



KPATEP Skopje

Production of
"THERMO - TECHNICAL INSTALLATIONS"
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Spiral tubes and junctions catalogue



TD KRATER - Skopje

is a company that have been successfully active in the Macedonian market more than 40 years.

We produce spiral or "Spiro®" ducts with different diameters, lengths and thicknesses of the material. The spiral ducts are manufactured from galvanized sheet with dimensions of 100 mm to 1250 mm and maximal length of 6000mm. The spiral ducts also can be made from different materials such as aluminum and INOX sheet.

Depending on the dimensions of the spiral ducts, we produce fittings or merging elements which may be different types with different sizes such as, bending sections, reducers, branches and other elements.

We also produce another types of ducts such as, circular ducts, ducts made of P3, and different types of distribution elements like regulation louver, plenum boxes, dampers, and other elements needed for producing complete project for ventilation and air conditioning.

As a company, we stand for fast and efficient response to customer requests. We are constantly working on improving and expanding of our facilities and products.

We have a production of HVAC -ventilation ducts and duct lines:

- Square Ducts: all dimensions of length L = 1500mm.
- Circular Ducts: diameter 950mm, length L = 1000mm.
- Spiral Ducts: From Φ 100- Φ 1250mm L=6000 mm.

Ducts and fittings are produced from hot dip galvanized metal sheets Dx51D+Z200 and Dx51D+Z275 for clean rooms. Also they can be fabricated with special sealant (Blue Mastic) automatically added to the seam witch can provided low leakage and higher pressure class.

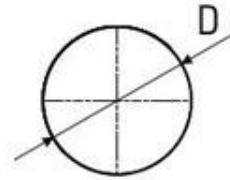
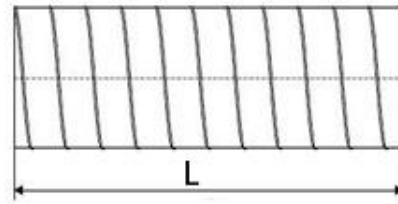
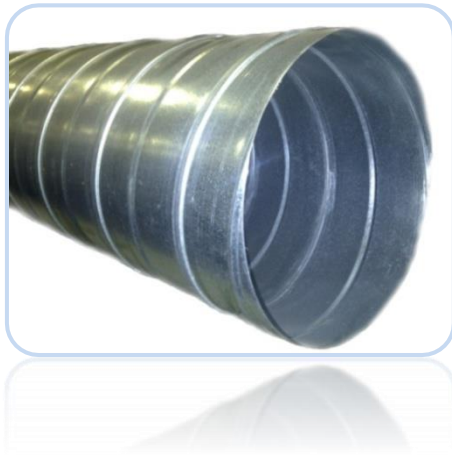
We produce fittings (elbows, reducers, t-sections, conical

They are manufactured from galvanized steel according to EN10143, SMACNA, DW144, ASHRAE.



In order to work together, we are free to quickly and effectively respond to your requests

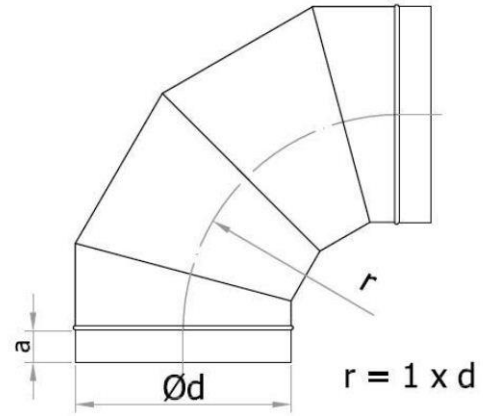
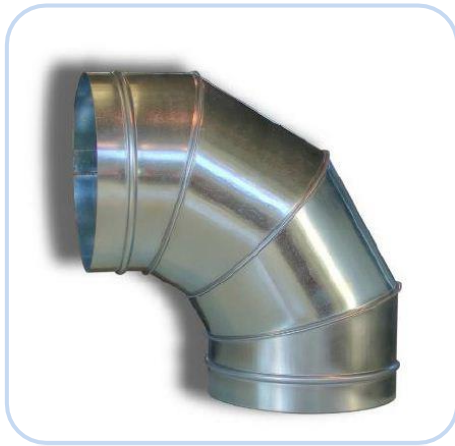
Sincerely,
TD. KRATER - Skopje

