

# LÜDECKE


Since 1930. The perfect connection.



## Coupling Systems and Accessories for the Construction Industry

**Product Range 2019/ 20**



**LÜDECKE** MADE IN GERMANY 



## Durable Coupling Systems for Outdoor Use in the Construction Industry



Whether in classic construction, mining and tunneling, ship yards or petrochemical industry, as well as craftsmanship or gardening and landscaping: In such applications, reliable coupling systems are requested to withstand extreme tasks and environmental influences.

The **LUDECKE** construction product portfolio offers high-quality and robust products - optimized for various application areas and different media.

### Advantages:

- First-class and extremely stable materials
- Safe, reliable and long-lasting
- Simple and intuitive handling
- Different sizes and connection types
- Standard range as well as individual custom-made products

## Quality and Service



Lifetime-Guarantee: Original **LUDECKE** claw couplings and clamps made of malleable iron from the '60s - still used today with pneumatic demolition hammers.

Engineered and Made in Germany - with this promise we guarantee not only premium products, but also a comprehensive customer service.

On the following pages, you can find information on how important it is to use high-quality couplings and fittings: Avoid any kind of safety issues with the **LUDECKE** construction range, which is tested by the relevant Norm regulations and meets the relevant DIN regulations (page 4). Use the opportunity at **LUDECKE** to get the perfect assembly for your desired hose (page 5).

**LUDECKE** only uses selected materials for all products from the Construction Industry range.

**Malleable Cast Iron:** The majority of **LUDECKE** construction couplers and fittings are made of malleable cast iron. This material has optimum mechanical properties (e.g. high hardness) which prevent brittle fractures when overstressed. Malleable cast iron is thus ideal for applications in which the components are subject to strong dynamic stresses (e.g. vibrations), and high mechanical forces. Naturally, **LUDECKE** only uses galvanized and yellow passivated malleable cast iron (chromium VI-free) in accordance with the RoHs guidelines.

**Steel:** (hardened/ nickel-pl./ galvanized): Turned parts that are implemented under the toughest conditions are usually made of chromium-VI-free, free-cutting steel. This material has excellent weldability, good casehardening properties and long service life.

**Aluminium:** Products made of aluminium excel with their very low weight (up to 60% weight reduction) and therefore, significantly easier handling during continuous use. The material is corrosion-resistant, resistant to chemical media and is excellently suited for machining.

**Brass:** (plain/ nickel-plated): The material brass MS 58 (machining brass) is an extremely robust material, which guarantees a long service life and excellent galvanizability (nickel-plating). In construction, this material is used in complementary products (e.g. locking nuts).

**Stainless Steel:** In applications with specific hygiene regulations, or in conveying of various critical media, stainless steel couplers and fittings are recommended. Further information can be found in our range for the Processing Industry.

**Seals:** **LUDECKE** offers various seals made of NBR, PTFE, PUR and brass for the construction sector. Naturally, only seals that meet the proven standards come in to implementation.

\*nickel-pl. = nickel-plated

## Wide Selection

From the classic claw coupling, to mortar and sandblast couplings up to hose clamps and throttle valves: At **LUDECKE** you will certainly find the right product for a wide range of applications.

If no coupling system in this product range meets with your requirements, we would be pleased to design a customized version together with you.





## Highest Quality for Safe Working Enormous Hazard Potential Caused by Inferior Material



Breaking test - Left: **LUDECKE** hose clamp (no crack/ break),  
Right: hose clamp from the Far East (complete break)

Often cheap copies of claw couplings and hose clamps are offered on the market - mostly delivered from the Far East.

### Lack of Functionality

The use of such products entails an enormous safety risk: on the one hand, many cast components feature large tolerances. This often makes exact coupling impossible with couplers or it leads to leakiness. In addition, due to the non-precise casted contours and high deviations in the dimensions of the clamps, a secure hose assembly cannot be guaranteed!

### High Potential of Cracking

These plagiarisms often contain inferior and unauthorized materials such as white iron are used, the products can rapidly break under heavy load (e.g. when connected to high vibrating machinery with compressed air in construction).

Using such unsuitable products carries a high liability risk!

