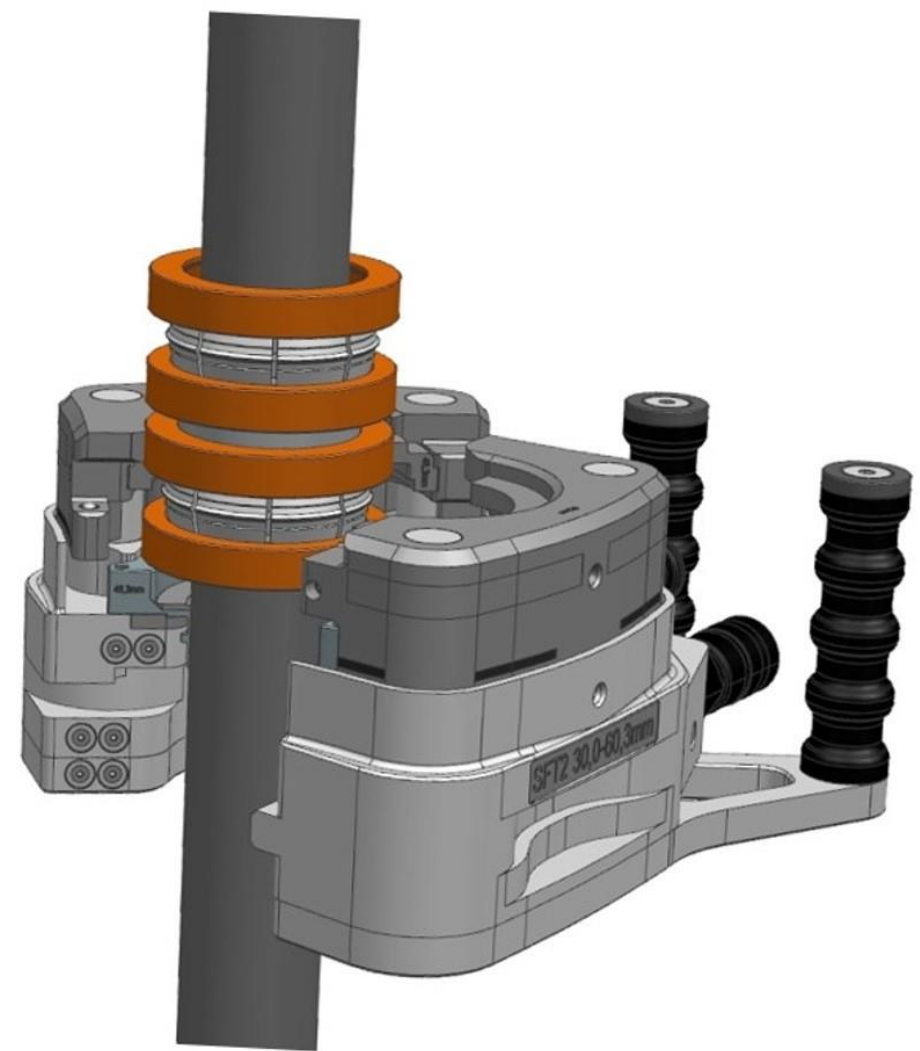


# PreFiS - Press Fitting System

5-1-2021

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- **Metallically sealing** steel tube connections which do not require welding
- Seamless and welded carbon and stainless steel tubes
- **High pressure applications** and/ or for highly inflammable areas
- The fittings can be **installed easily** with the help of a **press tool** and a **hydraulic pump** which are both supplied by us
- It only takes **a few seconds** to crimp the press fitting and the tubes

Fittings in nearly every form and size as well as customized solutions



1. Straight coupling
2. Distribution block
3. Reducing coupling
4. Equal tee and reducing tee
5. End plug
6. Parallel female stud coupling
7. Male stud coupling
8. Distribution block with blind end
9. Flange adapter
10. Weldable bulkhead coupling
11. Elbow

## Approved ranges for carbon and stainless steel tubes

Approved Range for Carbon Steel				Approved Range for Stainless Steel			
OD (mm)	Max. operating pressure (bar)	Temperature acc. LR (°C)	Temperature acc. DNV/RINA (°C)	OD (mm)	Max. operating pressure (bar)	Temperature acc. BV, LR, ABS (°C)	Temperature acc. DNV/RINA (°C)
10.0	630	-10 to 300	-55 to 400	10.0	260	-55 to 300	-55 to 400
26.9	450			26.9	180		
33.7	400			33.7	160		
48.3	250			48.3	140		
60.3	250			60.3	140		
76.1	220			76.1	100		
88.9	200			88.9*	120		

Versatile certifications, mainly for maritime/ offshore applications



## Certificates

DNV GL

Bureau Veritas (BV)

Lloyd's Register (LR)

Pressure Equipment Directive (PED)

RINA (Registro Italiano Navale)