krater@t.mk

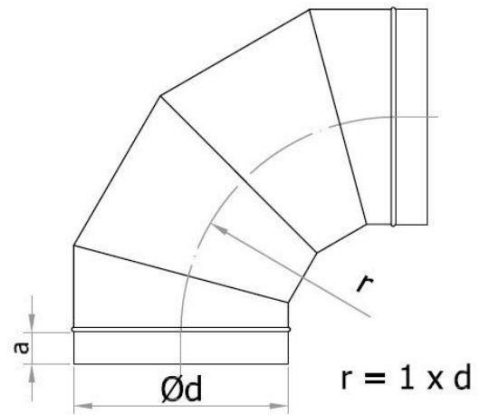
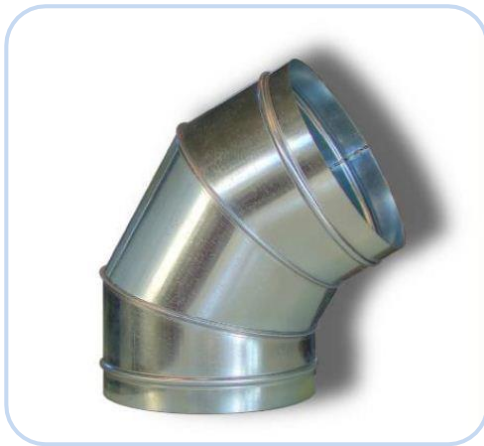

Spiral Ducts – Dimensions and Prices

Diameter (mm)	Material Thickness "s" (mm)				
	0,50	0,60	0,70	0,80	1,00
kg					
Ø100	Standard				
Ø125	Standard				
Ø150	Standard				
Ø160	Standard				
Ø200	Standard	On request			
Ø250	Standard	On request			
Ø300	Standard	On request			
Ø315		Standard			
Ø355		Standard			
Ø400		Standard			
Ø450		Standard			
Ø500		Standard			
Ø560		Standard	On request		
Ø630		Standard	On request		
Ø710		Standard	On request		
Ø800				Standard	
Ø900				Standard	
Ø1000					Standard
Ø1120					Standard
Ø1250					Standard

- Standard thickness 
- On request 

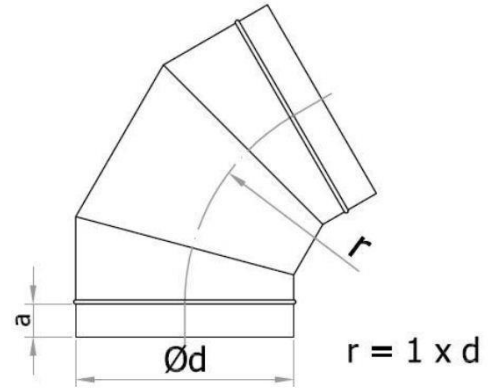

90° segmented elbow Dimensions and weights

d(mm)	a(mm)	m(kg)
100	30	
125	30	
150	30	
160	40	
200	40	
250	55	
300	55	
315	55	
355	55	
400	75	
450	75	
500	75	
560	75	
630	75	
710	100	
800	100	
900	100	
1000	115	
1120	115	
1250	115	



