

# Praktische Aspekte bei Entwicklungsprojekten im Launcherbereich

Dipl.-Ing. Dr. Gerhard Lindner

FH- Graz Joanneum

Sehr geehrter Space-Interessent!

Hier finden Sie die Fotos zu meinem Vortrag, den ich am 09.09.2016 um 9:30 bei der Summer University – Graz in Space gehalten habe. Für einige der beim Vortrag gezeigten Fotos habe ich keine Freigabe zur Veröffentlichung im Internet. Ich mußte diese Fotos leider aus der vorliegenden Präsentation entfernen.

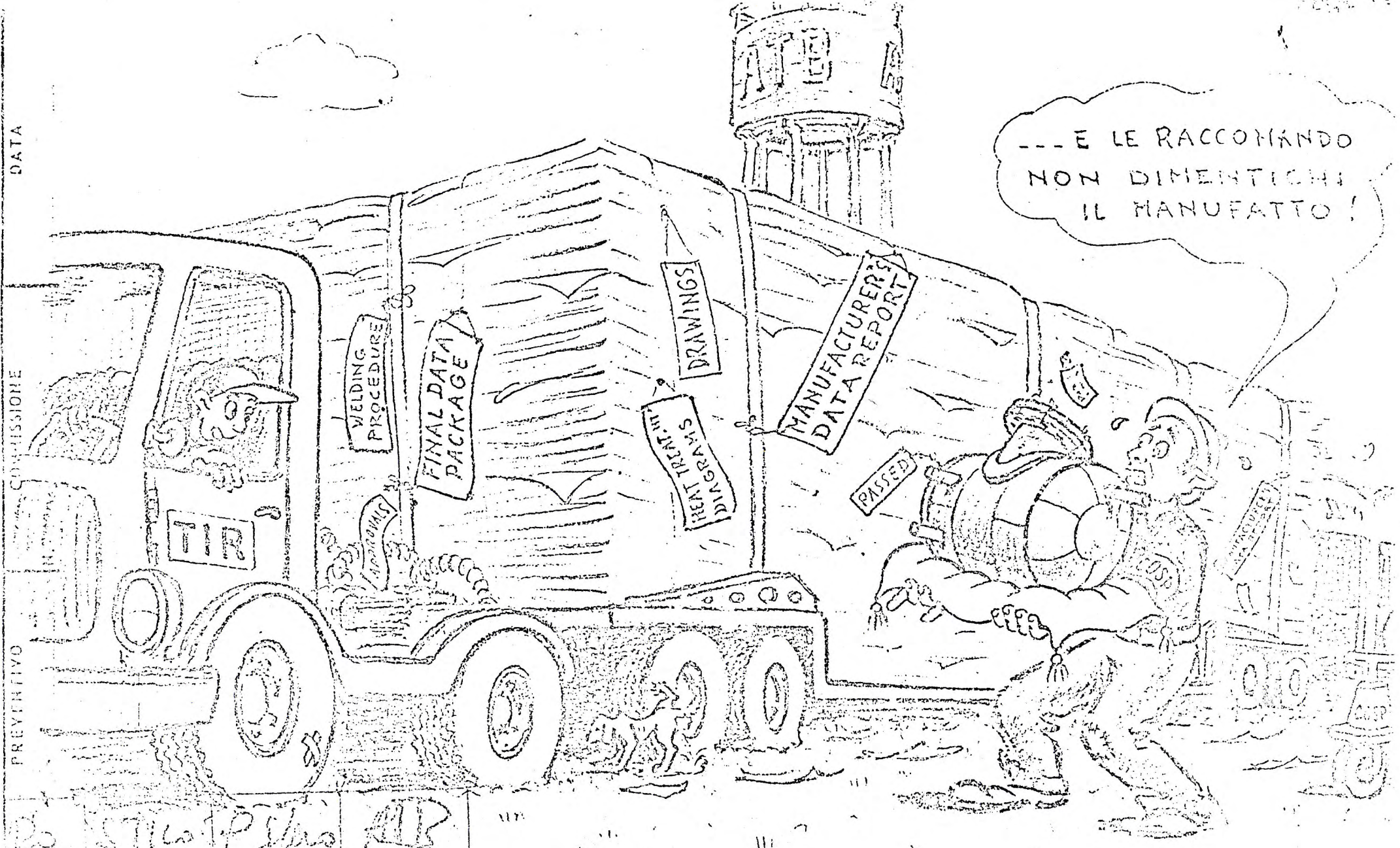
Bitte um Verständnis!



DATA

COMMISSIONE

PREVENTIVO



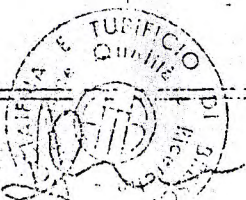
... E LE RACCOMANDO  
NON DIMENTICHI  
IL MANUFATTO!

SPS STU P Jho AB



2

4



3 LUG. 1976

Mod. 75/F

bolle exped...

