

# Brandschutzforum Austria

Vorlesung

„Traue keiner Statistik, die Du nicht selber gefälscht hast!“

## Heiße Zahlen

Statistik & Brandschäden

© Univ.-Lektor Dr. Otto Widetschek, KFU Graz

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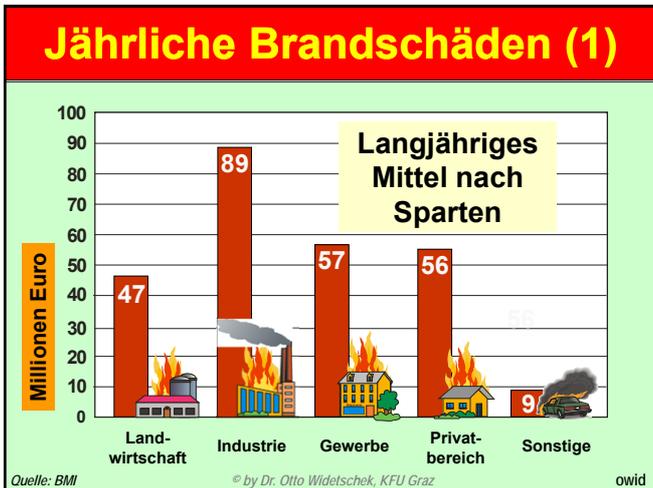
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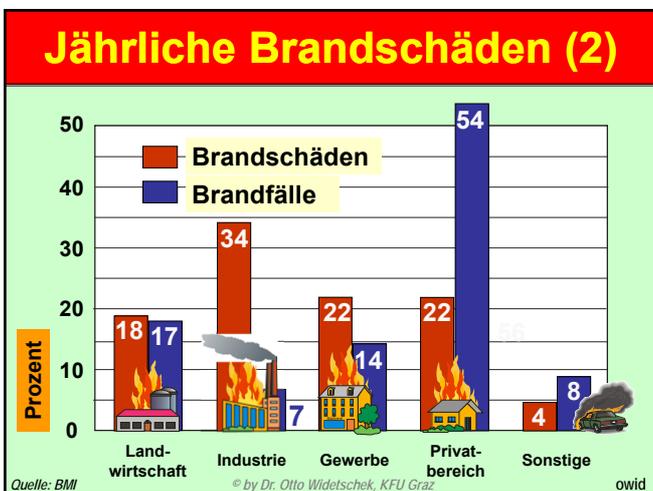
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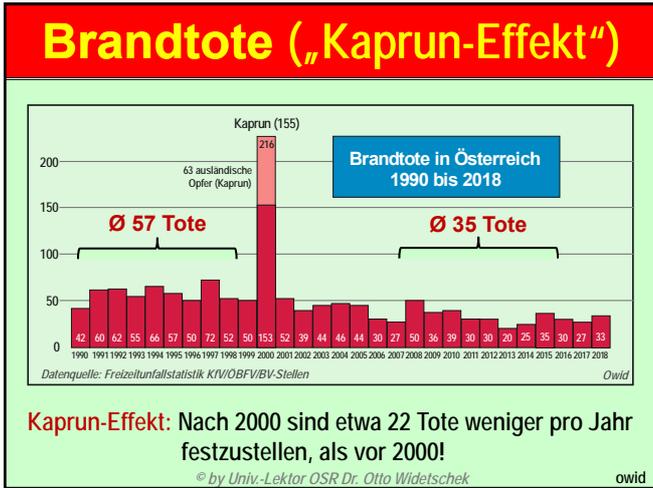
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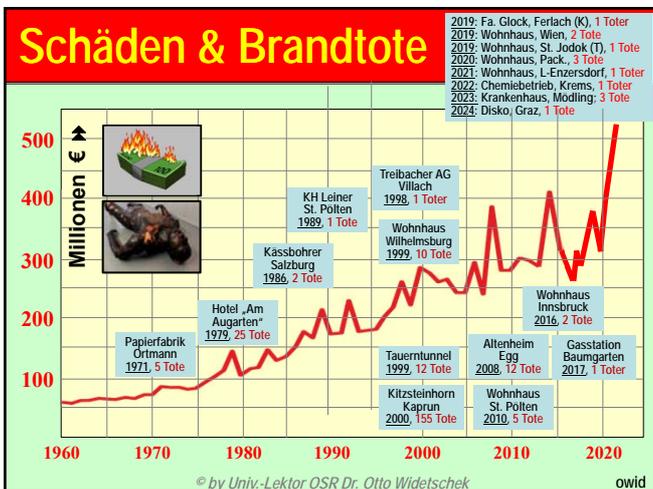
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## Tankwagenbrand (1964)