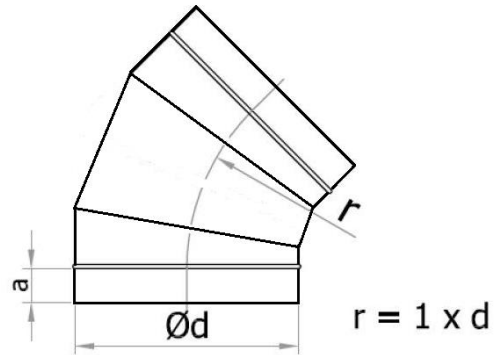
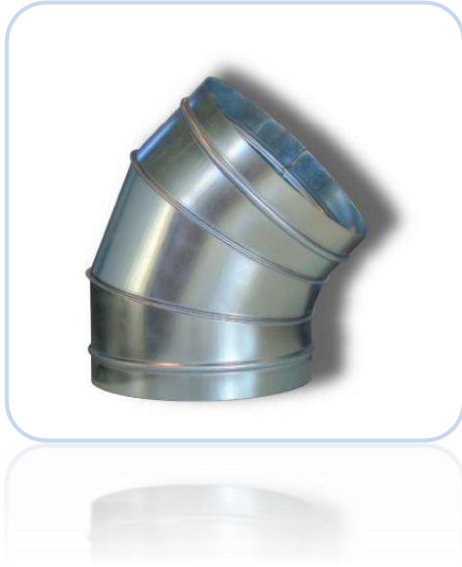
75° segmented elbow Dimensions and weights

d(mm)	a(mm)	m(kg)
100	40	
125	40	
150	40	
160	40	
200	40	
250	55	
300	55	
315	55	
355	55	
400	75	
450	75	
500	75	
560	75	
630	75	
710	100	
800	100	
900	100	
1000	115	
1120	115	
1250	115	



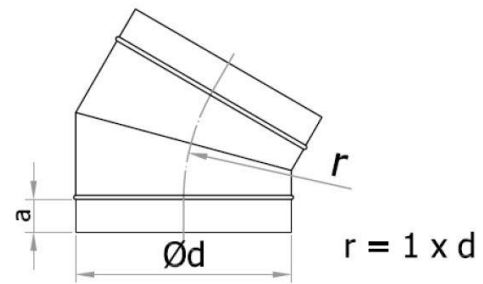
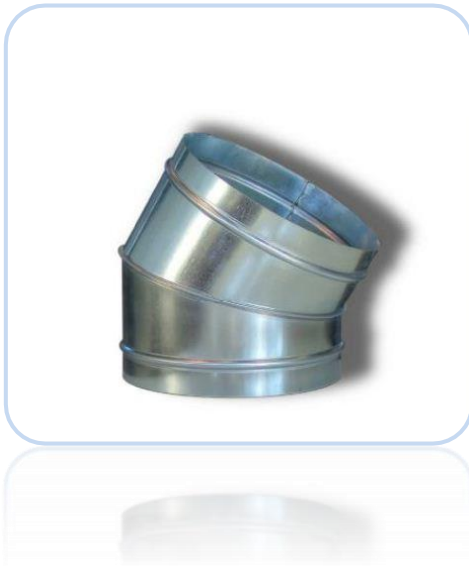
60° segmented elbow Dimensions and weights

d(mm)	a(mm)	m(kg)
100	40	
125	40	
150	40	
160	40	
200	40	
250	55	
300	55	
315	55	
355	55	
400	75	
450	75	
500	75	
560	75	
630	75	
710	100	
800	100	
900	100	
1000	115	
1120	115	
1250	115	

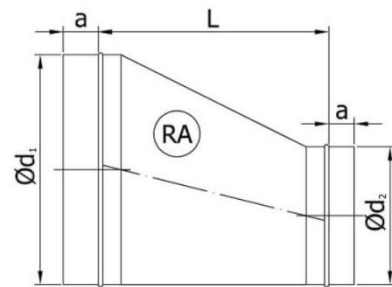
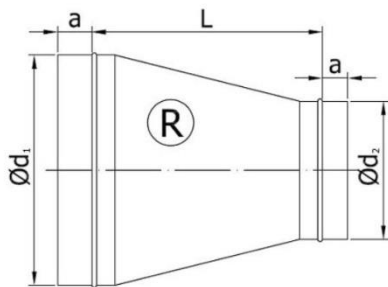
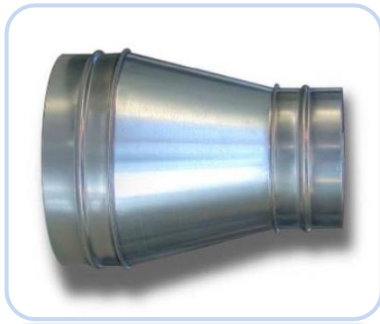


