

Considerations about the static fire of the RATTworks H70 rocket motor

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INTRODUCTION

HOW IT WORKS?

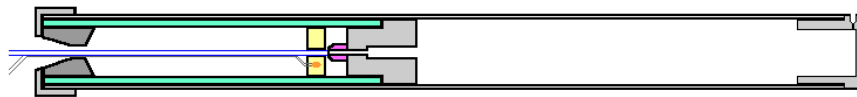


Figure 0.1: Empty motor

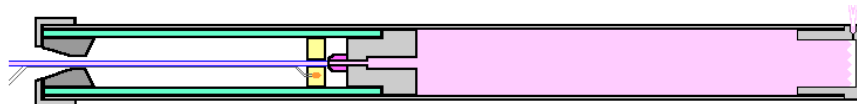


Figure 0.2: Motor filled with N_2O and venting

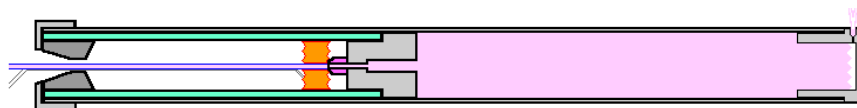


Figure 0.3: The ignitor starts the combustion of the solid grain

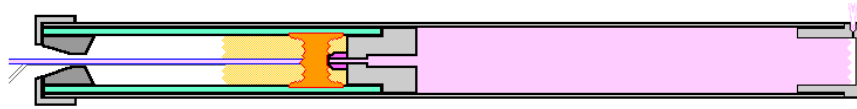


Figure 0.4: The combustion of the solid grain burns the gas tube

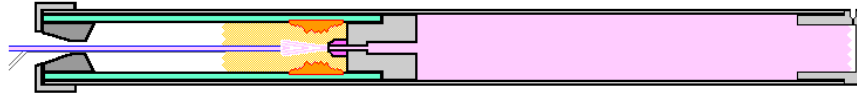


Figure 0.5: The gas leaks through the tube

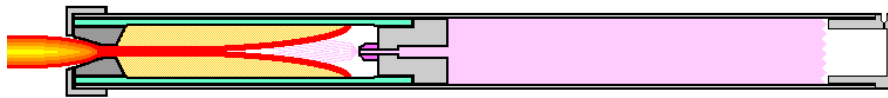


Figure 0.6: The motor is now functioning

GAS PRESSURE AND STATE

In order to study the gas state and pressure inside the tanks some, the basic properties of it has been extracted from [1]

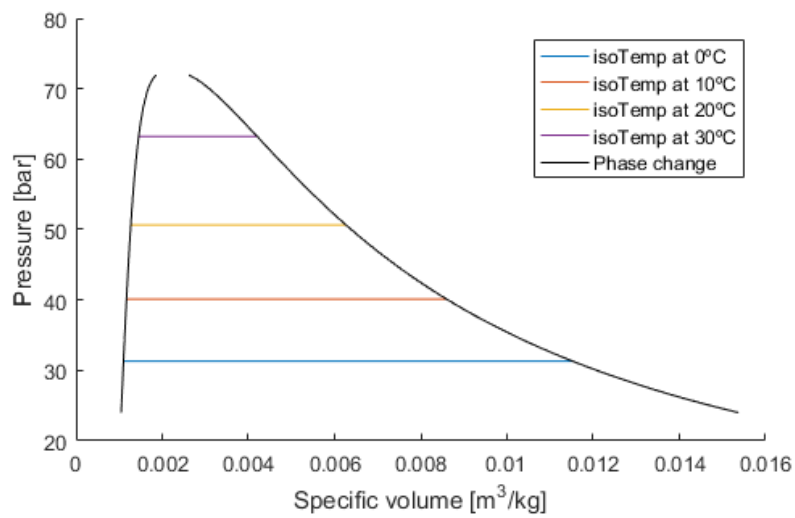


Figure 0.7: Empty motor

CONTROL SOFTWARE

SAFETY CONCERNS

REFERENCES

- [1] *Thermophysical properties of nitrous oxide*. 1991. URL: <http://edge.rit.edu/edge/P07106/public/Nox.pdf>.