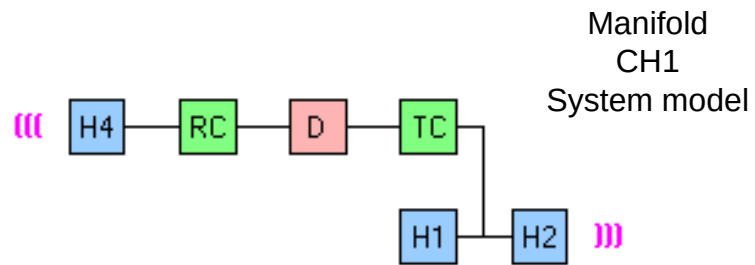


Particle velocity #1  
H4 throat

Particle velocity #2  
H4 mouth



Hornresp - Input Parameters Manifold-MTB

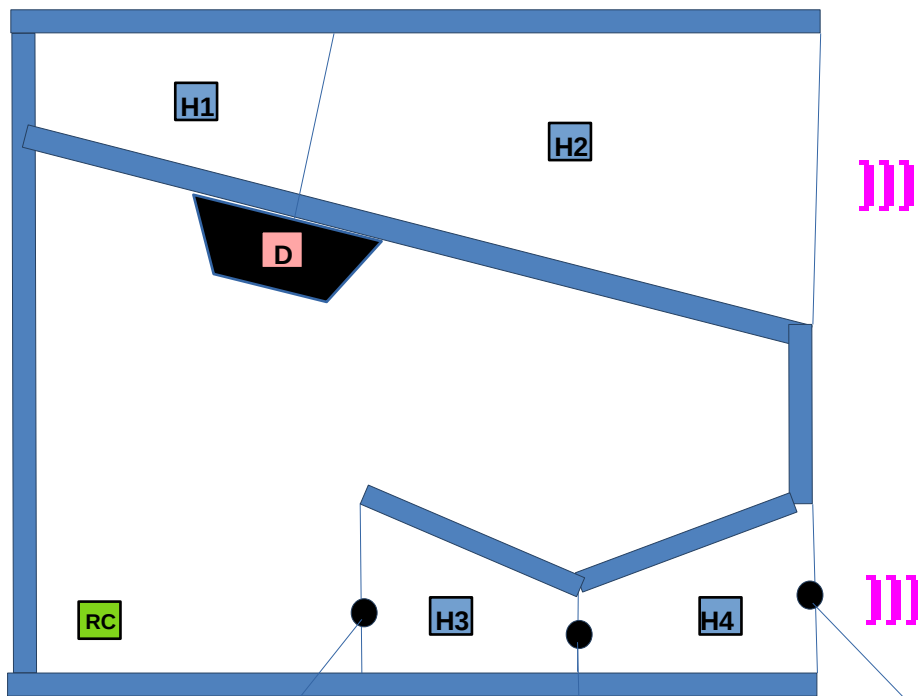
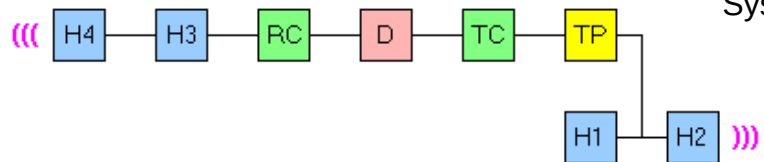
File Tools Window Help

Ang	2.0 x pi	Eg	2.83	Rg	0.00	Fta	10.68
S1	122.00	S2	703.97	Par	24.54	F12	0.00
S2	703.97	S3	2807.47	Par	59.39	F23	0.00
S3	0.00	S4	0.00	L34	0.00	F34	0.00
S5	431.85	S6	671.00	Par	50.00	F56	0.00
Sd	880.00	Cms	1.37E-04	Mmd	94.99	Re	4.70
Bl	23.08	Rms	2.94	Le	1.08	CH1	1
Vrc	127.74	Ap	0.00	Vtc	0.00		
Lrc	43.42	Lpt	0.00	Alt	0.00		

Comment: Manifold-MTB

Previous Next Edit Add Delete Record 9 of 10 Calculate

Manifold  
CH1  
System model



Particle velocity #1  
H3 throat

Particle velocity  
No data available

Particle velocity #2  
H4 mouth

Hornresp - Input Parameters Manifold-MTB

File Tools Window Help

Ang	2.0 * Pi	Eg	2.83	Rg	0.00	Fta	5.95
S1	122.00	S2	703.97	Par	24.54	F12	0.00
S2	703.97	S3	2807.47	Par	59.39	F23	0.00
S3S	671.00	S4	431.85	Par	25.00	F34	0.00
S4	431.85	S5	671.00	Par	25.00	F45	0.00