45° segmented elbow Dimensions and weights

d(mm)	a(mm)	m(kg)
100	40	
125	40	
150	40	
160	40	
200	40	
250	55	
300	55	
315	55	
355	55	
400	75	
450	75	
500	75	
560	75	
630	75	
710	100	
800	100	
900	100	
1000	115	
1120	115	
1250	115	


30° segmented elbow Dimensions and weights

d(mm)	a(mm)	m(kg)
100	40	
125	40	
150	40	
160	40	
200	40	
250	55	
300	55	
315	55	
355	55	
400	75	
450	75	
500	75	
560	75	
630	75	
710	100	
800	100	
900	100	
1000	115	
1120	115	
1250	115	

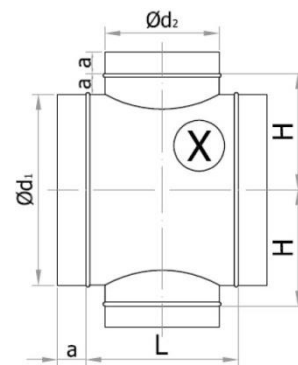
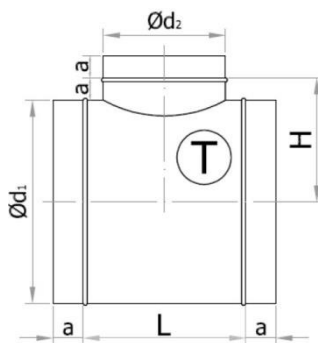
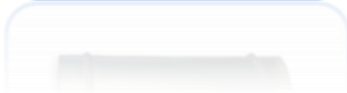


Reducers: $L = (d_1 - d_2) + 100$ [mm]

Reducers – Simetrical/Asimetrical	Weight (kg)
- Ø125 mm → Ø 100 mm	
- Ø150 mm → Ø 100 mm	
- Ø150 mm → Ø 125 mm	
- Ø160 mm → Ø 100 mm	
- Ø160 mm → Ø 125 mm	
- Ø160 mm → Ø 150 mm	
- Ø160 mm → Ø 250 mm	
- Ø200 mm → Ø 100 mm	
- Ø200 mm → Ø 125 mm	
- Ø200 mm → Ø 150 mm	
- Ø200 mm → Ø 160 mm	
- Ø250 mm → Ø 100 mm	
- Ø250 mm → Ø 125 mm	
- Ø250 mm → Ø 150 mm	
- Ø250 mm → Ø 200 mm	
- Ø280 mm → Ø 150 mm	
- Ø300 mm → Ø 200 mm	
- Ø300 mm → Ø 250 mm	
- Ø315 mm → Ø 125 mm	
- Ø315 mm → Ø 200 mm	



