

Nettetal, 17.03.06

Testing Procedure: Silencer packing/ Muffler packing

Since many years, Silent Sport products are leader in noise-reduction technology. And like with all superior technologies, some people try to copy it to make some quick profit. Those copies of Silent Sport™ products are mainly made in China and are sold under various brand names, often sold with the quiet indication: “it`s the same, just much cheaper...”.

Now compare a eastern made compact-car with a Porsche. They are both “cars” but are they the same?

That said, what`s the difference between “Muffler packing – Materials”?

Next to technical differences such as heat-resistance, “blow -out” resistance and others, one of the main factors is, what we call “**Loft**”.

What is “Loft”?

“Loft” is the ability of a material, to permanently fill a certain amount of “space”.

How do we check the “Loft”?

We use a testing-device, made from a testing-cylinder and a weight to press down the material to be tested. This gives us an idea how much space is really filled by a certain amount of different materials. See picture 1.

Picture 1

# The Loft-Inspection



Technical specifications:

Inspection cylinder:  
Height:.....30 cm  
Diameter:.....10,5 cm  
Volume:.....2598 ccm

Inspection weight:  
Height:.....5 cm  
Diameter:.....10,4 cm  
Weight:.....4 kg



## Execution



**Tools and utilities:**

- Inspection cylinder
- Inspection weight
- Balance
- material to inspect



**1. Step:**

- weigh 100g of material



**2. Step:**

- put the weighed material into the inspection cylinder



**2. Step:**

- the material is still in a loose stuffed state



**3. Step:**

- now you take the inspection weight...



**3. Step:**

- and put it careful into the inspection cylinder



**4. Step:**

- let the weight sink slowly until it won't move



**5. Step:**

- now the loft can be read off the scale at the lower edge of the weight

Picture 2



Picture 2 shows a test, performed with our standard “Silent Sport™” material, which is used as a reference-material here. 100 gram of material, loaded with a weight of 4 kg, result in a loft of 10 cm, which equals a “filled space” of 865 ccm. 100 gram of this material would cost “Joe Average” an amount of €6,00.

Picture 3



Picture 3 shows the same test, but with one of those “knock off” products, here the loft is only 7 cm, which equals **30% less** “filled space”. The “inexpensive” purchase-price for 100 gram of this material would be €5,42.

**BUT:** For to fill the **same space**, **143 gram** at €7,75 would be required, which is **30% up!**

Picture 4

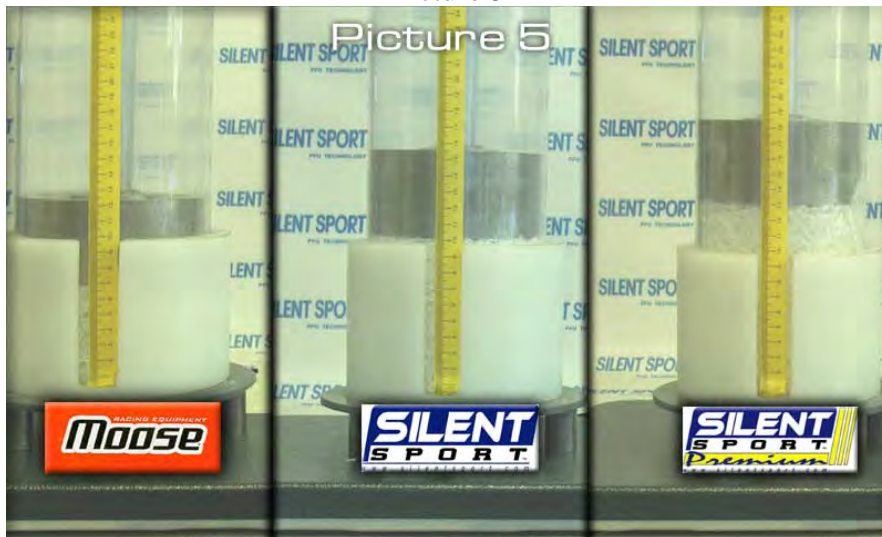


Picture 4 shows the newly developed “Silent Sport™ Premium™ material.

Here we have a loft of 13 cm!!!

That means in return: to fill 10 cm room in the testing cylinder or 865 ccm, instead of 100 gram of standard “Silent Sport” or even 143 gram of “knock-off” material, only 76 gram, worth €5,60 of “Silent Sport™ Premium material is required! For an average “MX-Muffler”, an price-advantage of + - €10,00 can be reached, at significantly **lowered weight** of the muffler and increased durability and **life-time** of the packing!

Picture 5



Picture 5 shows the tests next to each other for comparison.

All dates are set up against each other in the attached data-sheet.

In today`s times, customers should be very careful in spending their money on “minor” products...



Loft	7	10	13
gefüllter Raum / space filled	606 ccm	865 ccm	1125 ccm
Abweichung / difference	-30 %	+0 %	+30 %
Preis / price 100 Gramm	5,42 Euro	6,00 Euro	7,38 Euro
Preisabweichung / price difference	-10 %	+0 %	+23 %
Gewicht / weight 865 ccm	143 Gramm	100 Gramm	76 Gramm
Kosten für / cost for 865 ccm	7,75 Euro	6,00 Euro	5,60 Euro