**Graz, Grieskai**

**10.000 l Benzin  
brennen!  
18 Verletzte**

**Zusammenstoß**

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## Industriebrand (1971)



**Papierfabrik  
Ortmann, NÖ**

**5 Tote Feuerwehr-  
männer**

**Schweißen**

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## Wohnhaus-Explosion (1976)



**Graz,  
Plabutscherstr.**

**Umstellung von  
Stadtgas auf Erdgas  
(Dichtungen), 2 Tote**

**Rauchen**

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## Gasflaschenexplosion (1990)



Fa. Rigips, Bad Aussee, ST

- ▶ 10.000 m<sup>2</sup> Halle zerstört!
- ▶ Acetylen
- ▶ PCB-Trafos

Schweißen

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## Kulturbau (1992)



Redoutensäle, Hofburg, Wien

Zerstörung von Kulturgütern!

Raucherwaren

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## Textilbrand (1993)



Fa. Palmers, Wr. Neudorf

Kunststoffe, Löschen mit Überdruck!

Vermutlich Brandstiftung

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## Brand in einer Bank (1998)



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## Hotel & Freizeitclub (1998)



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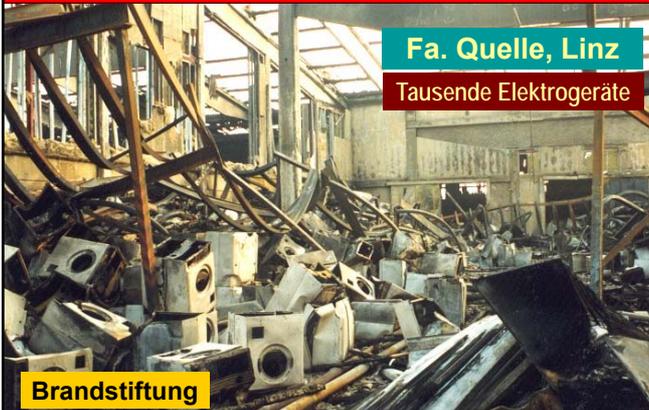
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## Lagerhausbrand (1998)



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## Tunnelbrand (1999)



**Tauerntunnel,  
Salzburg**

- ▶ 12 Tote
- ▶ 16 LKW, 24 PKW
- ▶ 24.000 Lackspraydosen
- ▶ 6,4 km einröhriger Tunnel

**Auffahrunfall mit Brand**

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## Wohnhaus (1999)



**Wilhelmsburg,  
NÖ**

**Gasexplosion, 10 Tote**

**Anbohren einer Gasleitung  
Zündfunken**

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## Standseilbahn (2000)



**Kaprun, Kitzstein-  
horn, S**

- ▶ 155 Tote
- ▶ 12 Personen gerettet
- ▶ 3,2 km Tunnel
- ▶ 16 Angeklagte

**Heizlüfter**

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## Altenheim (2008)



**KLEINE ZEITUNG**  
Inferno im Seniorenheim  
19.10.2008

**Altenheim, Egg, V**  
Desolater Brandschutz, 12 Tote

**Rauchwaren**

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## Tankwagenbrand (2009)



**Lassnitzhöhe/ Graz**  
30.000 l Benzin und Dieselöl, Umweltkatastrophe

**Reifenplatzer**

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## Holzindustrie (2009)



**Fa. Holzbau Weiz**  
Ursache: Ölgetränkte Putzlappen

**Selbstentzündung**

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### Recyclinganlage (2021)



St. Michael, Stmk.  
Totalbrand, Hoher Brandschaden

Lithium-Ionen-Batterie (?)