Reducers – Simetrical/Asimetrical	Weight (kg)
- Ø315 mm → Ø 250 mm	
- Ø355 mm → Ø 160 mm	
- Ø355 mm → Ø 200 mm	
- Ø355 mm → Ø 300 mm	
- Ø400 mm → Ø 355 mm	
- Ø450 mm → Ø 300 mm	
- Ø450 mm → Ø 315 mm	
- Ø450 mm → Ø 355 mm	
- Ø560 mm → Ø 355 mm	
- Ø630 mm → Ø 355 mm	
- Ø560 mm → Ø 400 mm	
- Ø630 mm → Ø 400 mm	
- Ø630 mm → Ø 450 mm	
- Ø630 mm → Ø 500 mm	
- Ø630 mm → Ø 560 mm	
- Ø710 mm → Ø 355 mm	
- Ø710 mm → Ø 500 mm	
- Ø710 mm → Ø 560 mm	
- Ø710 mm → Ø 630 mm	
- Ø800 mm → Ø 560 mm	
- Ø800 mm → Ø 630 mm	
- Ø800 mm → Ø 710 mm	
- Ø900 mm → Ø 630 mm	
- Ø900 mm → Ø 710 mm	
- Ø900 mm → Ø 800 mm	
- Ø1000 mm → Ø 630 mm	
- Ø1000 mm → Ø 710 mm	
- Ø1000 mm → Ø 800 mm	
- Ø1000 mm → Ø 900 mm	
- Ø1120 mm → Ø 800 mm	
- Ø1120 mm → Ø 900 mm	
- Ø1120 mm → Ø 1000 mm	
- Ø1250 mm → Ø 800 mm	
- Ø1250 mm → Ø 900 mm	
- Ø1250 mm → Ø 1000 mm	
- Ø1250 mm → Ø 1120 mm	

Tees – T:

"T" & "X" Tees:

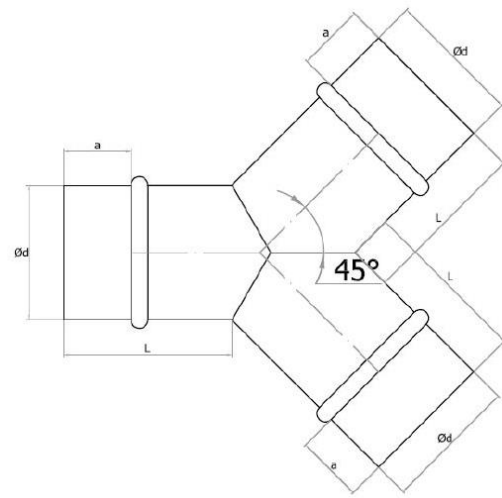
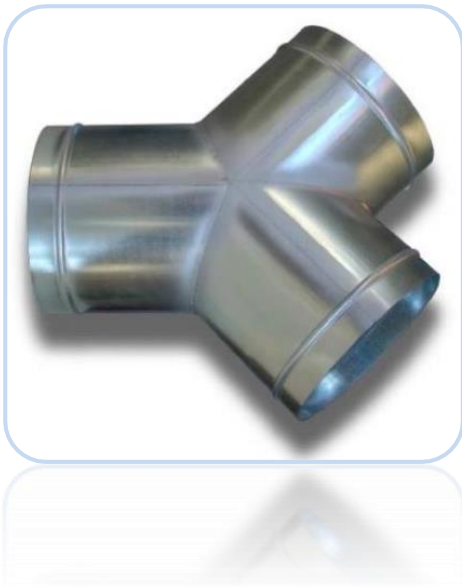
Below in the table there are some of the dimensions and weights for "T" and "X" elements. Our production line is more than the table below. Therefore, we give this information to you as a basic introduction. If interested, please contact us for other specific demands.

d1 (mm)	d2 (mm)	T(kg)		X(kg)	
		L(mm)	a(mm)	L(mm)	a(mm)
100	100		40		40
125	100		40		40
	125		40		40
150	100		40		40
	125		40		40
	150		40		40
160	100		40		40
	125		40		40
	150		40		40
	160		40		40
200	150		40		40
	160		40		40
250	160		55		55
	200		55		55