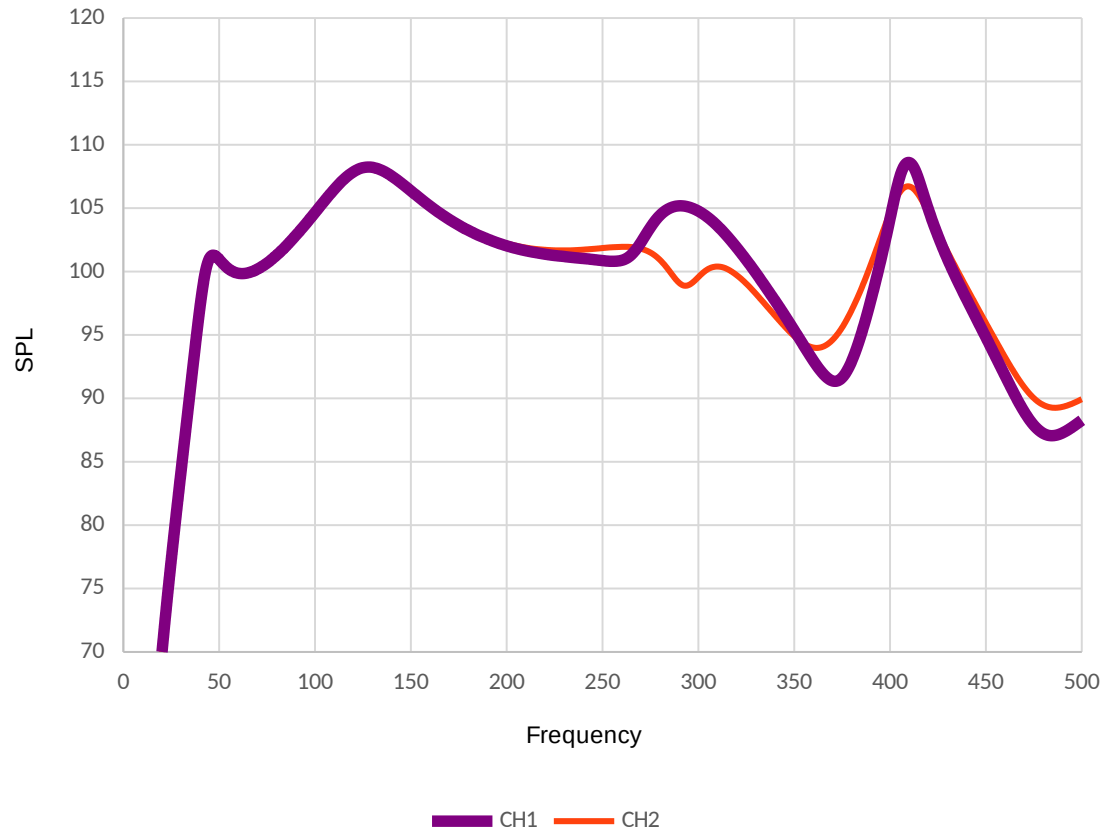
  

Sd	880.00	Cms	1.37E-04	Mmd	94.99	Re	4.70
Bl	23.08	Rms	2.94	Le	1.08	CH2	1
Vrc	127.74	Ap1	0.00	Vtc	0.00	CAUTION: S1 < Sd	
Lrc	43.42	Lp	0.00	Alt	0.00		

