDERED AS A 3D MODEL USING THE LATEST CAD TECHNOLOGY. SIMULATED LOADS CAN THEN BE APPLIED USING FINITE ELEMENT ANALYSIS TO REPRODUCE THE FORCES THAT MUST BE ENDURED BY THE STRUCTURE IN USE.

WHEN THE FORM HAS BEEN OPTIMISED, AND ALL OF THE NECESSARY DESIGN CRITERIA HAVE BEEN SATISFIED, WORK CAN BEGIN ON THE FIRST PROTOTYPE MOULDS. *isaac* LIKE THE PROCESS OF BIRTH, CREATION OF AN INITIAL PROTOTYPE FRAME FINALLY BRINGS PHYSICAL REALITY TO THE PROJECT – BUT MUCH MORE WORK LIES AHEAD. **HAVE A LOOK!**











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UNITED KINGDOM

WWW.ISAAC-CARBON.COM

PLEASE ENSURE THAT THE APPROPRIATE ISAAC MANUAL OR INSTRUCTION SHEET IS PROVIDED BY THE RETAILER WHEN PURCHASING ANY ISAAC PRODUCT. FRAME SETS ARE SUPPLIED WITH AN OWNER'S MANUAL, AND ALL OTHER PRODUCTS ARE SUPPLIED WITH AN INSTRUCTION SHEET. IT IS IMPORTANT THAT THE INSTRUCTIONS ARE READ AND UNDERSTOOD BY THE CONSUMER, PRIOR TO USE OF THE PRODUCT. AS WITH ANY COMPLETE CYCLE OR CYCLE PART, FAILURE TO FOLLOW THE INSTRUCTIONS FOR CORRECT FITTING PROCEDURE AND/OR CONDITIONS OF USE COULD RESULT IN AN ACCIDENT. PLEASE RETAIN ANY MANUAL OR INSTRUCTION SHEET FOR FUTURE REFERENCE.

ISAAC PRODUCTS HAVE BEEN DEVELOPED AND MANUFACTURED WITH GREAT CARE FOR THE PURPOSE OF COMPETITION AND TRAINING CYCLING APPROPRIATE TO THEIR SPECIFIC TYPE. UNDER EUROPEAN (EU) CONSUMER LAW THE PURCHASER HAS FULL STATUTORY WARRANTY RIGHTS WITHIN THE FIRST TWO YEARS OF PURCHASE.

FOR FRAMES ONLY, ISAAC INTERNATIONAL LIMITED OFFERS A FURTHER WARRANTY EXTENSION PERIOD OF AN ADDITIONAL THREE YEARS. THUS GIVING A TOTAL OF FIVE YEARS WARRANTY COVER (FROM DATE OF RETAIL PURCHASE), AGAINST FAILURE OF THE FRAME DUE TO DEFECTS IN MATERIALS OR WORKMANSHIP.

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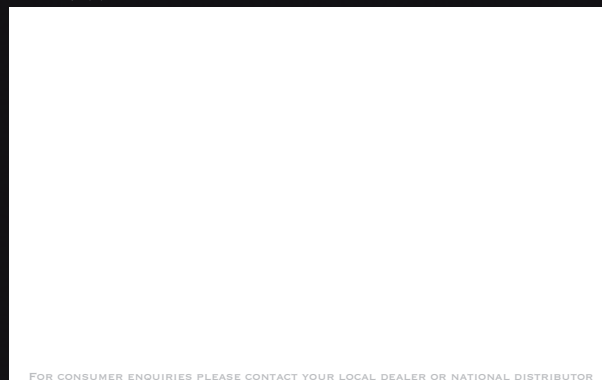
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