



**Flanges, Elbows
and Butt weld Fittings
Carbon Steel**

DIN EN

DIN EN 1092-1 / DIN EN 10253-2



rff Rohr Flansch Fitting
Handels GmbH

A partner to the industry: Strong, reliable, experienced

First-class performance and consistency are essential for creating enduring values. This has been an integral part of our philosophy for the past 40 years. This is also what drives us to find the very best solution for every situation. As a partner to the industry, we represent expertise, experience and competence. More than 350 members of rff staff are on hand to assist you and your project.





You set great store by first-rate material quality, planning security and cost-effective procurement. We are committed to creating the ideal conditions to ensure just this and provide you with optimal support – both in specific industries and across disciplines.

A visible mark for this are our two central warehouses in Stuhr/Bremen and Beucha/Leipzig, which store more than 14.000 tonnes of pipes, flanges, elbows, buttweld fittings and pipe accessories.

One noticeable sign of this is our expertise in the areas of material and product science, standards and application technology.

This allows us to support you during planning, construction and maintenance of your project. What's more: With our ex warehouse delivery service and highly efficient logistics, we can guarantee reliable commissioning and distribution of your materials "just in time". We are there wherever and whenever you need us. **rff – Strongly connected.**

The rff range of services

1 Access to over 14,000 tons of pipe and pipe fittings
DIN / EN / ASME
1. Pipes, seamless and welded, uncoated and coated
2. Flanges, collars and rings, forged, rolled, bent and welded
3. Fittings, seamless and welded, tees, reducers, caps, special fittings, Part 1 / EN Type A, Part 2 / EN Type B
4. Elbows, all types, seamless and welded, Part 1 / Type A, Part 2 / Type B
5. Special elbows, pipe bends inductive and cold-formed, all radii also with extended legs
6. Heads, collars, pipe clamps, U-bolts
7. Gaskets, bolts and nuts, stud bolts
8. High pressure, steel and malleable iron fittings
9. Couplings and valves
10. Bar steel, hollow steel bars, plates
11. Special parts acc. to specification / drawing
12. Material qualities: non-alloy, non-alloy heat-resistant, alloy heat-resistant, low temperature, fine grain steels, high yield steels, stainless steels, high temperature steels, special steels, sour gas materials, non-ferrous metals

2 Mechanical processing
Semi-finished stock items as installation-ready components
1. Pipes cutting and bevelling, drilling, bending, thread cutting
2. Flanges face machining, e.g. tongue/groove, male/female, tapering of ring type joints, drilling (smooth and tapped), machining of edges (inside and outside), tapped holes
3. Fittings bevelling, tapering, pig guide bars welded into tees
4. Elbows bevelling, tapering, cutting into graduated sections
5. Prefabricated pipe line parts acc. to isometric drawings and pipe classes

3 Surface treatment
1. Blasting according to required class, e.g. SA 2,5
2. Interior and exterior primer acc. to specification, e.g. with epoxy resin or other
3. Galvanising, hot-dip galvanising, zinc plating
4. PE coating, all types
5. Interior cement coating, all types
6. Rilsan coating
7. Pickling and passivating
8. Grinding and brushing
9. Polishing, mechanical or electropolishing

4 Material tests
1. Ultrasonic (U.S.), surface crack detection, magnetic particle testing
2. Mill test reports (MTR) acc. to EN 10204, 3.2 by TÜV or GL, LR, DNV, BV, ABS, RINA or other in compliance with customer specifications
3. Impact test
4. Tensile test at room temperature
5. Hot tensile test
6. Folding test, widening test, ring expanding test
7. HIC test / HUEY test for sour gas affected pipe components
8. Tests to customer specification

5 Labeling / marking
1. Marking with manual marking punches and embossing stamps
2. Hard stamping with electromagnetic dot marking
3. Colour marking
4. Component marking, individual part or trading unit labeling
5. Barcode labeling
6. Account number, drawing number, and other

6 Logistics
1. Logistics centre in Stuhr/Bremen, Beucha/Leipzig, Erkrath/Düsseldorf
2. Order picking from full automated pipe storage systems and small parts storage systems, high rack storage system
3. Disposable and reusable packaging
4. Export packaging according to specifications, e.g. boxes, containers
5. Shrink wrap packing
6. Individual or bundle packaging
7. Materials supply / storage in rff owned containers
8. Parcel station for lately pickup in Stuhr/Bremen
9. Own fleet with 10 trucks
10. Shipping with long-standing contract carriers, regular transit time 24 to 48 hours
11. Express and courier services, TNT in night or overnight service
12. Parcel service