TÜV Rheinland

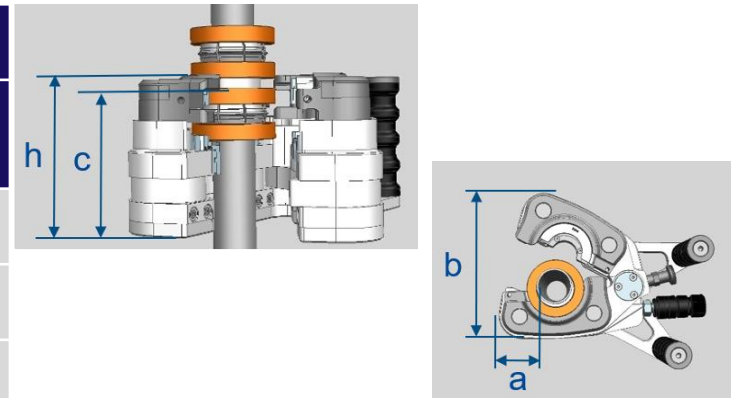
American Bureau of Shipping & Affiliated Companies (ABS)

Wehrtechnische Dienststelle für Schiffe und Marinewaffen (WTD71)

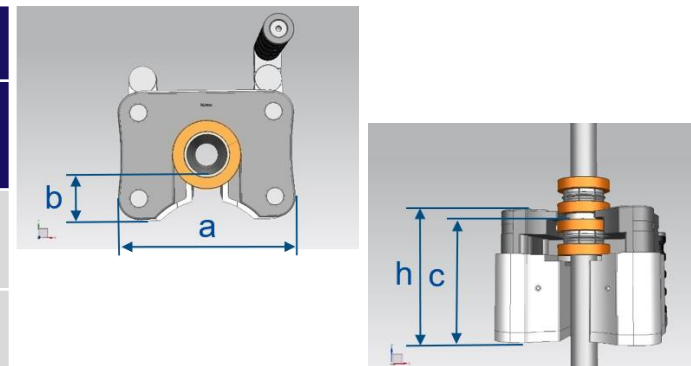
Canadian Register



Closed Tools with inserts						
Tube OD (mm)	Basic body	Weight (kg)	a (mm)	b (mm)	c (mm)	h (mm)
10.0 – 30.0	SFT1	5.8	55	160	110	120
30.0 – 60.3	SFT2	8.5	75	230	125	140
60.3 – 88.9	SFT3	13.5	90	320	150	158



Open Tools with <u>one</u> press head per diameter						
Tube OD (mm)	Basic body	Weight (kg)	a (mm)	b (mm)	c (mm)	h (mm)
10.0 up to 28.0*	SFT4	3.5	128	34	105	112
30.0 up to 60.3*	SFT5	6.5	139	36	130	140



\*One press head per diameter

Drawing with dimensions

# Klauke®

- Specialized in tools, testing, measuring and inspection devices for electrical engineering applications
- Global footprint with locations worldwide
- Worldwide service centers for maintenance

Pump type	AHP700LBEN	UAP700NG0001
Battery voltage (V)	18 V / 110V / 220V	18 V / 110V / 220V
Weight (w/o battery)	5,6 kg	3,6 kg
Ambient temperature	-12 °C to +40 °C	-12 °C bis +40 °C
Operating pressure	max. 700 bar	max. 700 bar
Max. oil volume	ca. 800 ml	ca. 290 ml



Pump type:  
AHP700LBEN



Pump type:  
UAP700NG0001

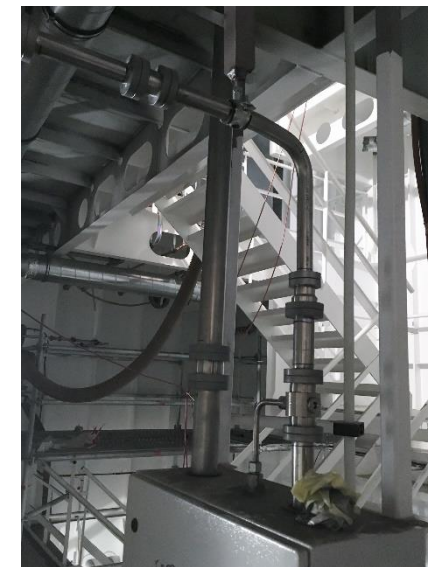
- Long-standing customer relationship with MEYER WERFT in Papenburg over the last 16 years and with MEYER TURKU since 2018

### The challenge

- PreFiS fittings for various applications on cruise ship – ongoing discussion about new application areas
  - Approx. 16,000 PreFiS fittings per ship
  - PreFiS-Solution
  - A broad variety of PreFiS fittings in stainless and carbon steel
  - Installation of fittings in every cruise liner manufactured at MEYER WERFT in Papenburg for high-pressure water mist, CO2 systems and high-pressure cleaning

