

a) Pictures & Typical Paintshop









a) Pictures & Typical Paintshop Amounts





Typical Paintshop Amounts:

500-50000 m² (contracted as one or several packages)

Installation period: 4-6 months



- b) Requirements for Suppliers
- >>> Preferrable manufacturing capacities for process ducts more than 500 m² per week
- Scope for the supplier: Detail Design incl. assembly drawings, manufacturing and installation
- ISO 9001 certification
- Installation possible throughout Europe (desirably USA, Mexico, South Africa)
- Site Manager must be fluent in German or English.



VENDOR DATA

Name:	Klicken oder tippen Sie hier, um Text einzugeben.		
Address	s: Klicken oder tippen Sie hier, um Text einzugeben.		
		YES	NO
1.	Tender preparation based on basic design layouts and duct lists	?	?
2.	Detail design of the ducts and the fastening	?	?
3.	work preparation department existing	?	?
4.	Labeling of the ducts	?	?
5.	Delivery of paint-compatible sealants (siliconefree)	?	?
6.	Creation of shipping documents	?	?
7.	Packaging (if necessary sea freight)	?	?
8.	Timely delivery and transportation of the ducts to the construction site	?	?
9.	Delivery of the entire holding and fastening material	?	?
10.	Assembly organisation in accordance with agreed schedule	?	?
11.	professional assembly	?	?
12.	EN1090-certified	?	?
13.	Construction site management	?	?
14.	Site facilities (container, equipment) available	?	?

15. Temporary storage of the produced parts



b) Scope of work

1. Engineering Detail Design

- Detail design of ducts as well as of fixing and suspension elements.
- Production drawings and planning/process engineering for manufacturing
- Assembly drawings incl. Parts list for installation on site.

2. Manufacturing and Shipment

- "state of the art" manufacturing according to drawings
- Acceptance of Dürr quality standards
- Labelling of components
- Clean surfaces (silicon free paint compatible)
- Packaging and shipment documents preparation
- Transport and on time delivery



b) Scope of work

3. Installation

- Unloading and storage on site (organized by contractor)
- On site equipment transport (from storage to final positions)
- Professional installation of the ducts according to assembly drawings, coordination of work
- The erection of ducts will be done in time blocks, together with other work packages
- >>> Finishing, and touch up works
- Disposal of Dürr materials and cleaning of work areas
- All tools and lifting equipment to be provided by contractor (incl. office containers and scaffolding)
- Dürr has experienced and qualified site organizator. The contractor manages its own part and assure to have experienced site manager as interface to Dürr.



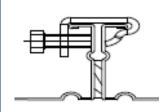
- c) Technical Information: Overview
 - Seometrical designs are tubes and rectangular, main joining processes are welding, screwing and folding.
 - Dimensions of welded and bolted ducts are in range of max.5000x4000 mm and diameter of max 2000 mm.
 - >>> Typical materials: Stainless Steel (1.4307, 1.4541), aluminized steel (FAL), galvanized steel
 - Thickness: 0,7 mm max. 3,0 mm.

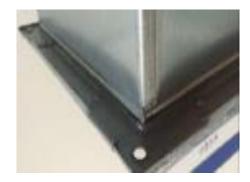


c) Technical Information: Types of Ducts

Air duct: Clamped flange

- Max edge length 2000 x 2000 mm
- Galvanized sheet, thickness 0,5 1,2 mm
- Edge folded
- Flange size 30 x 15 mm

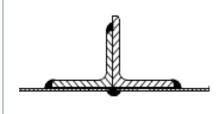






Air duct: Angle steel

- Airtight welded
- Galvanized sheet, thickness 1,5 -3 mm
- Straight site, welded







c) Technical Information: Types of Ducts

Air duct: Plate flange

- Galvanized, aluminized and SUS sheet thickness 1,5 - 3,0 mm
- Straight site, welded duct

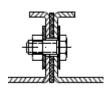








- Galvanized steel and Aluminized steel sheet (welded with AlBz8) thickness 1,5 - 3,0 mm (4 thickness variants in scope)
- Flange size 40 x 15 mm
- Bolted duct or welded, no rivets













c) Technical Information: Types of Ducts

Air ducts: Turnup flange

- Galvanized, SUS and aluminized steel sheet (welded with AlBz8)
- thickness 1,5 2,0 mm
- Flange size 35 x 50 mm (example)
- Oven recirculation hot air, welded airtight





Air ducts: No flange, round

- Galvanized, aluminized steel sheet (welded with AIBz8) and SUS
- thickness 1,5 3,0 mm
- Flange size 35 x 50 mm (example)
- · Sheet metal tubes welded tight.





c) Technical Information: Types of Ducts

Air ducts: Round duct spiral wounded

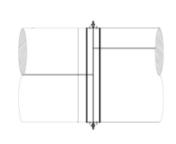
- Galvanized sheet metal thickness 0,6 1,2 mm
- Duct length ~ up to 6000 mm





Air ducts: Round duct longitudinal seam

- Galvanized sheet metal thickness 0,6 -1,2 mm
- Flange size 8 mm







d) Basic Design

- Tendering and contracting process on basis of basic design layouts and parts list of ducts and components.
- The scopes are contracted based on unit prices (€/m²). Mounting parts are calculated per piece. Extra work on site will be payed on basis of claim notes signed by Dürr Site Management.