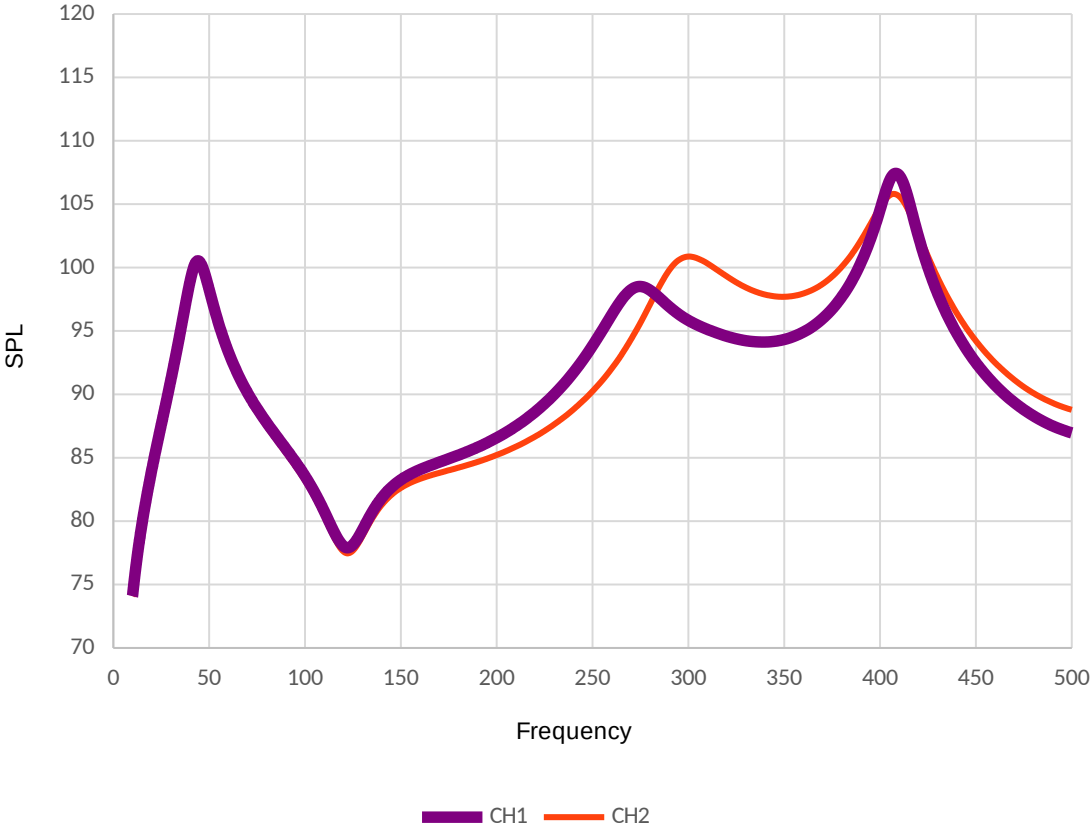
Comment: Manifold-MTB as CH2

Previous Next Edit Add Delete Record 10 of 10 Calculate

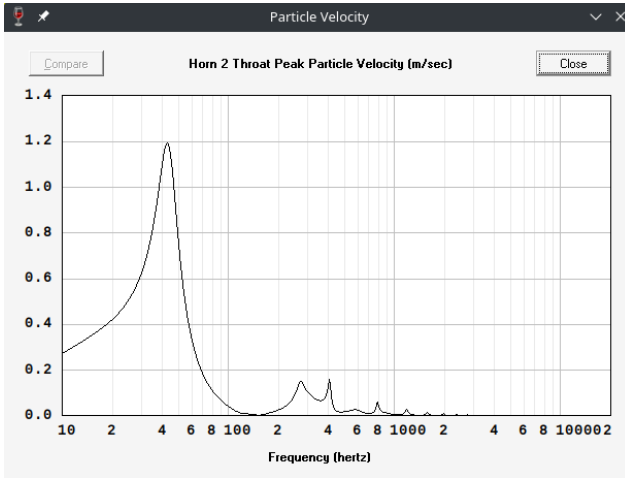
Total SPL Comparison



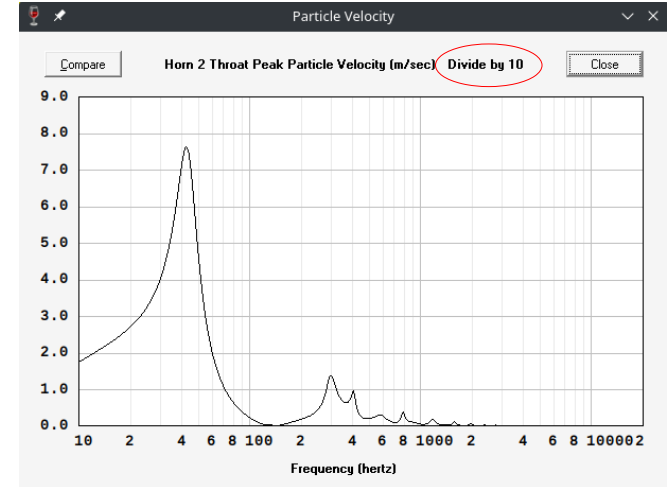
Port SPL Comparison



Manifold  
CH1  
Particle Velocity at Port Throat

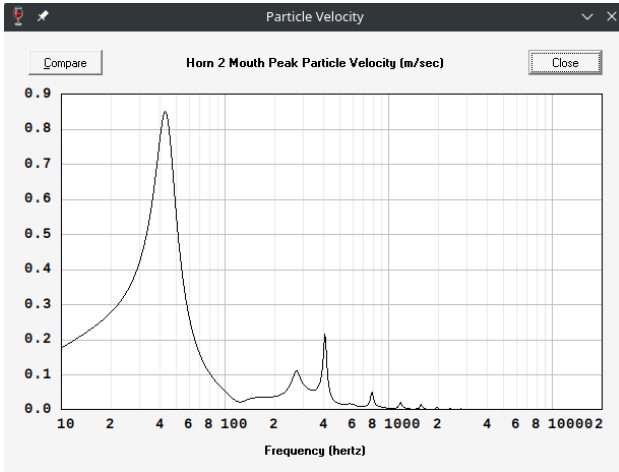


Manifold  
CH2  
Particle Velocity at Port Throat

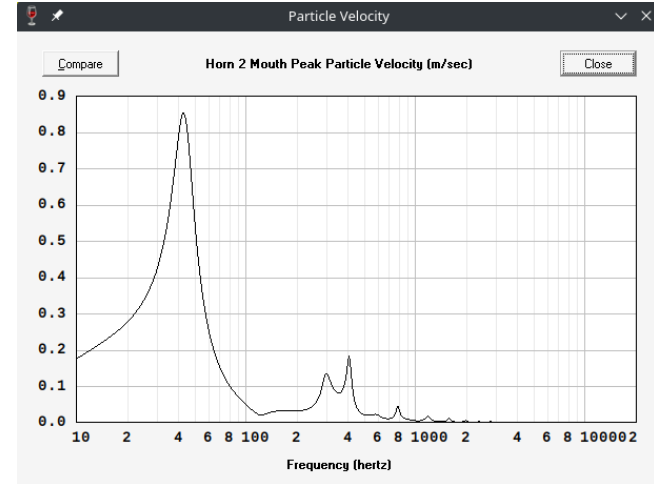


Peak at Port Throat lowered  
from 1.20 m/sec to 0,75  
m/sec  
37% reduction

Manifold  
CH1  
Particle Velocity at Port Mouth

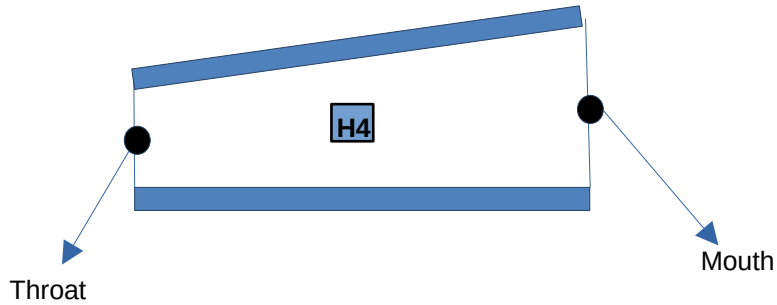


Manifold  