Quelle: BLAULICHT 7/2021

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### Waldbrand (2021)



Höllental (Rax), NÖ

- ▶ Größter Waldbrand in Österreich
- ▶ 13 Tage Einsatz
- ▶ 7.753 Einsatzkräfte
- ▶ 1.355 Fahrzeuge
- ▶ 16 Fluggeräte

Ursache unbekannt (Mensch)

Quelle: BLAULICHT 12/2021 owid

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### Holzspänelager (2022)



Gußwerk und Kirchberg, Stmk.  
Hoher Brandschaden

Technischer Defekt an Förderanlagen

Quelle: BLAULICHT 3/2022

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## Chemiebetrieb (2022)



**Krems, NÖ**

**Demontagearbeiten,  
1 Toter, 2 Verletzte,  
Totalschaden**

**Leck am Propan-Sauerstoff-  
Schweißbrenner**

Quelle: BLAULICHT 6/2022

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## Historische Mühle (2023)



**Rösselmühle, Graz**

- ▶ Schwierige Brandbekämpfung
- ▶ Kapazitätsgrenzen der Berufsfeuerwehr

**Brandstiftung**

Quelle: BLAULICHT 6/2023

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## Krankenhaus (2023)



**LKH Mödling, NÖ**

- ▶ 3 Tote, 11 Verletzte,  
90 Pers. evakuiert
- ▶ Organisatorische  
Mängel (Alarmierung,  
BTF, Sauerstoff?)

**Rauchen im Bett**

Quelle: BLAULICHT 6/2023

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## Brand im Tunnel (2023)



**Terfenertunnel, Tirol**

- ▶ Tunnel 16 km lang!
- ▶ Zwei Autos brennen
- ▶ 151 Personen gerettet
- ▶ Beinahe-Katastrophe à la Kaprun

**Lichtbogen**

Quelle: BLAULICHT 7-8/2023 © by Dr. Otto Widetschek, KFU Graz

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## Diskothekenbrand (2024)



**Stern-Bar, Graz**

- ▶ 1 Tote, 4 Schwerverletzte
- ▶ 9 Personen gerettet
- ▶ Extreme feuerpolizeiliche Mängel
- ▶ Christbaum

**Pyrotechn. Artikel?**

Quelle: BLAULICHT 2/2024 © by Dr. Otto Widetschek, KFU Graz

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## Anstieg der Brandschäden



**Große Brandabschnitte**

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**Anstieg der Brandschäden**

Gigantismus

Große Brandabschnitte

Hohe Wertdichte

EDV- und Roboteranlagen

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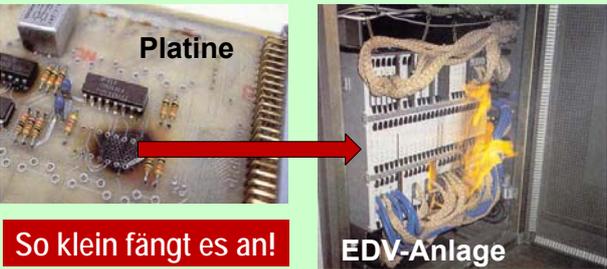
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## Brände in EDV-Anlagen



**So klein fängt es an!**

Hier kann man z. B. mit stationären Gaslöschanlagen den Brandschutz gewährleisten!

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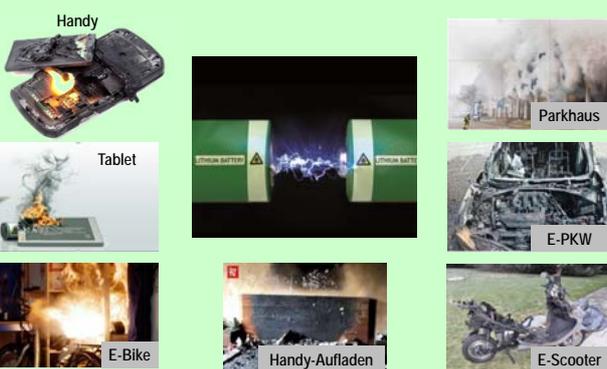
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## Lithium-Ionen-Batterien



