

WP 21/BAL/BE

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**Ref.:** Material analysis for one lightning conductor top  
Type "Schirtec-AS"  
order from 13.12.2006  
TÜV-Order.Nr. 2007-WS/PZW-EX-0-000039

## REPORT

about the material analysis executed in the Vienna Test Center of the  
TÜV Austria from December 9<sup>th</sup> 2007.

**Test subject:**

One lightning conductor top named "Schirtec-AS".

Modell E.S.E.

Type: S-AS

Serial Nr.: 061141

There is no declaration about the used material.

**Purpose of the test:**

It was to find out by use of spectral analysis which material or material compounds  
have been used for the production of the lightning conductor.

**Carrying out the test:**

The lightning conductor was dismantled into his component parts and in the  
following for each component part a spectral analysis was done. For the test of the  
material compound it was used the test device RF-Spectrumanalysator  
Modell XLt-898 Y, Serial no.: 6943.

Akkreditiert als:  
Prüfstelle,  
Überwachungsstelle,  
Zertifizierungsstelle,  
Kalibrierstelle

Notified Body 0408

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**Test result:**

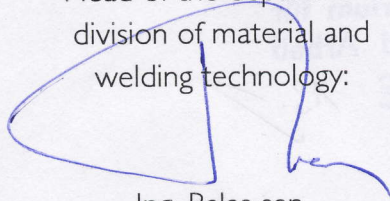
The following material compounds were realized (see attachment):

- Rohr/tube: 1.4301
- Hülse/socket: 1.4301
- Spitze/top: 1.4301
- Oberteil/upper part: 1.4301
- Lamelle/multiple-disk: 1.4301
- Unterteil/lower part: 1.4301

To sum it up one can say that for the concrete lightning conductor top of the type "Schirtec-AS" high quality material has been used. Sustainable environmental influences by use of those materials or their chemical elements when operating with those devices are not known by the undersigned testing body.

Vienna, 10.01.2007  
TÜV Austria

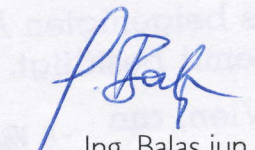
Head of the department  
division of material and  
welding technology:



Ing. Balas sen.



The test engineer:



