

# ATLAS BIS MDT wiring facility

UNIVERSITY OF ATHENS

- D. Fassouliotis
- P. Ioannou
- S. Igropoulos
- C. Kourkoumelis
- V. Pancheluga
- D. Pappas
- E. Stefanides
- V. Birioukov (engineer from Protvino)

Visit our web-page at:

*<http://www.phys.uoa.gr/Atlas/MDT>*

E. K. Stefanides

**Data Acquisition for the  
MDT Assembly  
in the University of Athens**

---

**SPEECH FLOW**

1/6 : Introduction

2/6 : Motivations

3/6 : Features

4/6 : Operation

5/6 : Data-Base visual display

6/6 : Close



# 1/6: INTRODUCTION

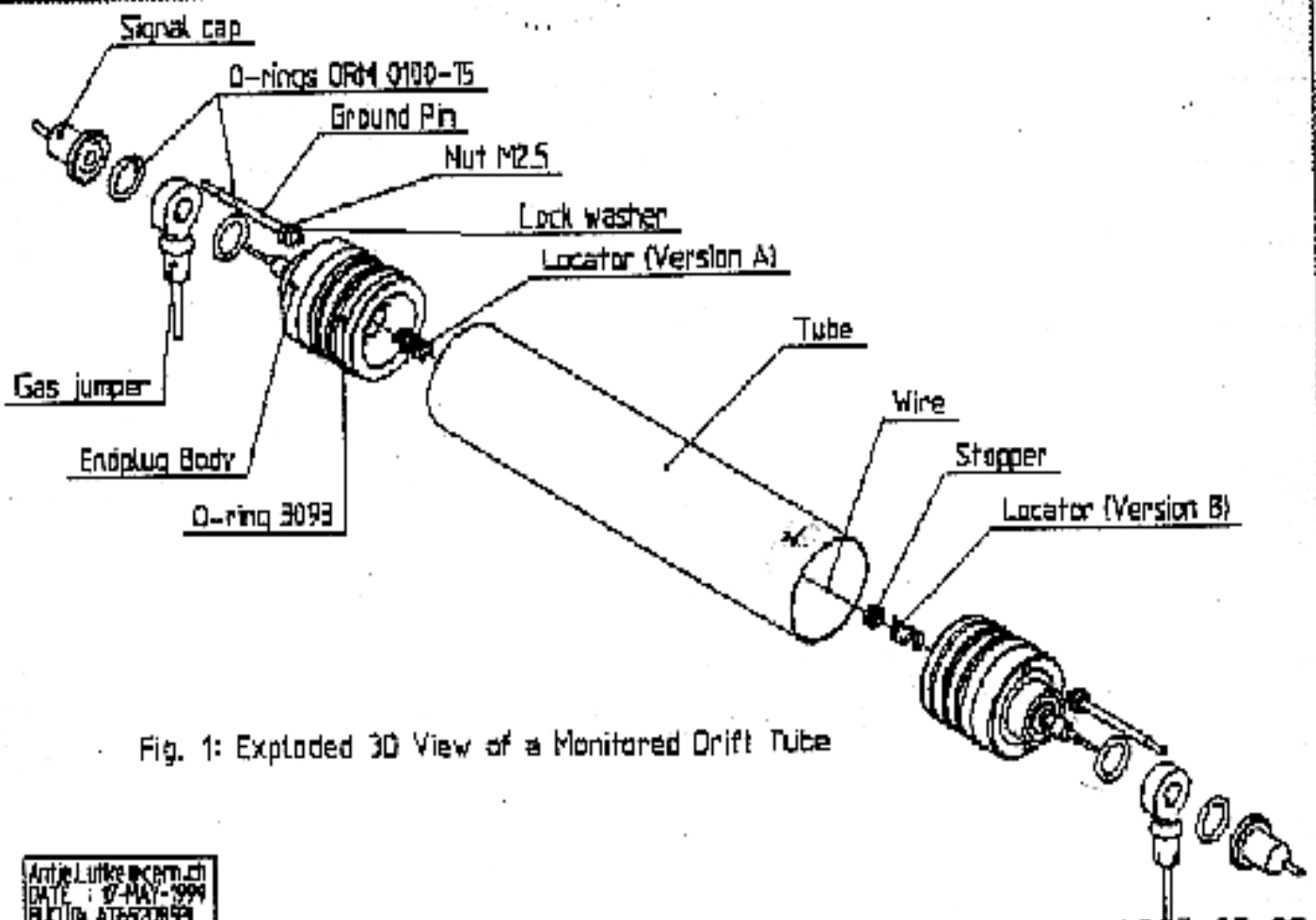


Fig. 1: Exploded 3D View of a Monitored Drift Tube

Artis Lutte Inc. Inc.  
DATE: 07-MAY-1999  
BUFILE: AT652085PL  
C/O: ATLMAC0031

COO: ATLMAC0031-...-1989-05-26

E. K. Stefanides

# 1/6: INTRODUCTION



E. K. Stefanides



## 2/6 : **MOTIVATIONS**

### **A. Requirement for satisfying construction specifications:**

.mechanical tension:  $350 \pm 15$  gr at  $20 \pm 1$  °C

.finished tube's length:  $1671,5 \pm 0.25$  mm

### **B. High Production Rate**

### **C. Reliable Operation**

### **D. Automatic recording the features of each individual tube:**



*Quick and automatic  
filling of Data Base.*

## 3/6 : FEATURES

### 1. Mean construction time

**reduced by 40%**



*Allows parallel tasks.*

### 2. User- friendly environment .

*Questions-  
Constant Commu-  
nication*



*Classification  
in clusters (colors)*



*Ability for  
intervention*



E. K. Stefanides



## 4/6 : OPERATIONS

- 1.Entering a set of parameters.**
- 2.Entering the Bar Code.**
- 3.Performing pre-tensioning and tensioning.**
- 4.Recording the finished tube's length.**
- 5.Recording the wire's mechanical tension.**
- 6.Recording the date and time.**
- 7.Storage.**

5/6 : **Data Base**

## **Visual Display**

- ① Graphical Presentation (histograms) of several parameters.**
- ② It's the user that selects the dates of beginning and ending.**
- ③ Use of PHP and MySQL software tools.**
- ④ Histograms are not pre-filled.**



6/6 : **CLOSE**

---

## **FUTURE PLANS**

- **Maintain/update the QA software**
- **Complete the software for the DB handling.**

## **OUR WEB – SITE:**

*<http://www.phys.uoa.gr/Atlas/MDT>*

## **SPECIAL THANKS**

- ***Prof. C. Kourkoumelis***
- ***Dr. D. Fassouliotis***
- ***Mr. K. Adreopoulos, GRA***

E. K. Stefanides

---



E. K. Stefanides





E. K. Stefanides