CH2  
Particle Velocity at Port Mouth

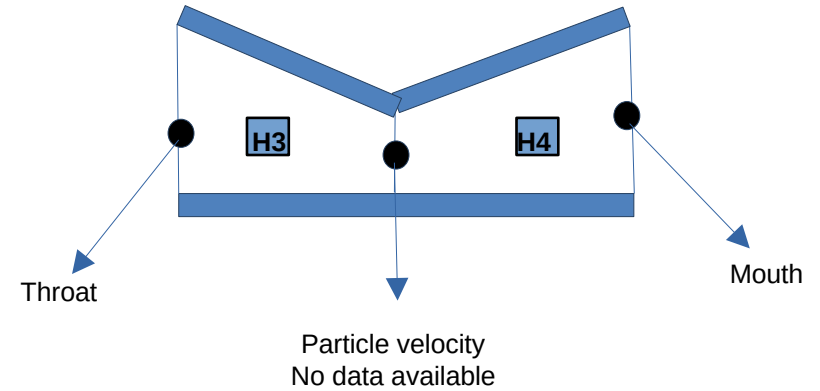


No speed change at Port  
Mouth side

Manifold  
CH1  
Particle Velocity at Port Mouth

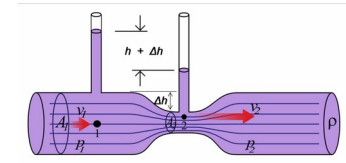


Manifold  
CH2  
Particle Velocity at Port Mouth



Particle Velocity clearly reduced the speed at Throat side because the area was increased at CH2 model, while at mouth there is no difference, but, due to Venturi effect we expect increased speed at middle position for CH2, it might be at the same magnitude from CH1 Throat, considering the same CSA, but it will generate less turbulence improving sound quality.

