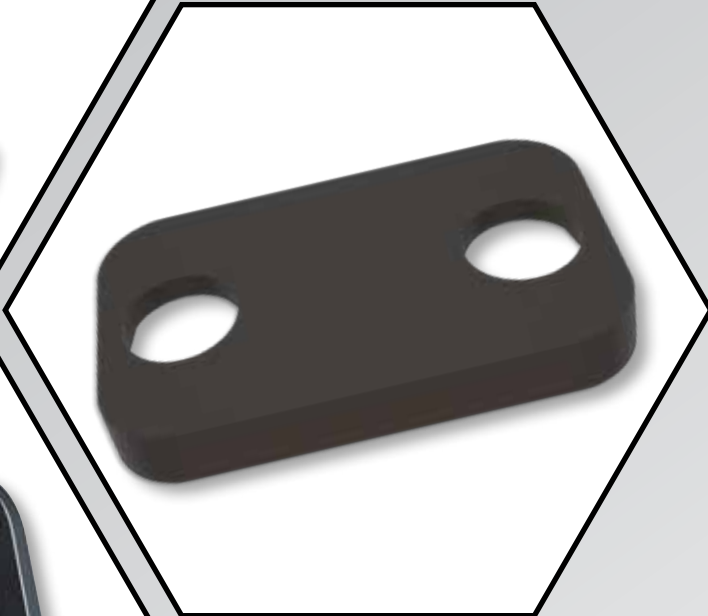
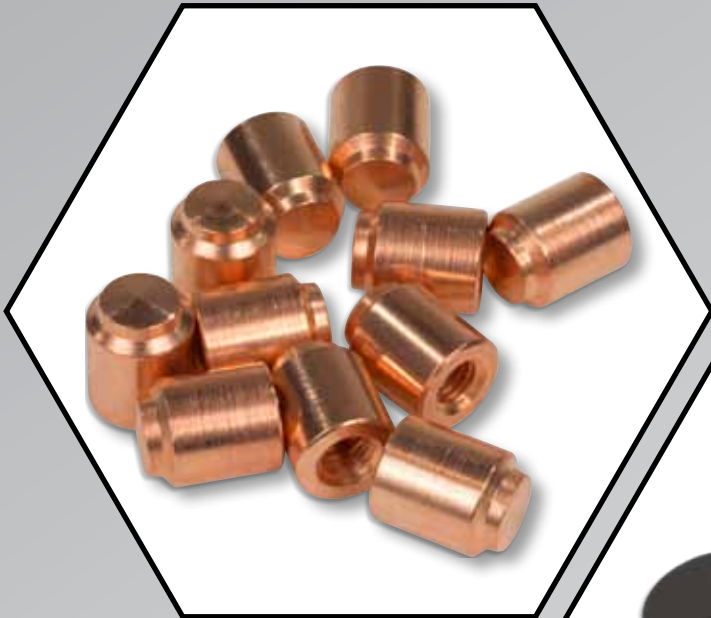




Weld Studs

Distance Plates

Stud Welding Equipment



## **STAUFF SWG**

Stud Welding System for STAUFF Clamps

## STAUFF Group

Walter Stauffenberg GmbH & Co. KG, the global headquarters and one of the main production plants of the STAUFF Group, was established in the 1950s. Over the years, STAUFF has developed into an internationally leading developer, manufacturer and supplier of industrial pipework equipment and hydraulic components, such as clamping systems for pipes, tubes, hoses, cables and other components.

For more than 50 years now, original STAUFF Clamps are known as a symbol for quick and easy pipe and tube installations as well as for a clean, distinct and safe pipe layout. Their vibration and noise reducing features are appreciated as being an important contribution to environmental protection and occupational health and safety.



## Drawn-Arc Stud Welding

In many areas stud welding is the most economic fastening method for components and sometimes even the only technical solution. Because the stud is joined with the work piece over the entire surface of the stud without any hollow areas, the strength of the joint is even higher than the base material or the stud.

STAUFF is now using this proven principle for the installation of STAUFF Pipe, Tube and Hose Clamps in the Standard Series (according to DIN 3015, part 1) with M6 mounting thread. The STAUFF Stud Welding System works entirely without shielding gas or the requirement to use ceramic ferrules.

## Main Benefits of the STAUFF Stud Welding System

- High productivity due to fast and easy handling
- More flexibility when working in horizontal or overhead position
- Material distortion reduced to a minimum through low thermal stress
- High degree of safety due to a welded joint free of hollow areas
- Reducing of rework on welding locations
- One-sided accessibility of the component is sufficient
- No leaking caused by drilled holes
- Works without high-voltage current

## Functional Description

The STAUFF Stud Welding System is based on welding process 784 "Stud Welding with Arc Ignition" according to currently applicable standards.

Before starting to weld, the earth clamps have to be connected to the work piece. The stud is manually inserted into the chuck and placed onto the work piece. When pressing the gun trigger, the welding process starts automatically: A lift mechanism in the welding gun or welding head lifts the stud. A secondary arc (pilot arc) of low current is ignited between stud tip and work piece. Then the ignition of the main arc is carried out between stud tip and work piece. Stud and work piece are melted. At the end of the adjusted welding time the stud is moved to the work piece, the two molten zones join. The power source is switched off, the weld pool solidifies and cools down.

### Surface Preparation

Generally materials of the same kind and with an electrically conductive surface should be welded.

Varnish and paint, oil and other contamination on the surface, scale, rust and non-conductive surface layers (e.g. surface-coated materials) are to be removed from the welded areas and the connection points for the earth clamps. Check galvanized plates for their weldability.

Only weld on plane welded areas that are located in the center of the connection points for the earth clamps.

