

## The rff range of services.

# We measure our success in terms of your absolute satisfaction.

Sector-specific expertise for various requirements and specifications – this is what you can expect from us. With consistently high product quality and precise warehouse and supply logistics, we have been a reliable partner for 40 years.

With access to over 14,000 tonnes of pipes, flanges, elbows, welded fittings and pipe equipment at our central warehouse in Stuhr/Bremen and Beucha/Leipzig, rff is one of the largest full-range suppliers in Germany.

These are benchmarks to measure us by.

## How you benefit

- Access to over 14,000 tons of pipe and pipe fittings
- · Mechanical processing
- · Facing machining
- · Material tests
- · Labeling/marking
- · Logistics
- · Project management
- Certifications, documentation and calculation
- · IT Services
- · Management system



## 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
- 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
- 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
- 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 beveling, 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
- Mill test reports (MTR) acc. to EN 10204, 3.2 by TÜV or DNV/GL, LR, BV, ABS, RINA or other in compliance with customer specifications
- 3. Impact test
- 4. Tensile test at room temperature
- 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

#### 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 innight 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
- 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. Occupational health and safety management acc. to DIN ISO 45001
- 4. Processors of materials acc. to AD 2000 Data Sheet W0
- TÜV restamping authorisation acc. to DIN EN 764-5 for acceptance certificates DIN EN 10240/3.1
- 6. Certified acc. to Pressure Equipment Directive 2014/68/EU
- 7. Approved supplier acc. to Regulation KTA 1401
- 8. In-house test equipment for spectral analyses, hardness testing and surface roughness measurement
- 9. Inspection of all incoming goods for radioactivity
- 10. Specific warehouse bin assigment system
- 11. Single batch / heat storage
- 12. Ongoing education and further training programmes to increase employee expertise