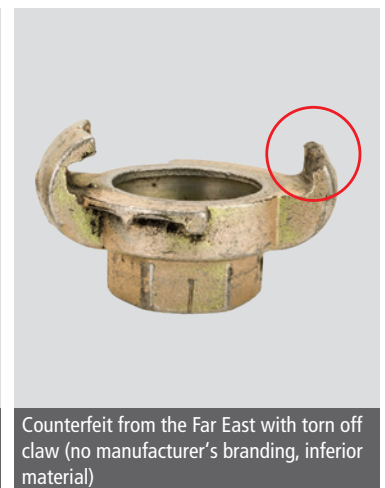
## Safety by High-Quality and Standardized Components

To avoid such safety risks the following essential facts requires your attention:

- White iron and other inferior materials are hard and very brittle due to the high amount of cementite steel and therefore are inappropriate materials for heavy duty applications.
- The production of malleable cast iron is cost intensive and therefore expensive because it undergoes an additional annealing heat treatment. The treatment results in strongly improved mechanical characteristics and is therefore suitable in demanding applications.
- Only components that are in compliance with the existing standards (DIN 3489, DIN 3238, DIN 20039) and are marked with a manufacturer's branding should be sold and installed

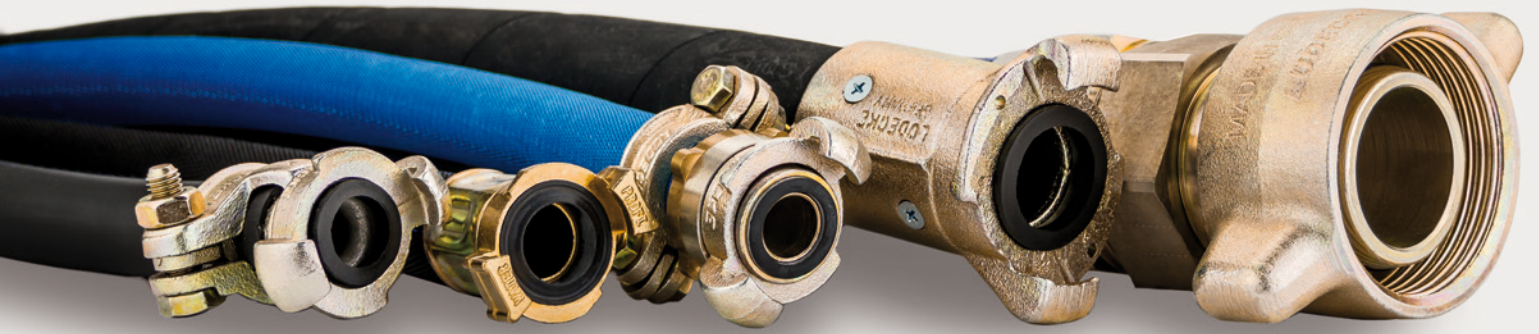


Original **LUDECKE** claw coupling according to DIN 3489

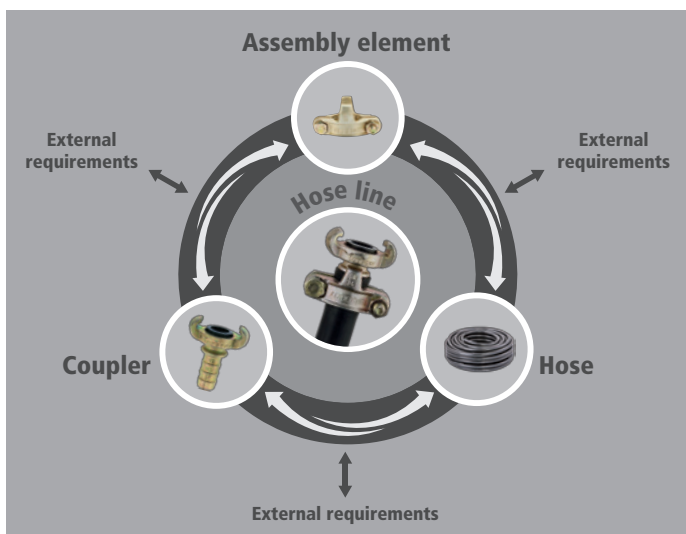


Counterfeit from the Far East with torn off claw (no manufacturer's branding, inferior material)

The products of the **LUDECKE** construction range undergo continuous stringent quality tests to guarantee maximum reliability in permanent operation.



