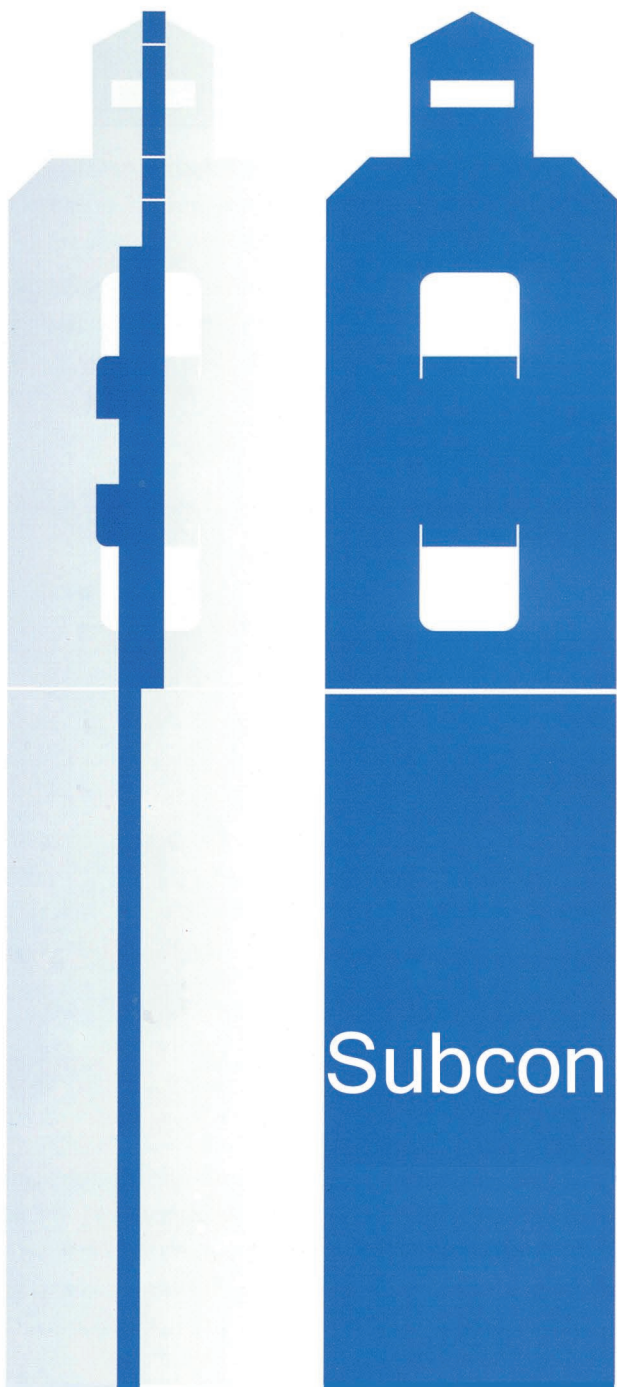


GO
Engineering
GmbH



WUS50
DUK50

Subconstruction system

WUS50 DUK50

Our patented subconstruction systems can be used on both flat and curved surfaces. They allow to assemble the thermal and acoustic insulation of boilers, ducts and filters in a reversed order of the steps of mounting enabling the quick and easy installation of high quality insulation at lower costs.

With their excellent thermal and acoustic insulation properties the WUS50/DUK50 systems are approved to be the most efficient tools for all insulation applications.

Step by step: the flat steel spacers are fixed on the areas to be insulated and then the insulation material is pierced upon without infringing on its integrity. Finally the coupling elements are fixed in the C-profile and the complete system is mounted on the spacers. If there is no need in acoustic insulation the DUK 50 coupling element is applied.

Both coupling elements are successfully established on the market.