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## Technisierung



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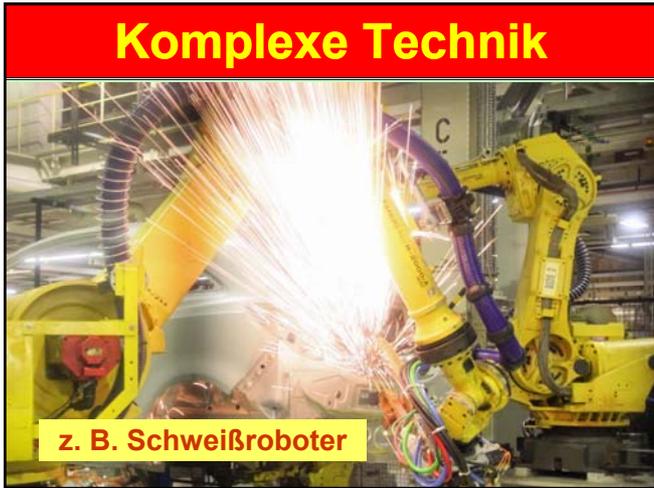
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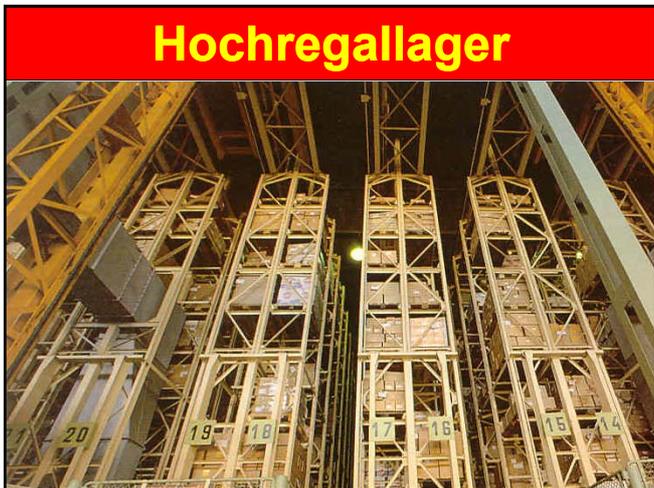
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**Anstieg der Brandschäden**

Gigantismus  
Große Brandabschnitte

Hohe Wertdichte

Kunststoffe & Chemikalien  
Große Brandbelastung

EDV- und Roboteranlagen

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The infographic features a light green background with four distinct icons. In the top left, an elephant is shown next to a tall, thin vertical bar, representing 'Gigantismus' (gigantism) and 'Große Brandabschnitte' (large fire sections). In the top right, a computer monitor and a robot are shown, representing 'EDV- und Roboteranlagen' (IT and robotic systems). In the bottom left, a chair and a stack of barrels are shown, representing 'Kunststoffe & Chemikalien' (plastics and chemicals) and 'Große Brandbelastung' (high fire load). The text 'Hohe Wertdichte' (high value density) is centered between the top and bottom icons. At the bottom, the copyright information '© by Dr. Otto Widetschek, KFU Graz' and the logo 'owid' are visible.

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## Brennbare Lagerungen



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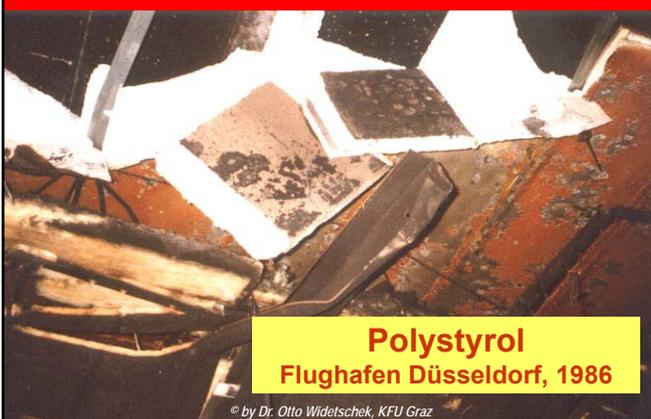
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## Schaumkunststoffe



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## Brennbare Wärmedämmung



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## Verpackungen



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## Brennbare Flüssigkeiten



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## Lacke, Lösungsmittel



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## Anstieg der Brandschäden

Gigantismus  
Große Brandabschnitte

Hohe Wertdichte  
EDV- und Roboteranlagen

Kunststoffe & Chemikalien  
Große Brandbelastung

„Gift-Cocktail“  
CO, HCl, HCN

Folgeschäden (HCl, Dioxine...)

