# Traverse (Veranstaltungstechnik)

**Traversen** in der Veranstaltungstechnik sind Trage- und Aufbaukonstruktionen. Sie werden auch als *Truss* bezeichnet. Meist bestehen sie aus Aluminium, aber auch Traversen aus Stahl sind durchaus verbreitet.

## **Formen**

Oftmals werden die beschriebenen Formen auch als 2-, 3- bzw. 4-Holmtraverse bezeichnet.

## 2-Punkt-Traverse

2-Punkt-Traversen findet man oft in Theatern als Vorhangsschienen oder für Leuchten (Teil der Obermaschinerie). Bei Veranstaltungen wird diese Form ebenfalls für Vorhänge, Molton oder Folien benutzt. Sie kann in einem *Ground Support* auch als zusätzliche *Schwebeeinheit* oder als zusätzlicher Träger benutzt werden.

# 3-Punkt-Traverse

3-Punkt-Traversen werden meist bei kleinen Veranstaltungen als Dekotrusse und für Spezialkonstruktionen eingesetzt. Bekannteste Spezialkonstruktion ist der Kreis. In diesen wird meist eine Folie eingespannt für Projektionen mit Moving Heads oder Beamern. Wie bei der 2-Punkt-Traverse kann auch diese Form in einem *Ground Support* auch als zusätzliche *Schwebeeinheit* oder als zusätzlicher Träger benutzt werden.

# 4-Punkt-Traverse

Die 4-Punkt-Traverse ist die am meisten verbreitete Form. Sie hat die höchste mechanische Stabilität der drei Bauformen. Als Normal- oder als Schwerlasttraverse wird diese Form meist für den sogenannten *Ground Support* oder für den Bühnenaufbau benutzt.

# Aufbauformen

## Stativ

Diese Aufbauform wird meist bei kleinen Veranstaltungen, Messen oder Tagungen benutzt. Dabei sind zwei Stative am äußeren Teil und die Traverse dazwischen. Die mögliche Belastung richtet sich nach den Stativen und der Strecke, sowie der Nutzlast der Traverse selbst. Auch Aufbauten mit mehreren Stativen sind durchaus üblich, entweder in einer Strecke mit z. B. drei Stativen oder auch als Carré (Viereckige Konstruktion). Bei kleineren Veranstaltungen sind dafür häufig einfache Kurbelstative zu finden, sind größere Höhen oder schwerere Lasten zu überwinden, bieten sich Stative mit elektrischem Antrieb (Lifte) an.

## Schwebend

Die schwebende Form findet man oft in Hallen und Theatern, wo der Aufbau eines *Ground Supports* aus Platz- oder Dekorationsgründen nicht möglich ist. Dabei wird eine Laststrecke oder eine Viereck durch mehrere Motoren oder Handkettenzüge nach oben gezogen.

Diese Konstruktion wird durch Stahlseile gesichert oder durch Motoren (nach BGV-C1) frei schwebend "gefahren".

# **Ground Support**

Der Ground Support ist die bekannteste Form des Traversenbaus, ob mit Motoren durch *Sleevblöcke* an *Towern* nach oben gezogen oder mit festen *Cornerblöcken* als Messe und Dekoration erbaut. Dieses hat den Vorteil, dass er in jeder Halle und auf jedem Platz aufgebaut werden kann und man damit unabhängig ist.

Zudem erlaubt die Bauart zusätzliche Features wie schwebende Einbauten, wie z. B. Prospektzüge oder andere Formen der Traversen (z. B. die runde Form mit Leinwand).

Die Belastungen richten sich auch hier nach der Größe und der Art der Tower und Traversen. Für den Bau mit Dach (Bühnen) gibt es extra Schwerlasttraversen. Diese werden aber auch bei großen Konzerten benutzt, da die Aufbauten sehr vielschichtig sind und somit ein hohes Eigengewicht mit sich führen.

## Bühne

Wie beim *Ground Support* schon beschrieben ist eine Bühne aus einer Traversenkonstruktion nichts anderes als ein Ground Support mit Dach.

Durch Regen oder Schnee kann die Dachlast sehr schnell zunehmen, daher sind hier Spezialtraversen notwendig. Diese Schwerlasttraversen sind auch in Aluminium erhältlich. Vor einigen Jahren waren diese ausschließlich aus Stahl.

# **Gesetzliche Regelung**

Traversen fallen im Eventbereich unter die Obermaschinerie. Zuständige Gesetzliche Regelung ist die MVStättV (Muster-Versammlungs-Stätten-Verordnung), auch einfach als Versammlungsstättenverordnung bekannt.

Zusätzlich greifen folgende Normen und Vorschriften:

- DIN 15020-1/2 Hebezeuge; Grundsätze für Seiltriebe
- DIN 56920-3 Theatertechnik; Begriffe für bühnentechnische Einrichtungen
- DIN 56921-1 Theatertechnik, Bühnenmaschinerie Prospektzüge Teil 1: Handkonterzüge mit einer Tragfähigkeit bis 500 kg
- DIN 56950 Veranstaltungstechnik Maschinentechnische Einrichtungen Sicherheitstechnische Anforderungen und Prüfung
- GUV 4.2 VBG D8 Winden, Hub- und Zuggeräte
- GUV 4.6 Lastaufnahmeeinrichtungen im Hebezeugbetrieb
- GUV 14.3 ZH 1/461 Sicherheitsregeln für hochziehbare Personenaufnahmemittel
- GUV 66.15 ZH 1/222 Grundsätze für die Prüfung von Einrichtungen in Bühnen und Studios
- BGV C1 Unfallvorschriften für Veranstaltungs und Produktionsstätten für Szenische Darstellung

# Quellen

- · DTHG Profi Handbuch
- Max Keller "Faszination Lichttechnik"
- · www.eurotruss.nl
- BGV C1 und MVStättV

# Quelle(n) und Bearbeiter des/der Artikel(s)

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