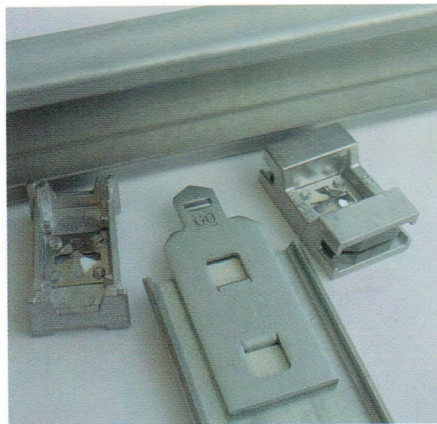
THE WUS-DUK Subconstruction Systems



Both coupling elements have been optimised and combined to a perfect subconstruction system setting a new standard for the future.

and the spacer itself are grouted, so that there is no need of the common rivetted or welded connections as usual.

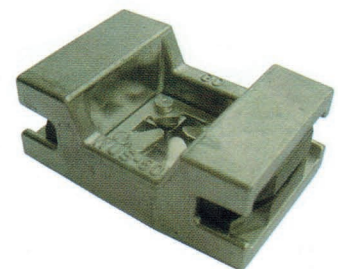
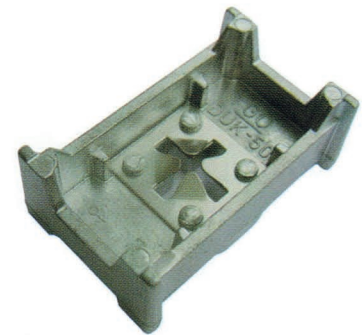
The outer dimensions of the WUS-DUK coupling elements are designed to use of the same C-profile for both coupling elements.



The idea of being able to use the same spacers and C-profiles for both coupling elements was in the focus of the new development.

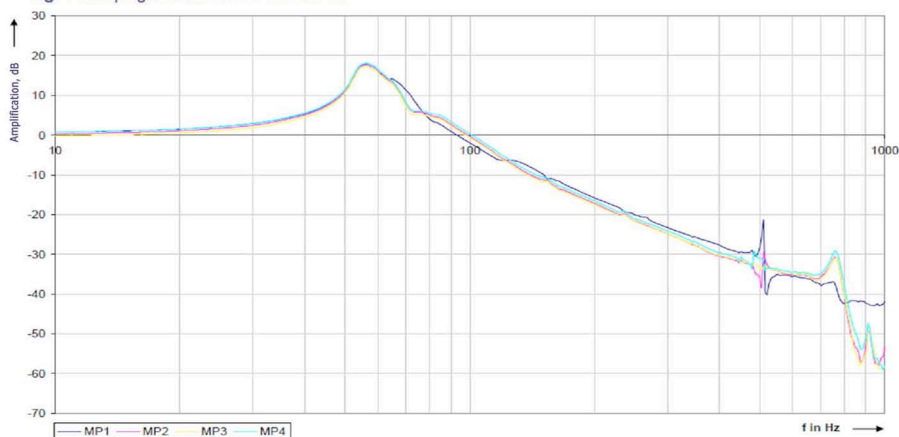
The novel leg spring for both coupling elements ensuring the clamping connection with the correspondingly formed top part of the spacers enables the installation of the WUS-DUK coupling elements as fix or loose support.

In order to produce spacers of any length and different materials and profiles the top part of the spacer



The corpus of both coupling elements consists of aluminium alloy and allows a load capacity of 300 kg for the DUK and 100 kg for the WUS elements so that the

Fig. 1 Damping characteristics of WUS 50



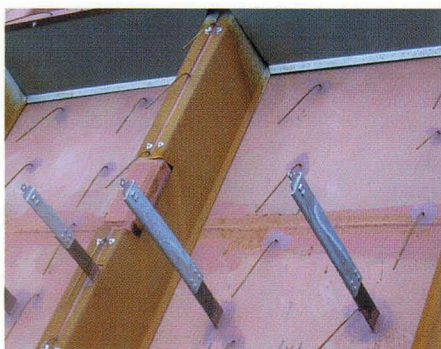
horizontal distances between the C-profiles as well as between the spacers themselves along the C-profile can be increased.