7 Project management
1. Projects management by designated project teams
2. Shutdown support, preplanning and storage
3. Deadline monitoring / expediting
4. Regular status reports
5. Bill of materials (BOM) preparation acc. to isometric drawing
6. Order picking and labeling per assembly / isometric drawing
7. Designated project-specific warehouse space
8. Internal/external inspection
9. Colli lists and outgoing goods reports

8 Certifications, documentation and calculation
1. Unmistakeable Mill test report (MTR) number system
2. 6-fold MTR backup
3. Immediate access to MTRs for telephone inquiries
4. Additional information / Barcode directly on MTR acc. to customers specification
5. MTRs enclosed with goods delivery and / or invoice
6. Online MTR access
7. MTRs deliverable via email or on CD
8. MTRs deliverable in multiple languages
9. Shipping documents and MTR cover letter with heat numbers
10. Interim certificate for acceptance according to DIN EN 10240 3.2 possible
11. Wall thickness calculations according to DIN 2413, AD-B2, AD-B3, AD-B9 or TRD 301 on request, TÜV-approved

9 IT Service – Information Technology
1. Comprehensive process control
2. Customised B2B solutions
3. Marketplace solutions
4. Item definition based on e-class characteristics
5. Order tracking and online catalogue service via website rff.de/en and "my rff"
6. Electronic invoices
7. Invoice settlement in the credit memo procedure

10 Management system
1. Quality management acc. to DIN EN ISO 9001
2. Environmental management acc. to DIN EN ISO 14001
3. Processors of materials acc. to AD 2000 Data Sheet W0
4. TÜV restamping authorisation acc. to DIN EN 764-5 for acceptance certificates DIN EN 10240/3.1
5. Certified acc. to Pressure Equipment Directive 97/23/EC
6. Approved supplier acc. to Regulation KTA 1401
7. In-house test equipment for spectral analyses, hardness testing and surface roughness measurement
8. Inspection of all incoming goods for radioactivity
9. Specific warehouse bin assignment system
10. Single batch / heat storage
11. Ongoing education and further training programmes to increase employee expertise

Content

Version 12-2018

About rff				Page
About rff				2 - 3
The rff range of services				4
Flanges DIN EN 1092-1		PN	DIN EN	DIN
Flange types acc. to DIN EN 1092-1 / DIN				6
Content flanges				7
Tolerances				1092-1 8 - 10
Facings				1092-1 2526 2512-2514 12 - 19
Weld neck flanges	Typ 11	6 - 160	1092-1 / 11	2631-2638 20 - 31
Slip-on flanges	Typ 12	6 - 100	1092-1 / 12	86029 86030 32 - 38
Threaded flanges	Typ 13	6 - 100	1092-1 / 13	2565-2569 39 - 46
Plate flanges for welding	Typ 01	6 - 100	1092-1 / 01	2573 2576 47 - 55
Loose flanges	Typ 02	6 - 40	1092-1 / 02	2641-42 2655-56 56 - 63
Weld-on plate collars	Typ 32	6 - 40	1092-1 / 32	2641-42 2655-56
Loose flanges	Typ 04	10 - 40	1092-1 / 04	2673 64 - 68
Weld neck collars	Typ 34	10 - 40	1092-1 / 34	2673
Blind flanges	Typ 05	6 - 160	1092-1 / 05	2527 69 - 78
Elbows, type A		Dimensions	DIN EN	DIN
Wall thickness table DIN EN 10253-2 / DIN ISO		21,3 - 1219,0		80
Content butt weld fittings				81
Tolerances				10253-2 83 - 84
Elbows 90°	Type 3	21,3 - 1219,0	10253-2 / A	2605-1 86 - 91
Elbows 90°	Type 2	21,3 - 1219,0	10253-2 / A	2605-1 92 - 97
Elbows 90°	Type 5	21,3 - 1219,0	10253-2 / A	2605-1 98 - 102
Butt weld fittings DIN EN		Dimensions	DIN EN	DIN
Tees	Type A	21,3 - 1219,0	10253-2 / A	2615-1 104 - 129
Reducers, concentric	Type B	26,9 - 1219,0	10253-2 / B	2616-2 130 - 145
Reducers, eccentric	Type A	26,9 - 1219,0	10253-2 / A	2616-1 146 - 163
Caps	Type B	21,3 - 1219,0	10253-2 / B	2617 164 - 168
Butt weld fittings DIN		Dimensions	DIN EN	DIN
Branch saddels		21,3 - 610,0		similar to 2618 170 - 171
Weld-in elbows		21,3 - 610,0		similar to 2619 172
Pressed collars		21,3 - 406,4		2641-2642 174 - 175
Torispherical heads		21,3 - 406,4		28011 176
Technical part			DIN EN	DIN EN
Dimensions and weights / seamless pipes		10,2 - 711,0	10220	10216-1 bis 4 178 - 179
Dimensions and weights / welded pipes		10,2 - 2540,0	10220	10217-1 bis 6 180 - 181
Material comparison DIN / EN / ASTM				182 - 183
Wall thickness table DIN / ISO / EN / ASME				184 - 185
Pipe construction standards				186 - 187
Delivery programme DIN / EN / ASME				188 - 190
Imprint				191