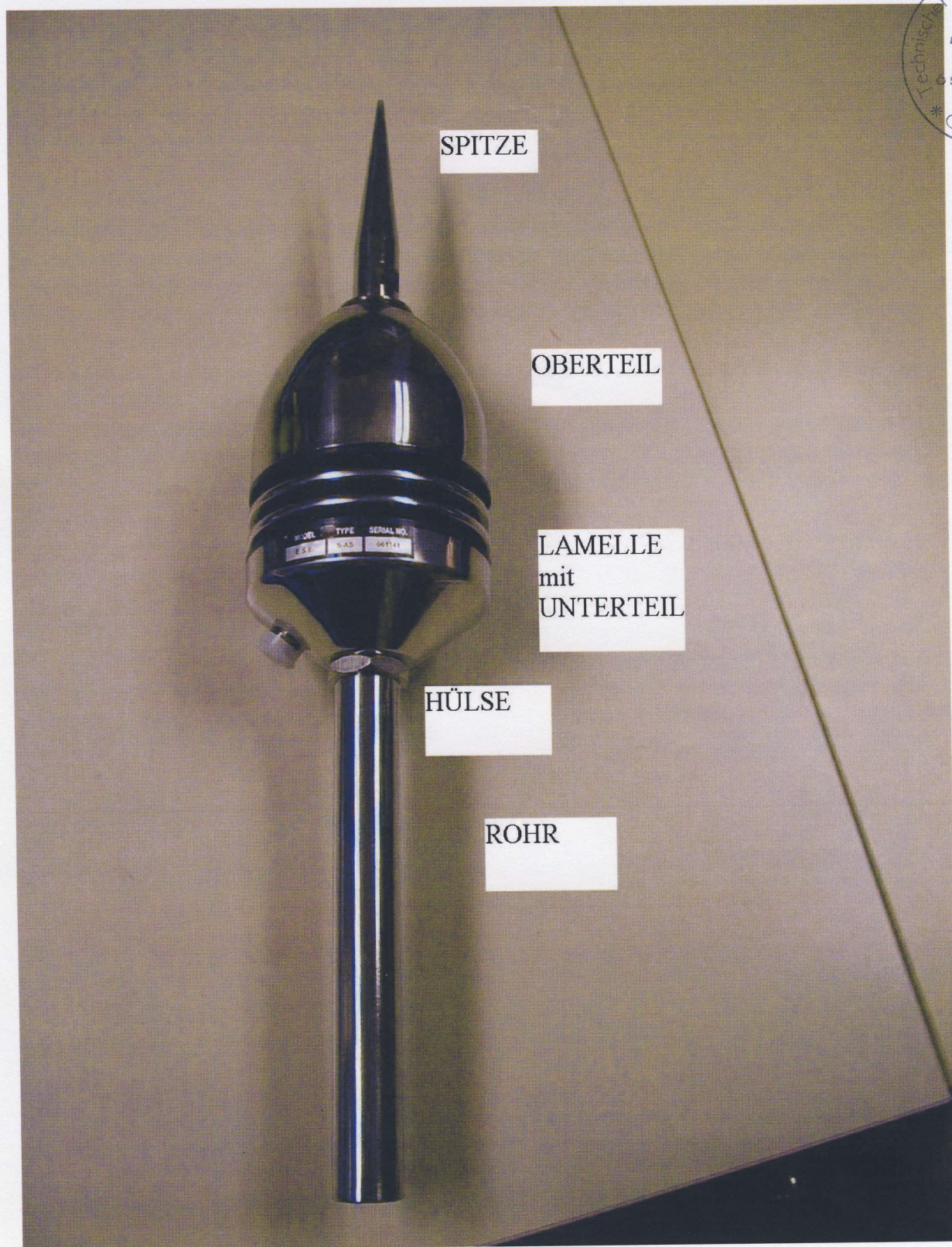
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Attachment:  
2 pages

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Bauteil	Alloy1	Mo	Mo +/-	Cu	Cu +/-	Ni	Ni +/-	Fe	Fe +/-	Mn	Mn +/-	Cr	Cr +/-	Ti	Ti +/-
Rohr	1.4301/05/11 : 0.989168	0,26	0,03	0,19	0,13	8,49	0,51	70,81	0,79	1,74	0,36	17,96	0,48	0	0,23
Hülse	1.4301/05/11 : 0.020322	0,54	0,04	0,41	0,14	8,89	0,48	69,66	0,72	1,71	0,34	18,54	0,44	0	0,07
Spitze	1.4301/05/11 : 2.729798	0,44	0,06	1,17	0,34	7,5	0,75	71,02	1,2	1,92	0,57	17,23	0,72	0	0,08
Oberteil	1.4301/05/11 : 1.291029	0,35	0,03	0,45	0,15	8,45	0,49	71,18	0,74	1,8	0,35	17,43	0,45	0	0,05
Lamelle	1.4301/05/11 : 0.287940	0,27	0,03	0,37	0,14	9,44	0,5	69,87	0,74	1,06	0,31	18,51	0,45	0	0,21
Lamelle	1.4301/05/11 : 0.302628	0,11	0,02	0,06	0,11	8,94	0,51	71,71	0,77	1,08	0,33	17,68	0,46	0	0,22
Unterteil	1.4301/05/11 : 0.628240	0,28	0,04	0,35	0,19	9,93	0,65	70,37	0,94	1,01	0,4	17,44	0,57	0,03	0,07



SPITZE

OBERTEIL

LAMELLE  
mit  
UNTERTEIL

HÜLSE

ROHR