Noise damping of the WUS elements has been improved by the use of the special elastomer dampers with an average value > 20 dB. (Fig.1)

The unique advantages of the WUS-DUK systems

Price advantage

Due to the higher load capacity there are less contact points and at the same time considerable reduction of the mounting costs.



Load capacity

Approved high load capacity of the WUS-DUK elements enables a secure statics of the subconstructions.

Transport

All system parts can be easily packed for transport and require minimum storage space at site which reduces costs.

Welding

A minimum of welding is required as only the spacers have to be welded to the surface.

Adjustment

The position of the stiffener members and support structures often needs a specified adjustment to the subconstruction. Due to the possibility to move the WUS-DUK elements inside the C-profile this procedure is no longer necessary.

C-profiles

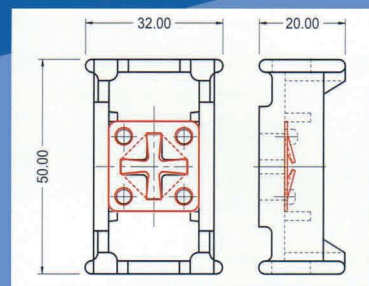
This system can also be used on cylindrical ducts, filters and chimneys. The standard type C-profile for the horizontal fixing of the cladding can be rounded up to min diameter of 5 m.



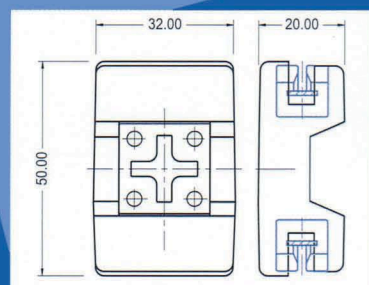
Installation of insulation

There is no need for cutting mineral wool mats around the spacers but instead they are pierced

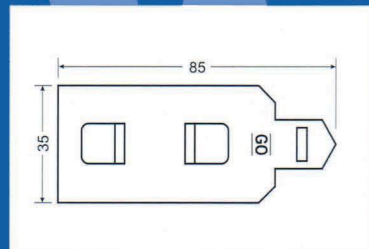
The elements of the WUS 50 / DUK 50 subconstructions



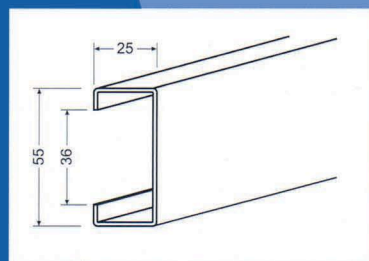
DUK 50 coupling element, freely movable in the C-profile



WUS 50 coupling element, freely movable in the C-profile, sound damping > 20dB



Head part fixed to the spacer



C-profile. Coupling elements are easily to mount and to demount. C-profile is stuck on the spacers.



There are 3 things needed for the perfect insulation: C-profile, coupling elements and spacer.

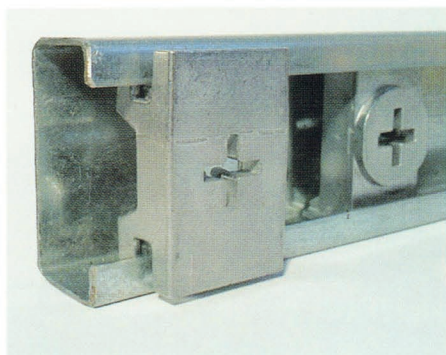
by pushing them down to the spacers. Longer pieces of mineral wool can be handled more quickly. This advantage becomes especially evident in the case of multy-layer installation.

Cladding

The material thickness of the C-profile can be reduced to 1,5 mm so the cladding can be fixed with self-tapping screws.