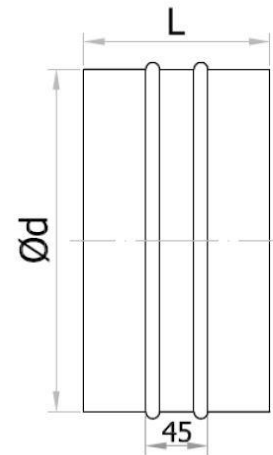
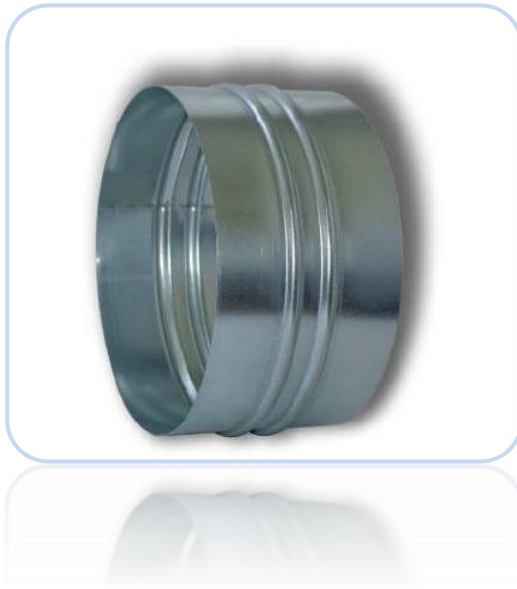
d1 (mm)	d2 (mm)	T(kg)		X(kg)	
		L(mm)	a(mm)	L(mm)	a(mm)
	250		55		55
300	200		55		55
	250		55		55
	300		55		55
315	200		55		55
	250		55		55
	300		55		55
	315		55		55
355	250		55		55
	300		55		55
	315		55		55
	355		55		55
400	300		75		75
	315		75		75
	355		75		75
	400		75		75
450	315		75		75
	355		75		75
	400		75		75
	450		75		75
500	300		75		75
	315		75		75
	355		75		75
	400		75		75
	450		75		75
	500		75		75
560	315		75		75
	355		75		75
	400		75		75
	450		75		75
	500		75		75
	560		75		75
630	355		75		75
	400		75		75
	450		75		75
	500		75		75
	560		75		75
	630		75		75
710	400		100		100
	450		100		100
	500		100		100
	560		100		100
	630		100		100
	710		100		100
800	450		100		100
	500		100		100



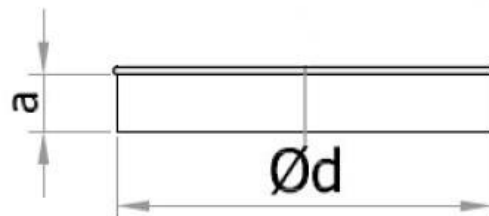
d1 (mm)	d2 (mm)	T(kg)		X(kg)	
		L(mm)	a(mm)	L(mm)	a(mm)
	560		100		100
	630		100		100
	710		100		100
	800		100		100
900	500		115		115
	560		115		115
	630		115		115
	710		115		115
	800		115		115
	900		115		115
1000	560		115		115
	630		115		115
1120	900		115		115
	1000		115		115
	1120		115		115
1250	900		115		115
	1000		115		115
	1120		115		115
	1250		115		115


Wyes – “Y” elements – Dimensions and Weights

d (mm)	a (mm)	L (mm)	m (kg)
100	40	100	
125	40	100	
150	40	100	
160	40	100	
200	40	100	
250	55	100	
300	55	100	
315	55	150	
355	55	150	
400	75	150	
450	75	150	
500	75	200	
560	75	200	
630	75	200	
710	100	250	
800	100	250	
900	100	250	
1000	115	300	
1120	115	300	
1250	115	300	


Couplings– Dimensions and Weights

d (mm)	a (mm)	L(mm)	m (kg)
100	40	135	
125	40	135	
150	40	135	
160	40	135	
200	40	135	
250	55	135	
300	55	135	
315	55	135	
355	55	135	
400	75	135	
450	75	135	
500	75	135	
560	75	135	
630	75	185	
710	100	185	
800	100	185	
900	100	185	
1000	115	185	
1120	115	185	
1250	115	185	



Round cup– Dimensions and Weights

d (mm)	a (mm)	m (kg)
100	40	
125	40	
150	40	
160	40	
200	40	
250	55	
315	55	
355	55	
400	75	
450	75	
500	75	
560	75	
630	75	
710	100	
800	100	
900	100	
1000	115	
1250	115	