## Assembly of Hoses All relies on the Optimal Assembly



High-quality couplings and fittings are the premise for a reliable and safe operation. However, only the functional interaction all of the affiliated components of a hose line achieves a permanent and satisfying result.

**Problems with the assembly of fittings on hoses:**  
Often, due to lack of standardization, there are a variety of **hose brands** that often possess different dimensions and materials for one and the same size of hose and identical application.

Opposite them are the coupler and **fitting manufacturers**. They manufacture various fittings for the standard hose widths and use various methods of assembly. As with the hoses, these fittings are subject to dimensional tolerances. As a result, the hose stem contours from different manufacturers may differ in shape and dimensions.

## General statements are not always possible

Assembled hose lines often show strong behavior variations with pressure and temperature. This usually leads to large problems with the security of the assembled hose and fitting, subject to application.

In addition, the demands continue to increase on hose lines with regards to resistance to operating pressures, the environment and operating temperatures, chemical substances and external mechanical stresses.

Due to the large number of influencing parameters, it is not possible to make a generalized statement about the reliability of the hose line based on the individual components.

## Professional Hose Assemblies with **LUDECKE**

Based on the desired hose type **LUDECKE** will advise you to choose the right fitting and correct assembling method.

All hose assemblies are also tested in our own test center based on various criteria.

Our specially trained experts, (accredited hose assembly inspectors and testers) are able to make reliable statements regarding the suitability for the appropriate applications and media.

If you cannot find a suitable measured fitting for your hose, we are pleased to manufacture a customized solution.





# Claw Couplings

also in Stainless Steel

**Standard Version**

**Swivelling**

also in Stainless Steel

**MODY-Safety-Screwing Coupling**

**With Brass Seal**

DIN 3489

DIN 3489







DIN 3238



**Materials:**



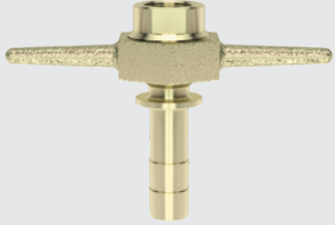
Claw:	Malleable iron (zinc-plated + yellow pass.)	Malleable iron (zinc-plated + yellow pass.)	Malleable iron (zinc-plated + yellow pass.)	Malleable iron (zinc-plated + yellow pass.)
Connector:	Malleable iron (zinc-plated + yellow pass.)	Steel (zinc-plated + yellow pass.)	Steel (zinc-plated + yellow pass.)	Malleable iron (zinc-plated + yellow pass.)
Locking Nut:	-	-	Brass MS 58	-
Screw:	-	-	-	Steel (zinc-plated + yellow pass.)
Seals:	Buna N	Buna N	Buna N, Brass	Brass
Special seals on request:	TFEP, FKM, EPDM	TFEP, FKM, EPDM	TFEP, FKM, EPDM	-
<b>Max. Working Pressure:</b>	PN 10 bar	PN 16 bar	PN 16 bar	PN 10 bar
<b>Temperature:</b>	-40°C - + 95°C	-40°C - + 95°C	-40°C - + 95°C	-40°C - + 95°C
<b>Thread Types:</b>	ISO 228, NPT	ISO 228	ISO 228, NPT	ISO 228
<b>Claw Distance:</b>	42 mm	42 mm	42 mm	42 mm
<b>Other:</b>	Also available in stainless steel		Also available in stainless steel, also available with coloured claw	








With Bore for Safety-Clips	Left-Closing	Forged Steel	Forged Brass	US Version with Bore for Safety-Clips	US Version with Bore for Safety-Clips - MODY
					