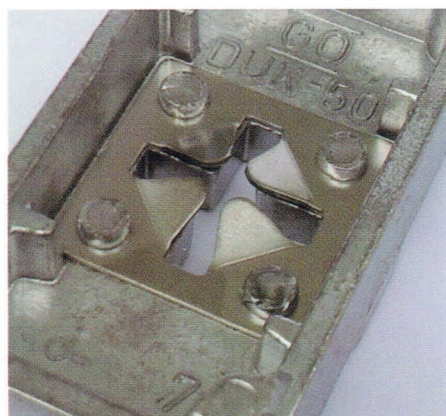
Quality

An optimal quality is achieved by application of insulation materials without the need for cutting them so that they don't leave any gaps around the spacers.



Thermal stress

Due to the gliding quality of the coupling elements in the C-profile, the thermal stress caused by the different thermal expansion between the hot and the cold parts of the construction is compensated. Fix and loose points can be reached by 90° turn of the spacer.



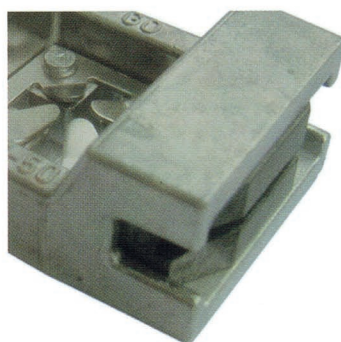
Thermal insulation

The reduced quantity of the spacers and the optimal quality of the insulation minimize the heat loss. A specific combination of the different materials for the spacers can improve these conditions even more.



Acoustic Insulation

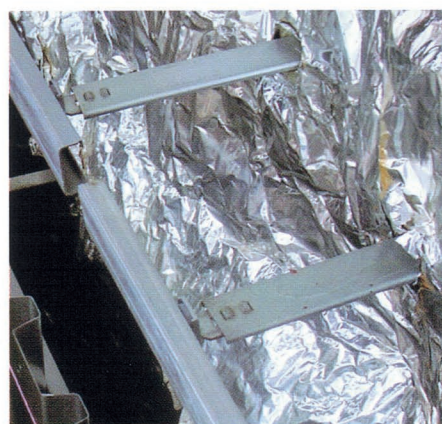
The elastomer vibration dampers integrated in the WUS 50 coupling elements reduce the sound transmission to the outer cladding at about >20dB.



Health protection

There are less harmful dust as the insulation material is only pierced on the spacers without cutting.

To sum up these single advantages result in minimizing the costs of the material and the time of mounting leading to optimal quality of insulation on flat and slightly curved surfaces.



DUK 50

Three-piece set of the subconstruction system for assembling the thermal and acoustic insulation of boilers, filters and ducts. Applicable for fix and loose points. The spacer extensions in mm grid with the integrated insulation plate.

- Pressure load 300 kg
- Tensile load 300 kg
- Vertical load 300 kg
- Material:

Fixing head Steel galv.

Spacer Steel,Steel galv.

1.5415 (16Mo3)

1.4512 (CrTi-Steel)

Coupling elements ALG 32

C-profile Steel galv.

WUS 50

Three-piece set of the subconstruction system for assembling the thermal and acoustic insulation of boilers, filters and ducts. Applicable for fix and loose points. The spacer extensions in mm grid with the integrated insulation plate. Sound damping >20 dB.

- Pressure load 300 kg
- Tensile load 300 kg
- Vertical load 300 kg
- Material:

Fixing head Steel galv.

Spacer Steel,Steel galv.,

1.5415 (16Mo3)

1.4512 (CrTi-Steel)

Coupling elements ALG 32

C-profile Steel galv.

- Sound damping >20dB

GO Engineering GmbH

Am Neggenborn 107a / 115

D-44892 Bochum

Germany

Tel.: +49 (0)234 290929

Fax: +49 (0)234 292402

E-mail:
gogortat@aol.com

Internet
www.go-engineering.eu