



## SUPERTECH EVALUATION

### 1) PRESENTATION

We are a company manufacturing equipment for the aggregate and mining market in which we produce crushing and concrete batching equipments . We are also distributor of machinery for mining excavators .

The work developed in this study aims to evaluate the ability of Supertech and to see a reduction in costs related to fuel consumptions on our machinery and on our fleet, that are to be economically sustainable and technically proven.

We received three models of SUPERTECH for testing, model B, model D and Model E , respectively , for fuel tank capacity of tank up to 70 liters up to 350 liters up to 800 liters.

The tests were carried out over a period of 10 days for the B model , including 5 days without installation of Supertech , to be used as a reference and five days with the product installed.

For models D and E tests were performed over a period of 2 days, 1 day without Supertech installed for parameterization and reference and 1 day with the device installed.

Petrol used : Common - 87 Octane without additives ( Alcohol Content - 25 %) \*

Diesel Used : Joint S500 \*

See Attached

## 2 . PERFORMANCE AND CONSUMPTION EVALUATION

### Supertech B

For the Supertech model B , we performed the test on a passenger vehicle business model of the company, a 2012 Ford EcoSport tank : 55 liters

During the reporting period , the vehicle was used in an urban environment with the use of about 20 kilometers daily cycle , distributed in 4 : 5km each travel along the same route 2 round trips and 2 return trips .

Two measurements were made, for redundancy

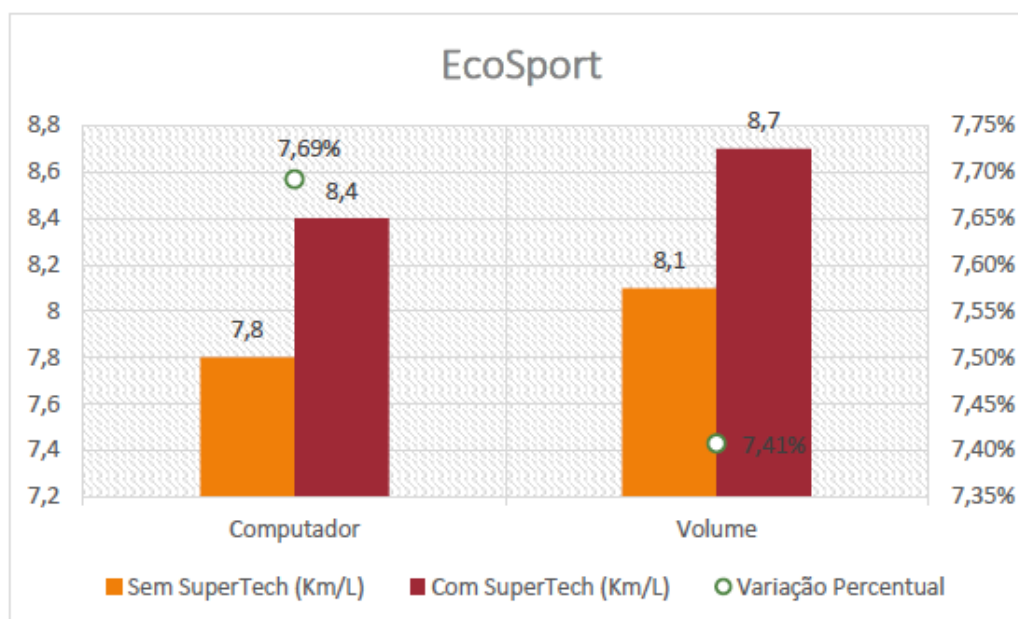
1 - Measurement conducted by the onboard computer of the vehicle.

2 – Measurement by measuring the volume of fuel effectively delivered.

The results obtained from these measurements were quite strong, in the first case the result was only 7.8 km / s , in the second case , although a slightly better result can also assume a probability of error , it was anyhow slightly better , having found a 8.1 km / L.

Having completed the first stage we proceeded to the installation of SuperTech as indicated in the manual and on the website and we repeated the same test with the same conditions of use of the vehicle and the results were respectively 8.4 km / L ( Computer on board ) and 8.7 km / L ( volumetric measurement ) , which represent 7.69% and 7.41% of ECONOMICS . .

\* For the whole period of the test , the vehicle is used by a single person , and the fuel tank has been refilled between the first and the second stage .





## PERFORMANCE AND CONSUMPTION EVALUATION

### Supertech D

Supertech D, we performed the test on a crawler , Metrotrak Caterpillar engine with ACERT 187HP 6.6 C at 1800 rpm and a total capacity of 333 liters tank .

The reference period was 1 day (8 hours) with continuous use .

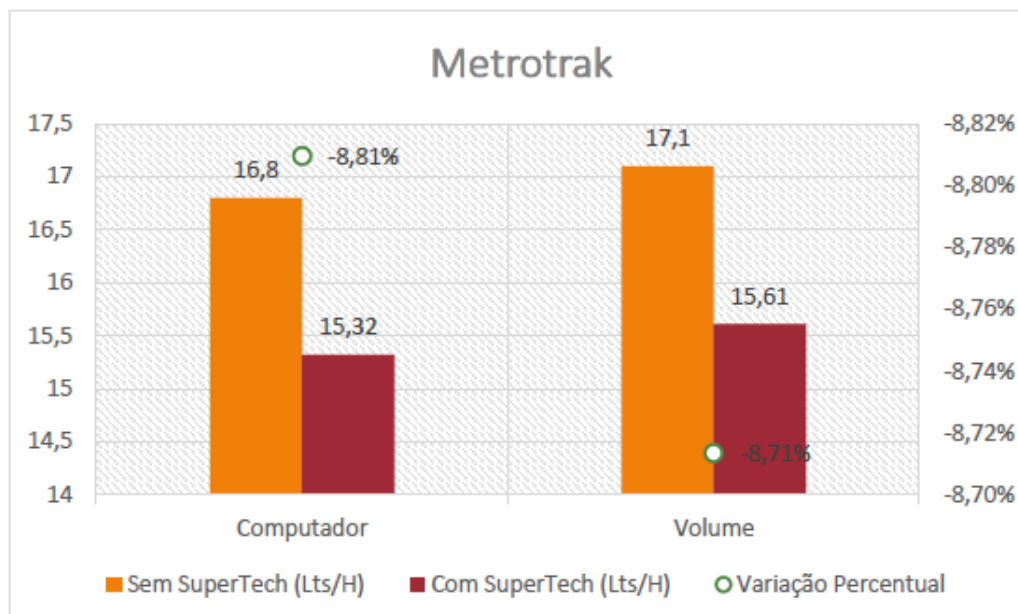
1 - measurement by the automated system of the engine.