Venturi Effect



Hornresp - Input Parameters Manifold-MTB

File Tools Window Help

Ang	2.0 x pi	Eg	2.83	Rg	0.00	Fta	10.68
S1	122.00	S2	703.97	Par	24.54	F12	0.00
S2	703.97	S3	2807.47	Par	59.39	F23	0.00
S3	0.00	S4	0.00	L34	0.00	F34	0.00
S5	431.85	S6	671.00	Par	50.00	F56	0.00

---

Sd	880.00	Cms	1.37E-04	Mmd	94.99	Re	4.70
Bl	23.08	Rms	2.94	Le	1.08	CH1	1
Vrc	127.74	Ap	0.00	Vtc	0.00		
Lrc	43.42	Lpt	0.00	Atc	0.00		

Comment: Manifold-MTB

Previous Next Edit Add Delete Record 9 of 10 Calculate

Hornresp - Input Parameters Manifold-MTB

File Tools Window Help

Ang	2.0 x Pi	Eg	2.83	Rg	0.00	Fta	5.95
S1	122.00	S2	703.97	Par	24.54	F12	0.00
S2	703.97	S3	2807.47	Par	59.39	F23	0.00
S3S	671.00	S4	431.85	Par	25.00	F34	0.00
S4	431.85	S5	671.00	Par	25.00	F45	0.00

---

Sd	880.00	Cms	1.37E-04	Mmd	94.99	Re	4.70
Bl	23.08	Rms	2.94	Le	1.08	CH2	1
Vrc	127.74	Ap1	0.00	Vtc	0.00	CAUTION:	
Lrc	43.42	Lp	0.00	Atc	0.00	S1 < Sd	

Comment: Manifold-MTB as CH2

Previous Next Edit Add Delete Record 10 of 10 Calculate

CH2 show a warning not present at CH1 model while both have the same front horn.



Hornresp - Input Parameters Manifold-MTB

File Tools Window Help

Ang	2.0 x pi	Eg	2.03	Rg	0.00	Fta	10.60
S1	122.00	S2	703.97	Par	24.54	F12	0.00
S2	703.97	S3	2807.47	Par	59.39	F23	0.00
S3	0.00	S4	0.00	L34	0.00	F34	0.00
S5	431.85	S6	671.00	Par	50.00	F56	0.00

---

Sd	880.00	Cms	1.37E-04	Mmd	94.99	Re	4.70
Bl	23.08	Rms	2.94	Le	1.08	CH1	1
Vrc	127.74	Ap	0.00	Vtc	0.00		
Lrc	43.42	Lpt	0.00	Alt	0.00		

Comment: Manifold-MTB

Previous Next Edit Add Delete Record 9 of 10 Calculate

Hornresp - Input Parameters Manifold-MTB

File Tools Window Help

Ang	2.0 x Pi	Eg	2.03	Rg	0.00	Fta	5.95
S1	122.00	S2	703.97	Par	24.54	F12	0.00
S2	703.97	S3	2807.47	Par	59.39	F23	0.00
S3S	671.00	S4	431.85	Par	25.00	F34	0.00
S4	431.85	S5	671.00	Par	25.00	F45	0.00

---

Sd	880.00	Cms	1.37E-04	Mmd	94.99	Re	4.70
Bl	23.08	Rms	2.94	Le	1.08	CH2	1
Vrc	127.74	Ap1	0.00	Vtc	0.00	CAUTION:	
Lrc	43.42	Lp	0.00	Alt	0.00	S1 < Sd	

Comment: Manifold-MTB as CH2

Previous Next Edit Add Delete Record 10 of 10 Calculate

CH2 prove the possibility to use Throat Chamber Adapter (Ap1/Lp) while CH1 don't.  
 Vented rear chamber (Ap/Lpt) is not needed for CH1.