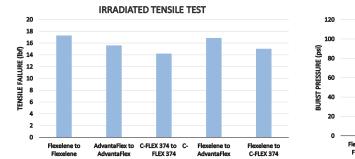
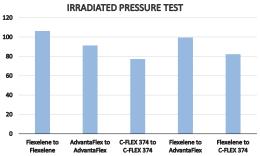
Eldon James

Weld Burst and Tensile Testing Results Gamma Irradiated – Flexelene™ 135C

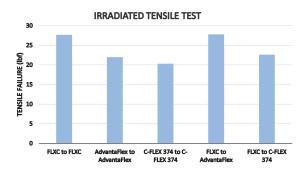
GAMMA IRRADIATED TUBE WELD TEST DATA (.125 I.D by .250 O.D Tubing) - SARTORIUS BIOWELDER					
Tube	Samples Tested	Average Tensile Failure (lbf)	Average Burst Pressure (psi)		
Flexelene [™] 135C to Flexelene [™] 135C	10	17.29	106.21		
AdvantaFlex [®] to AdvantaFlex [®]	10	15.60	91.26		
C-FLEX [®] 374 to C-FLEX [®] 374	10	14.22	77.33		
Flexelene 135C to AdvantaFlex	10	16.88	99.50		
Flexelene 135C to C-FLEX 374	10	15.04	82.19		





GAMMA IRRADIATED TUBE WELD TEST DATA (.250 I.D by .375 O.D Tubing) - SARTORIUS BIOWELDER

Tube	Samples Tested	Average Tensile Failure (lbf)	Average Burst Pressure (psi)
Flexelene 135C to Flexelene 135C	10	27.66	67.72
AdvantaFlex to AdvantaFlex	10	21.96	65.05
C-FLEX 374 to C-FLEX 374	10	20.31	55.34
Flexelene 135C to AdvantaFlex	10	27.79	65.27
Flexelene 135C to C-FLEX 374	10	22.61	57.86



Test Procedure

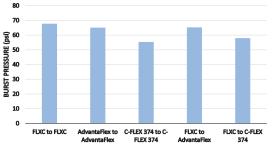
Gamma Irradiation

All tubes were dosed between 25 kGy and 50 kGy.

Welding Procedure

All tubes were welded In a Sartorius BioWelder with standard settings. Flexelene 135C did not have a setting optimized for it, so the C-Flex 374 setting was used. Tensile samples were created with a first use blade, and pressure samples with a second use blade. Samples for tensile and pressure testing were made to be 4" and 6" long respectively.

IRRADIATED PRESSURE TEST



Tensile Test Procedure

All samples were pulled in a MARK 10 test stand at 20 inches/minute until failure occurred. The failure mode and force at which a failure occurred was recorded.

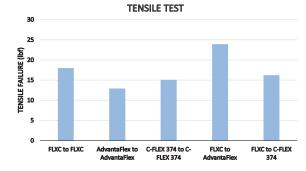
Pressure Test Procedure

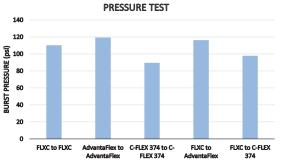
All tubes were tested with a closed loop hydrostatic testing system on barbed fittings, secured with nylon Handy Clamps. Tubes are bled of all air to maintain consistent accurate results. Pressure is slowly increased until failure is observed. Failure mode and maximum pressure is recorded.

Eldon James

Weld Burst and Tensile Testing Results Non-Irradiated – Flexelene™ 135C

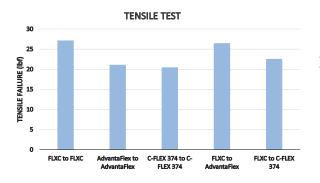
TUBE WELD TEST DATA (.125 I.D by .250 O.D Tubing) - SARTORIUS BIOWELDER					
Tube	Samples Tested	Average Tensile Failure (lbf)	Average Burst Pressure (psi)		
Flexelene [™] 135C to Flexelene [™] 135C	6	17.98	110.31		
AdvantaFlex [®] to AdvantaFlex [®]	6	12.90	119.21		
C-FLEX [®] 374 to C-FLEX [®] 374	6	15.09	89.49		
Flexelene 135C to AdvantaFlex	6	23.92	116.18		
Flexelene 135C to C-FLEX 374	6	16.23	97.80		



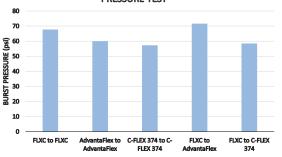


TUBE WELD TEST DATA (.250 I.D by .375 O.D Tubing) - SARTORIUS BIOWELDER

Tube	Samples Tested	Average Tensile Failure (lbf)	Average Burst Pressure (psi)
Flexelene 135C to Flexelene 135C	6	27.18	67.77
AdvantaFlex to AdvantaFlex	6	21.11	59.94
C-FLEX 374 to C-FLEX 374	6	20.49	57.34
Flexelene 135C to AdvantaFlex	6	26.48	71.64
Flexelene 135C to C-FLEX 374	6	22.56	58.54



PRESSURE TEST



Test Procedure

Welding Procedure

All tubes were welded In a Sartorius BioWelder with standard settings. Flexelene 135C did not have a setting optimized for it, so the C-Flex 374 setting was used. Tensile samples were created with a first use blade, and pressure samples with a second use blade. Samples for tensile and pressure testing were made to be 4" and 6" long respectively.

Tensile Test Procedure

All samples were pulled in a MARK 10 test stand at 20 inches/minute until failure occurred. The failure mode and force at which a failure occurred was recorded.

Pressure Test Procedure

All tubes were tested with a closed loop hydrostatic testing system on barbed fittings, secured with nylon Handy Clamps. Tubes are bled of all air to maintain consistent accurate results. Pressure is slowly increased until failure is observed. Failure mode and maximum pressure is recorded.