2 - measurement performed by measuring the volume of fuel delivered effectively .

The results obtained from these measurements were quite substantial , in the first case the result presented was 16.8 Lts / H and in the second case , the result was slightly higher than that indicated by the computer, in fact it was recorded a 17.1 Lts / H

After performing the installation of Supertech we repeated the same test with the same operating conditions of the equipment and the results were respectively 15.32 Lts / H ( engine system ) and 15.61 Lts / H ( volumetric measurement ) , which accounts for 8.81 % and 8.71 % savings.

\* The tank was refilled between the first and the second stage





## 4 . PERFORMANCE AND CONSUMPTION EVALUATION

### Supertech E

For Supertech E, we performed the test on a crawler , with units Maxtrak 1300 Caterpillar C -13 motor Tierr III ACERT 440hp with 1800rpm and the capacity of the fuel tank was total 509 liters .

The reference period was 1 day (8 hours) with continuous use

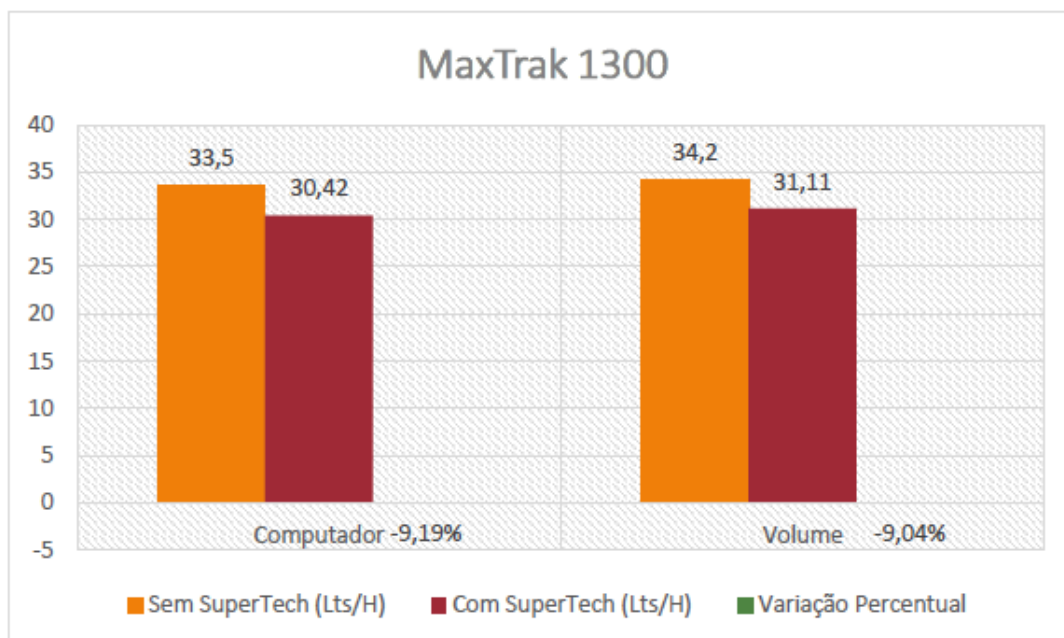
1 - measurement by the automated system of the engine.

2 - Measured by measuring the volume of fuel delivered .

The results obtained from these measurements were quite substantial , in the first case the result presented was 33.5 Lts / H and in the second case , provided the result was slightly higher than that indicated by the computer , and that of 34.2 Lts / H

After performing the installation of Supertech we repeated the same test with the same operating conditions of the equipment and the results were , respectively, 30.42 Lts / H ( engine system ) and 31.11 Lts / H ( volumetric measurement ) , respectively, representing 9 , 19% and 9.04% of savings.

\* The tank was refilled between the first and the second stage





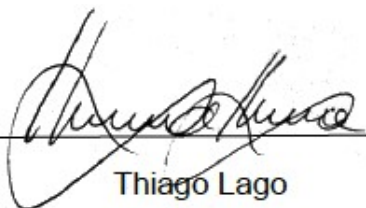
## 5 . CONCLUSION

Through the results obtained it was possible to conclude that the tested device , for all the models tested, showed **a significant margin of fuel economy** within the parameters established for the trial period.

The relationship between economics and power was directly positively correlated, that is: more the power of the engine was, more was the fuel economy obtained.

On average, the economy given was of 8,475% and it is necessary to consider that both petrol and diesel engines had been used.

This study was not able to evaluate, because of the short period of time, if there is a time of adjustment and stabilization of the system, ie, if the results are likely to change in the presence of a longer processing time of the machines and / or in presence of fuel additive use.

A handwritten signature in black ink, appearing to read "Thiago Lago", is written over a horizontal line.

Thiago Lago

Lagoa Santa-MG / Brasil - 23/05/2014