Malleable iron (zinc-plated + yellow pass.) Malleable iron (zinc-plated + yellow pass.) - -	Malleable iron (zinc-plated + yellow pass.) Steel (zinc-plated + yellow pass.) Brass MS 58 -	Steel (hardened, zinc-plated + yellow pass.) Steel (hardened, zinc-plated + yellow pass.) -	Brass MS 58 Brass MS 58 -	Malleable iron (zinc-plated + yellow pass.) Malleable iron (zinc-plated + yellow pass.) -	Malleable iron (zinc-plated + yellow pass.) Steel (zinc-plated + yellow pass.) Brass MS 58 -
Buna N	Buna N/ Brass	Buna N	Buna N	Buna N	Buna N
TFEP, FKM, EPDM	TFEP, FKM, EPDM	TFEP, FKM, EPDM	-	-	TFEP, FKM, EPDM
PN 10 bar	PN 16 bar	PN 16 bar	PN 10 bar	PN 10 bar	PN 16 bar
-40°C - + 95°C	-40°C - + 95°C	-40°C - + 95°C	-40°C - + 95°C	-40°C - + 95°C	-40°C - + 95°C
ISO 228, NPT	ISO 228, NPT	ISO 228, NPT	ISO 228	ISO 228, NPT	ISO 228, NPT
42 mm	42 mm	42 mm	42 mm	41 mm	41 mm
Available incl. safety-clip (steel zinc-plated)	Also available with coloured claw		French system (according to NF E 29-573)	US Version, available incl. safety-clip (steel zinc-plated)	US Version, available incl. safety-clip (steel zinc-plated)

yellow pass. = yellow passivated

# Screwing Sets

Complete Screwing Sets		Flat Hose Screwings		Hot Tar Screwing	
DIN 8537/ 20 033		DIN 3238/ 20 033			
					
<b>Materials:</b>		<b>Materials:</b>		<b>Materials:</b>	
Tapered Stem:	Steel/ malleable iron (zinc-plated + yellow pass.)	Connecting Nut:	Malleable iron (zinc-plated + yellow pass.)	Tapered Stem:	Steel/ malleable iron (zinc-plated + yellow pass.)
Connecting Nut:	Malleable iron (zinc-plated + yellow pass.)	Connector, squeeze ring, squeeze nut:	Steel (zinc-plated + yellow pass.)	Wing Nut:	Malleable iron (zinc-plated + yellow pass.)
Seals:	Buna N	Locking Nut:	Brass MS 58	Nipple:	Steel (zinc-plated + yellow pass.)
<b>Max. Working Pressure:</b>	PN 16/ 25 bar*	Seals:	Buna N	<b>Max. Working Pressure:</b>	PN 25 bar
<b>Temperature:</b>	-40°C - + 95°C	<b>Max. Working Pressure:</b>	PN 16/ 25 bar*	<b>Temperature:</b>	up to +200°C
<b>Thread Types:</b>	ISO 228/ DIN 405	<b>Temperature:</b>	-40°C - + 100°C	<b>Thread Types:</b>	ISO 228
		<b>Thread Types:</b>	ISO 228/ DIN 405		

\*subject to temperature and assembly method






	Connecting Nipples	Double Nipples	Thread Stems	Hose Connections	Thread Ferrule Screwings
					
<b>Materials:</b>					
Body:	Steel/ malleable iron (zinc-plated + yellow pass.)	Steel (zinc-plated + yellow pass.)	Steel (zinc-plated + yellow pass.)	Steel (zinc-plated + yellow pass.)	Steel (zinc-plated + yellow pass.)
<b>Max. Working Pressure:</b>	PN 25 bar	PN 25 bar	PN 16/ 25 bar	PN 16/ 25 bar	PN 16/ 25 bar
<b>Thread Types:</b>	ISO 228/ DIN 405	ISO 228/ DIN 405	ISO 228/ DIN 405	-	ISO 228

yellow pass. = yellow passivated





## Mortar Couplings

	Standard Version	For Hydraulic Hose Crimping	Made of Aluminium	System „Mai“
<b>System:</b>	22 and 23.5	22 and 23.5	X25	Mai
				
<b>Materials:</b>				
Female Thread:	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)	Aluminium	Malleable iron (zinc-plated + yellow passivated)
Male Thread:	Steel/ Malleable iron (zinc-plated + yellow passivated)	Steel/ Malleable iron (zinc-plated + yellow passivated)	-	Steel (zinc-plated + yellow passivated)
Connector:	Steel (zinc-plated + yellow passivated)	Steel (zinc-plated + yellow passivated)	Aluminium	-
Handle:	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)
Seals:	Buna N	Buna N	Buna N, PTFE, PUR	Buna N
<b>Max. Working Pressure:</b>	PN 50 bar	PN 50 bar	PN 40 bar	PN 50 bar
<b>Temperature:</b>	-40°C - +90°C	-40°C - +90°C	-40°C - +90°C	-40°C - +90°C
<b>Thread Types:</b>	All types	All types	ISO 228	ISO 228
<b>Version:</b>	Rigid/ swivelling	Rigid/ swivelling	Rigid/ swivelling	Rigid

