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<b>Hose/Fitting</b>	1/2" , ContiTech Super Sani Wash - 300 300 WP, Initial length = 21" SAP# 20449743	<b>Compression Ratio</b>	Standard Crimping per page 32 of our Crimp Specification Guide for our Bowes/Thor product offering
<b>Fitting &amp; Retention</b>	WDSS-2/FLSS050058 both ends	<b>Highest Pressure</b>	1290 psi (the -10 gets added to the peak of 1280)
<b>End 1 Diameter &amp; Wall Thickness</b>	.158, .177, .146, .138 - .155 Avg. CD = Φ .800, read, 19mm dies	<b>Test Temperature</b>	180 F
<b>End 2 Diameter &amp; Wall Thickness</b>	.162, .137, .150, .178 - .157 Avg. CD = Φ .800, read, 19 dies	<b>Failure Mode</b>	Large hose wall burst abruptly depressurized the assembly, 3 1/2" from the second connection.



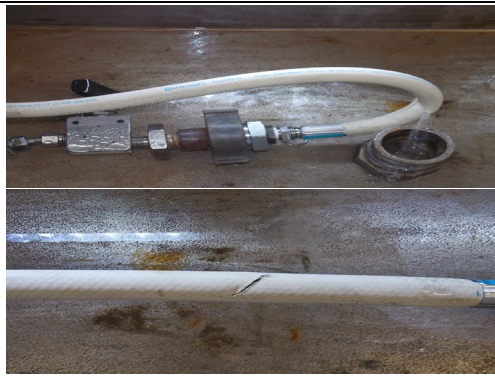
Washdown fittings, top; Assembly in the tester at start, bottom



Initial close-up at 58 psi, End 1 (top) End 2 (bottom)



Close-up at 180F temp prior to test



After hose burst, the assembly abruptly jumped into this orientation. Burst close-up



Post failure connections, no movement!



The -10 thermal drift and the registered Peak pressure

**PRIMER:** We just recently entered into the wash down fitting market with a new offering that employs our proven Bowes/Thor line serration pattern with an interlocking thin walled ferrule as the hose compression member. Made entirely of 316 SS, with a Viton O-ring seal inside the rotating NPT threaded body, we achieved an attractive and highly functional washdown fitting. ContiTech's Super Sani-Wash 300 was selected because it is an excellent hose choice to be used with this new fitting and specifically made for washdown applications.

**TEST RESULTS:** The hose assembly was in the tester unit 3 hours with elevated temperature water flowing through it; final test temp was 180 F with both of the 180 F blocks on the indicator strips fully blackened. Stretch due to thermal expansion was zero, as was measureable stretch up until 900 psi, when about .01" of stretch was perceptible. At 1200 psi, a slim line of white, about .02" wide was perceptible between the black mark and the ferrule ends. Shortly after observing at 1200 psi, the hose burst with some violence, jumping up in the tester and landing in a partially folded position. A large hose wall burst through the outer cover could be easily seen by its stream of escaping water. The Peak reading on the pressure transducer was 1280 psi, and when vented back to atmosphere, where the transducer had its original zero set, it read -10 due to high temp transducer shift. We add in that 10 to the peak for a failure pressure of 1290 psi @ 180 F. Note, this was the second elevated temperature test of the day, two done back to back, so when I zeroed the transducer for this test, it was already at a very warm temperature from the days prior test, which had a much larger thermal shift of the transducer.

**Conclusion:** Performance of the Super Sani-Wash 300 hose with our WDSS-2/FLSS050058 connection was very impressive! A hose failure at 1290 psi @ 180F correlates to 2521.50 psi @ 70F, which divided by a safety factor of 4 gets us 630.4 psi @ 70F, which is >1.5X higher than our 70F rating for this fitting/attachment and >2X the WP of the hose. Working with the proven performance of 630 psi @ 70, then applying our temperature de-rating factor for the 200 F recommended maximum hose temperature, provides us with a max pressure/max temperature rating of 265 psi @ 200F. Considering that washdown applications run hot water, not steam, operating this hose assembly at a high city water pressure of 70 psi @ 170F carries an additional 5X safety factor over the 4X safety factor standard for our products. Note, this is because it could operate at 350 psi @ 170F and still be within the 4X SF.