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## PVC-Brand

Lengerich, BRD, 1992

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## Kabelisolierungen

Nationalbank, Wien 1979

Flughafen Düsseldorf, 1996

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## Chloridschäden

ca. 1 Liter Salzsäure

1 kg PVC

einige 100 Liter HCl-Dampf

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## Ultragifte

Düsseldorf 1996

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## Korrosionen

Fa. MACO, Trieben, 2003

Bild: Belfor

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## Kontaminierter Schaltschrank



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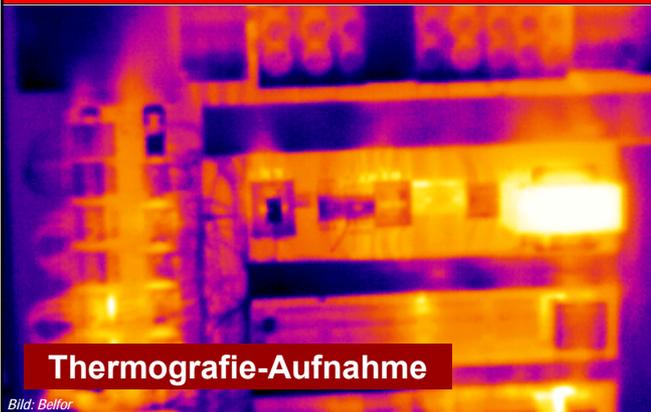
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## „Heiße Stellen“



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## Brandkatastrophen



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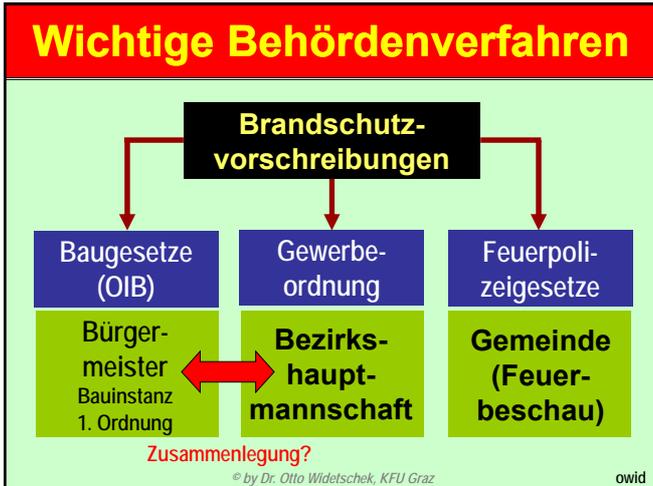
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## Kommunikationsprobleme



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## Die 10 Todsünden

- 1. Große Brandabschnitte, mangelnder baulicher Brandschutz**
- 2. Unzureichende Flucht- und Rettungswege**
- 3. Hohe Brandbelastung (Plaste, gefährliche Stoffe)**
- 4. PVC, organische Stoffe (▶ Folgeschäden)**
- 5. Keine Brandmeldeanlage**

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## Die 10 Todsünden

- 6. Keine Sprinkleranlage**
- 7. Fehlende RWA (▶ Flashover)**
- 8. Schlechter Betriebsbrandschutz**
- 9. Kein Intrusionsschutz (▶ Brandstiftung)**
- 10. Menschliches Versagen**  
▶ Brandkatastrophe

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## Brandschutz-Sparpaket

**Brandschutzgesetz**

<p><b>Pflichtvorlesung</b></p> <p><b>Brandschutz-Fortbildung (Planer)</b></p> <p><b>Brandschutz-SV in Jury</b></p> <p><b>Einheitliche Gesetze (OIB-Richtlinien) und Sprachregelung</b></p> <p><b>Bauinstanz 1.Ordnung</b></p> <p><b>Bundesbauten</b></p> <p><b>Betriebsbrandschutz</b></p>	<p><b>Selbst(Zivil)schutz</b></p> <p><b>Feuerwehren, BV</b></p> <p><b>Versicherungen</b></p> <p><b>Rechtssprechung (Verursacherprinzip)</b></p> <p><b>Zentrale Brandstatistik</b></p> <p><b>Safety &amp; Security (Brandstiftung)</b></p> <p><b>SV (einheitliche Ausbildung)</b></p>
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## Welche Strategie?

**Beten beruhigt !**



**Versichern hilft !**



**Vorbeugen schützt !**



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## Ende des Vortrags



Danke!

Owid

Letzte Überarbeitung:  
Oktober 2024

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