50,5 m

### Coiffe

- 3 versions
- 12, 12,7, 13,8 m
- 2 à 2,9 tonnes

### SYLDA

- 7 variantes  
(de 4,6 à 6,4 m de hauteur)
- de 400 à 500 kg

### ACU

- de 100 à 150 kg

### Case à équipement

- 1,13 m de haut
- 950 kg

### ESC-A

- 4,71 m de hauteur
- 19 tonnes

### Moteur HM-7B

- 65 kN de poussée
- 970 s de fonctionnement

### EPC

- 31 m de hauteur
- 188,3 tonnes

### EAP

- 31,6 m de hauteur
- 280,5 tonnes

### MPS

- 7080 kN de poussée max
- 130 s de fonctionnement

3,05 m

5,46 m

### Moteur Vulcain

- 1350 kN de poussée
- 540 s de fonctionnement

780 tonnes de  
masse globale



13 000 kN au décollage



innovative  
technology

▲ MAGMA STEYR

FEEDLINE FOR THERMOPOWER PLANT

Industrial feeding line for the power plant. The feeding line is made of stainless steel and is used for the transport of the feed material to the power plant.

The feeding line is made of stainless steel and is used for the transport of the feed material to the power plant. The feeding line is made of stainless steel and is used for the transport of the feed material to the power plant.

innovative  
technology

10/04/2009

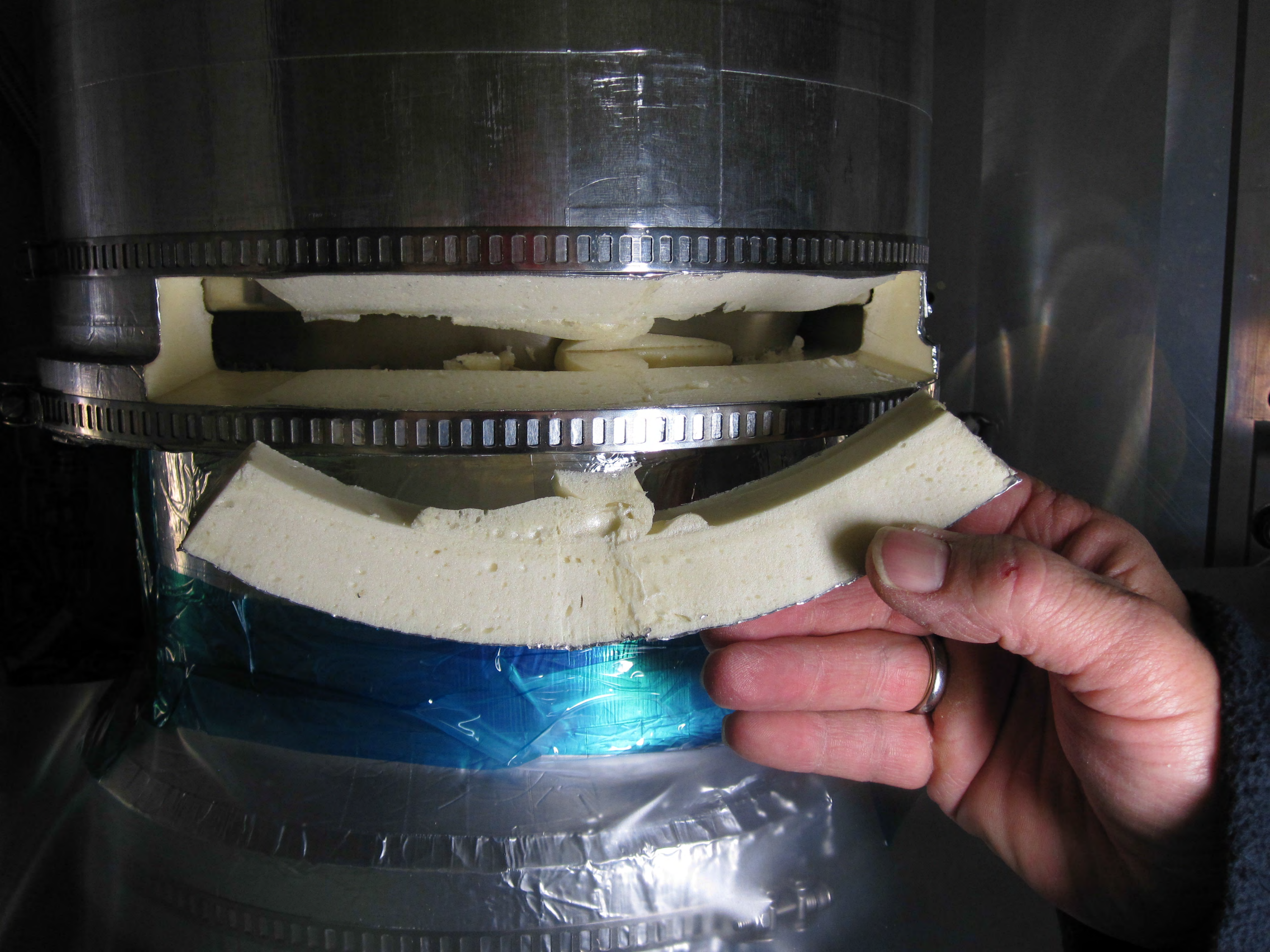


10/04/2009

















07:038  
⑦

2203-2004



07.03.01

12.03.2001

1/5



Two stainless steel beakers are placed on a silver metal platform. Below the platform is a red and silver magnetic stirrer. The stirrer's control panel features a black dial labeled "Watt %" with markings from 0 to 100, a black handle, a green temperature gauge with a scale up to 200 °C, and a small orange indicator light. The CE mark is also visible on the panel.

Below the chamber, there is a white electrical control box with a red and a green indicator light. The box is labeled "D2.3 F4". To its right is a blue control unit with a black knob and a circular gauge with a scale from 0 to 100. A black power cord connects the stirrer to the control box.







**Danke für die Aufmerksamkeit!**