# Sandblast Couplings

	Hose Couplings		Nozzle Holder	
	Malleable Iron	Nylon	Aluminium	Nylon
				
<b>Materials:</b>				
Body:	Malleable iron (zinc-plated + yellow passivated)	Nylon	Aluminium	Nylon
Seals:	Buna N	Buna N	Buna N	Buna N
<b>Max. Working Pressure:</b>	PN 12 bar	PN 12 bar	PN 12 bar	PN 12 bar
<b>Temperature:</b>	up to + 100°C	up to + 100°C	up to + 100°C	up to + 100°C
<b>Thread Types:</b>	ISO 228/ coarse thread	ISO 228/ coarse thread	ISO 228/ coarse thread	ISO 228/ coarse thread
<b>Claw Distance:</b>	58 mm	58 mm	-	-






	Sandblast Throttle Valve
	
<b>Materials:</b>	
Body:	Malleable iron (zinc-plated + yellow passivated)
Throttle:	Forged Steel
Handle:	Malleable iron (zinc-plated + yellow passivated)
<b>Max. Working Pressure:</b>	PN 10 bar
<b>Temperature:</b>	- 15°C - + 80°C
<b>Thread Types:</b>	NPT

# Hose Clamps and Hose Clips

also in Stainless Steel

	Hose Clamps Standard Version	Hose Clamps US Version	Double-Ear Hose Clips	Heavy Duty Clamps
	DIN 20039 A/B			DIN 3017
				
<b>Materials:</b>				
Clamps:	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)	Unbreakable special reliable steel (zinc-plated + blue chromated)	-
Spacers:	Malleable iron (zinc-plated + yellow passivated)	-	-	-
Screws:	Steel zinc-plated	Steel zinc-plated	-	Steel zinc-plated
Band:	-	-	-	Stainless Steel 1.4016
Body:	-	-	-	Steel zinc-plated
<b>Max. Working Pressure:</b>	PN 16/ 25 bar	PN 25 bar	-	-

# Ball Valves and Throttle Valves

	Ball Valves Sturdy Version	Ball Valves Light Version	Double Ball Valves and Air Hammer Ball Valves	Throttle Valves Standard Version	Throttle Valves US Version
					
<b>Materials:</b>					
Body:	Brass CW617N (sandblasted + nickel-plated)	Forged brass nickel-plated	Brass CW617N	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)
Sockets:	Brass CW617N (sandblasted + nickel-plated)	Forged brass nickel-plated	Brass CW617N	-	-
Spindle:	Brass MS 58 nickel-plated	Brass MS 58 nickel-plated	Brass MS 58	-	-
Nut:	Brass MS 58 nickel-plated	Brass MS 58 nickel-plated	Brass MS 58	-	-
Ball:	Brass MS 58 chromed	Brass MS 58 chromed	Brass MS 58 chromed	-	-
Seals:	PTFE*/ FKM**	PTFE*/ FKM**	PTFE*/ Buna N**	Brass	Brass
Handle:	Aluminium die cast red lacquered	Steel zinc-plated and coated with red PVC	Steel red lacquered	Malleable iron (zinc-plated + yellow passivated)	Malleable iron (zinc-plated + yellow passivated)
<b>Max. Working Pressure:</b>	PN 35 bar	Depends on type size and temperature	PN 35 bar	PN 10 bar	PN 10 bar
<b>Temperature:</b>	-15°C - +100°C	-15°C - +120°C	-15°C - +100°C	-15°C - +80°C	-15°C - +80°C
<b>Thread Types:</b>	DIN 2999, ISO 228	ISO 228	ISO 228	ISO 228	NPT
<b>Claw Distance:</b>	-	-	-	42 mm	-

\*Ball seals \*\*Spindle seals

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