### Customer benefit

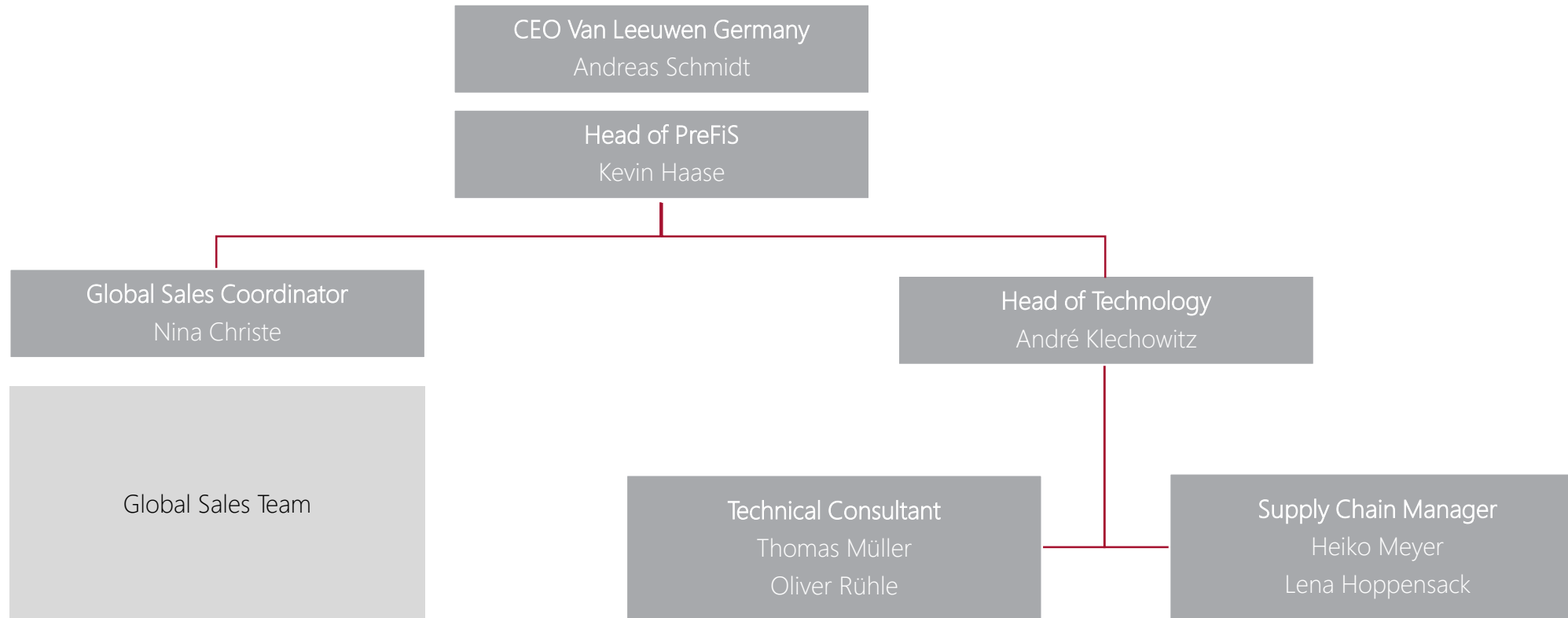
- Easy and quick installation periods
- Direct technical support from Berlin





## Variety of tests as proof of different application areas for carbon and stainless fittings

Test	Test condition		
		Carbon steel	Stainless steel
Vacuum test	Test medium	Air	Air
	Test pressure	170 mbar	700 mbar
	Test duration	5 min.	15 min.
Static gas pressure test	Test medium	Nitrogen	Nitrogen
	Test pressure	70 bar	100 bar
	Test duration	5 min.	2 min.
Burst pressure test	Test medium	Hydraulic oil	Hydraulic oil
	Test pressure	4 x PN	4 x PN
	Test duration	5 min.	2 min.
Pressure impulse and vibration test	Test medium	Hydraulic oil	Hydraulic oil
	Pressure impulse	Number of cycles: 5 x 10 <sup>5</sup>	Number of cycles: 5 x 10 <sup>5</sup>
		Cycles: 0.5 Hz – 1.7 Hz	Cycles: 0.5 Hz – 1.7 Hz
	Vibration	Number of cycles: 20 x 10 <sup>6</sup>	Number of cycles: 20 x 10 <sup>6</sup>
Frequency: 20 – 50 Hz		Frequency: 20 – 50 Hz	
Fire protection test	Temperature	-	750 – 800°C
	Test pressure	-	240 – 520 bar
	Test duration	-	30 min.
He leak test	Test medium	-	He 4.6
	Test pressure	-	DN 20 = 190 bar, DN 80 = 120 bar



- PreFiS Image Film

→ English : [https://youtu.be/ULOGU5L\\_olc](https://youtu.be/ULOGU5L_olc)

→ Deutsch: <https://youtu.be/JrE0skaRIO4>

- PreFiS Manual Film

→ English : <https://youtu.be/vgLHoEHcjhw>

→ Deutsch : <https://youtu.be/r8OHRlz3gs8>