The STAUFF Stud Welding System was designed for commercial and professional use only. Using the system in non-commercial areas is strictly prohibited due to a possible lack of knowledge in welding technology and the currently applicable standards.

The STAUFF Stud Welding System is intended to be used in conjunction with STAUFF Weld Studs with Female Thread only. Please consult STAUFF prior to using it with other types of weld studs.

**Please note: Selection, proper application and correct installation of the products are the user's responsibility!**

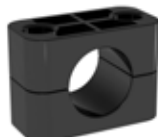
## Original STAUFF Clamps for Quick, Easy and Safe Pipe, Tube, Hose and Cable Installation

Clamp bodies manufactured from thermoplastics (PP / PA), thermoplastic elastomers (SA), aluminium (AL) or special materials

Mounting hardware made of Steel or Stainless Steel



Profiled inside surface with tension clearance (for rigid pipes / tubes)



Smooth inside surface without tension clearance (for flexible hoses / cables)



With elastomer insert for most effective vibration and noise reduction



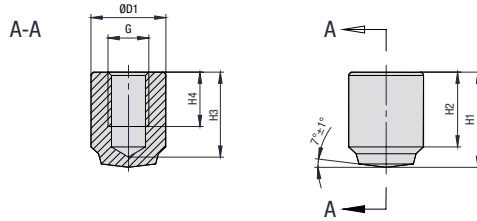
Flame-retardant materials according to several international standards



Cover plates, locking plates for multi-level assembly, additional mounting hardware



Hexagon head bolts, socket cap screws, stacking bolts for multi-level assembly

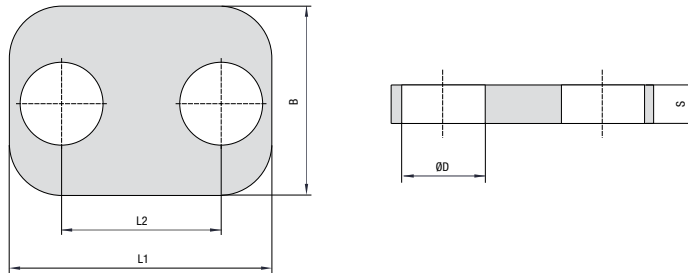
**Weld Stud with Female Thread  
Type SWG-SF**


Dimensions (mm/in)		Order Codes (Standard Options)				
Thread G	ØD1	H1	H2	H3	H4	
M6	11	14	11	12,5	8	SWG-SF M6x11x14 CU
	.43	.55	.43	.49	.31	

Alternative types are available upon request. Consult STAUFF for further information.

**Order Code**

<b>Weld Stud</b>	<b>*SWG-SF*M6x11x14*CU</b>
* Weld Stud with Female Thread	<b>SWG-SF</b>
* Thread and Dimensions	<b>M6x11x14</b>
* Material	Steel 4.8 with galvanised copper coating C1E (DIN EN ISO 4042) <b>CU</b>

**Distance Plate  
Type SWG-DIP**


Group	STAUFF	DIN	Diameter (mm/in)		Dimensions (mm/in)				Order Codes (Standard Options)
			Clamp	Body	L1	L2	B	S	
1A	1		6 ... 12	34	20	30	6	11,5	SWG-DIP 1A PA-BK
			.24 ... .48	1.34	.79	1.18	.24	.45	
2	2		12,7 ... 18	40,5	26	30	6	11,5	SWG-DIP 2 PA-BK
			.50 ... .71	1.59	1.02	1.18	.24	.45	
3	3		19 ... 25,4	48	33	30	6	11,5	SWG-DIP 3 PA-BK
			.75 ... 1.00	1.89	1.30	1.18	.24	.45	
4	4		26,9 ... 32	57	40	30	6	11,5	SWG-DIP 4 PA-BK
			1.06 ... 1.26	2.24	1.57	1.18	.24	.45	
5	5		32 ... 42	70	52	30	6	11,5	SWG-DIP 5 PA-BK
			1.26 ... 1.65	2.76	2.05	1.18	.24	.45	
6	6		44,5 ... 54	86	66	30	6	11,5	SWG-DIP 6 PA-BK
			1.75 ... 2.12	3.39	2.60	1.18	.24	.45	
7	7		57,2 ... 76,1	118	94	30	6	11,5	SWG-DIP 7 PA-BK
			2.25 ... 3.00	4.65	3.70	1.18	.24	.45	
8	8		88,9 ... 102	144	120	30	6	11,5	SWG-DIP 8 PA-BK
			3.50 ... 4.00	5.67	4.72	1.18	.24	.45	

**Order Code**

<b>Distance Plate</b>	<b>*SWG-DIP*2*PA-BK</b>
* Distance Plate	<b>SWG-DIP</b>
* STAUFF Group	<b>2</b>
* Material	Polyamide (Colour: Black) <b>PA-BK</b>

Alternative materials are available upon request. Consult STAUFF for further information.

**Weld Inverter - Type SWG-WI06**


- Works without high-voltage current (230V instead of 400V)
- No heavy and expensive extension cords required
- Extremely powerful and robust
- Compact in design: 465x330x350 mm (LxBxH)
- Lightweight with less than 20 kg
- Welding current: 100 ... 650 A (stepless control)
- Welding time: 5 ... 200 ms (stepless control)

**Weld Gun - Type SWG-WG**

with Tripod, Weld Stud Retainer and Distance Adaptor for STAUFF Groups 1A to 8



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- Modern high tech offices
- Conference and training area
- SAP stock management
- Trade counter facility offering:
  - Product collection
  - Hose repair and assembly while you wait

The STAUFF Webshop has been upgraded to include a Hose Configurator. This function offers the ability to order your exact requirements online for collection from our Trade Counter.



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