Flange types acc. to DIN EN 1092-1

Flange types acc. to DIN EN 1092-1 with stating of the comparable DIN norms for the respective nominal pressure levels acc. to DIN EN 1092-1 (marked with a red dot).

Designation		EN-Type	Pressure nominal / PN											
			2,5	6	10	16	25	40	63	100	160	250	320	400
Flat flanges	Flat flanges for welding	01	•	2573	2576	•	•	•	•	•				
	Loose flanges Flat collars ¹ see also type 37	02	•	2641	2642	•	2655	2656						
		32	•	2641	2642	•	2655	2656						
	Loose flanges fit type 34	04			2673	2674	2675	2676						
	Blind flanges	05	•	2527	2527	2527	2527	2527	2527	2527	•	•	•	•
Neck flanges	Weld neck flanges	11	2630	2631	2632	2633	2634	2635	2636	2637	2638	2628	2629	2627
	Slip-on flanges	12		•	86029	86030	•	•	•	•				
	Threaded flanges	13		2565	•	2566	•	2567	2568	2569				
	Weld neck collars ² fit type 04	34			2673	2674	2675	2676						
Collars and flanging	Flat collars fit type 02	32	•	2641	2642	•	2655	2656						
	Pipe ends, flanged fit type 02	33	•	•	•	•								
	Weld neck collars fit type 04	34			2673	2674	2675	2676						
	Weld neck rings fit type 02	35	•	•	•	•	•	•						
	Pressed collars, long fit type 02	36	•	•	•	•								
	Pressed collars fit type 02	37	•	2641	2642	•								

¹ and ² also see under collars and flanging

Supplementary notes on DIN EN 1092-1

The following DIN standards are not included in DIN EN 1092-1 and, if needed, can be ordered acc. to the relevant DIN standards:

- Oval threaded flanges DIN 2558.
- Flange joints for vessels and process apparatus DIN 28030, 28031, 28032, 28034, 28036 and 28038 as well as DIN 86041, 86044 and 28117.
- Flanges with chamfering for membrane seal welds acc. to DIN 2695 and flanges with groove for lens gaskets acc. to DIN 2696.
- Slip-on flanges are available as type 12, PN 10 and PN 16 acc. to DIN EN 1092-1, or also acc. to DIN 86029/86030.
- In DIN EN 1092-1, EN standard sheets are shown in the respective flange types and respective nominal pressure. They conform to DIN-standards, but have been withdrawn again from the DIN standards. These withdrawn DIN standards are marked green in the table.
- Flanges with DIN pipe connection dimensions, such as DN15/20, DN 25/30, DN 50/57, DN 100/108, can be delivered only acc. to DIN standards, because in all types and pressure ratings acc. to DIN EN 1092-1 only ISO pipe connection were ordered.
- Flange for automated welding process (machine welding flanges) are dimensioned acc. to PAS 1057-6 due to the tight tolerances.

Dieser Katalog ist für Sie von Interesse?

Dann geben Sie sich mit einer Vorschau nicht zufrieden. Registrieren Sie sich kostenlos für unsere Mediathek, um diesen Service in vollem Umfang nutzen zu können.

Sie haben Zugriff auf zahlreiche Produktkataloge und weitere Datenblätter rund um das Lieferprogramm von rff.

 [Anmeldung](#)

Are you interested in this catalog?

Then you are not satisfied with a preview. Register for our media center free of charge in order to be able to use this service to its full extent.

You have access to numerous product catalogs and other data sheets relating to the rff delivery program.

 [Registration](#)



rff Rohr Flansch Fitting
Handels GmbH