

Annual Statistics
2018

FEFCO ANNUAL STATISTICS 2018

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FEFCO ANNUAL REPORT 2018 Key Statistics

	2017	2018	% Change
Total Shipments (Millions of m ²) (including Non-Members)	47 052	48 177	2,4
Total Shipments ('000 Tonnes) (including Non-Members)	23 975	24 307	1,4
Shipments of Member Companies (Millions of m ²)	38 554	39 013	1,2
Shipments of Member Companies ('000 Tonnes)	19 726	19 662	-0,3
Total Number of Companies (including Non-Members)	371	369	-0,5
Total Number of Plants (including Non-Members)	630	630	0
Average Weight of Board in g/m ² (including Non-Members)	510	505	-1,0
Total Consumption of Raw Materials ('000 Tonnes) (including Non-Members)	20 486	20 766	1,4
Consumption of White or Colored Kraftliner as % of total consumption of Raw Materials	5,2	5,2	0
Consumption of Brown Kraftliner as % of total consumption of Raw Materials	14,9	14,5	-2,8
Consumption of White Top Testliner as % of total consumption of Raw Materials	7,7	8,2	6,1
Consumption of Testliner as % of total consumption of Raw Materials	27,7	27,8	0,4
Consumption of Other Recycled Liner as % of total consumption of Raw Materials	4,1	4,2	2,4
Consumption of Semi-chemical Fluting as % of total consumption of Raw Materials	4,2	3,8	-10,5
Consumption of Recycled Fluting as % of total consumption of Raw Materials	38,4	38,8	1,0
Total Personnel	101 529	103 202	1,6
Shipments to CONVERTERS	293,0	314,0	6,7
Shipments to TRADERS	20,0	22,0	9,1

Total Shipments in Millions of m²
(including Non-Members)

	2017	2018	% Change 2017/2018	Members Only
Austria	1 012	1 028	1,58	Y / Y
Benelux	2 068	2 114	2,22	N / N
Czech Republic	1 113	1 115	0,18	N / N
France	5 184	5 151	-0,64	N / N
Germany	10 323	10 625	2,93	N / N
Hungary	590	581	-1,53	N / N
Italy	6 759	7 004	3,62	N / N
Norway	216	220	1,85	Y / N
Poland	4 071	4 230	3,91	N / N
Romania	777	788	1,42	Y / Y
Spain	5 201	5 286	1,63	N / N
Sweden	657	671	2,13	Y / Y
Turkey	4 269	4 357	2,06	N / N
United Kingdom	4 812	5 007	4,05	N / N
TOTAL EUROPE	47 052	48 177	2,40	

Total Shipments in 000's Tonnes
(including Non-Members)

	2017	2018	% Change 2017/2018
Austria	478	478	0
Benelux	1 090	1 111	1,93
Czech Republic	545	544	-0,18
France	2 633	2 597	-1,37
Germany	5 299	5 434	2,55
Hungary	297	285	-4,04
Italy	3 791	3 886	2,51
Norway	102	n.a.	n.a.
Poland	2 008	2 067	2,94
Romania	384	387	0,78
Spain	2 775	2 772	-0,11
Sweden	319	329	3,13
Turkey	2 241	2 270	1,29
United Kingdom	2 115	2 147	1,51
TOTAL EUROPE	24 077	24 307	1,40

Shipments of Member Companies in Millions of m²

	2017	2018	% Change 2017/2018
Austria	1 012	1 028	1,58
Benelux	1 965	2 008	2,19
Czech Republic	763	755	-1,05
France	3 979	3 956	-0,58
Germany	7 819	7 950	1,68
Hungary	550	541	-1,64
Italy	6 287	6 369	1,30
Norway	216	245	13,43
Poland	3 576	3 649	2,04
Romania	777	788	1,42
Spain	3 770	3 831	1,62
Sweden	657	671	2,13
Turkey	3 170	3 137	-1,04
United Kingdom	4 013	4 085	1,79
Membership Total	38 554	39 013	1,20

Shipments of Member Companies in 000's Tonnes

	Membership 2017		Membership 2018	
	Tonnes	% of total shipments	Tonnes	% of total shipments
Austria	478	100,00	478	100,00
Benelux	1 035	94,95	1 055	94,96
Czech Republic	366	67,16	362	66,54
France	2 021	76,76	1 993	76,74
Germany	4 012	75,71	4 054	74,60
Hungary	277	93,27	265	92,98
Italy	3 567	94,09	3 595	92,51
Norway	102	100,00	n.a.	n.a.
Poland	1 747	87,00	1 770	85,63
Romania	384	100,00	387	100,00
Spain	2 011	72,47	2 009	72,47
Sweden	319	100,00	329	100,00
Turkey	1 664	74,25	1 635	72,03
United Kingdom	1 743	82,41	1 730	80,58
Membership Total	19 726	81,90	19 662	80,90

Total Number of Corrugating Companies (including Non-Members)

	2017	2018
Austria	7	6
Benelux	n.a.	n.a.
Czech Republic	7	7
France	17	16
Germany	45	44
Hungary	7	7
Italy	43	43
Norway	3	3
Poland	40	40
Romania	11	11
Spain	71	72
Sweden	4	4
Turkey	88	88
United Kingdom	28	28
TOTAL EUROPE	371	369

Total Number of Corrugating Plants (including Non-Members)

	2017	2018
Austria	9	9
Benelux	n.a.	n.a.
Czech Republic	9	9
France	62	62
Germany	125	124
Hungary	10	10
Italy	68	69
Norway	3	3
Poland	55	55
Romania	12	12
Spain	89	90
Sweden	10	10
Turkey	110	110
United Kingdom	68	67
TOTAL EUROPE	630	630

Total Number of Corrugators
(including Non-Members)

	2018			Result
	<2m	>2 <2,5m	> 2,5m	
Austria	2	6	2	10
Benelux	1	14	6	21
Czech Republic	1	8	1	10
France	n.a.	n.a.	n.a.	n.a.
Germany	5	70	27	102
Hungary	3	7	1	11
Italy	7	72	18	97
Norway	n.a.	2	1	3
Poland	n.a.	n.a.	n.a.	n.a.
Romania	1	11	n.a.	12
Spain	10	76	9	95
Sweden	n.a.	10	n.a.	10
Turkey	n.a.	n.a.	n.a.	n.a.
United Kingdom	24	44	9	77
TOTAL EUROPE	54	320	74	448

Average Weight of Board in g/m²
(including Non-Members)

	2017	2018
Austria	472	465
Benelux	527	526
Czech Republic	490	488
France	508	504
Germany	513	511
Hungary	503	491
Italy	561	555
Norway	472	
Poland	493	489
Romania	494	491
Spain	534	524
Sweden	486	490
Turkey	525	521
United Kingdom	440	429
TOTAL EUROPE as weighted average	510	505

Die Cut Boxes

(as % of total shipments in m², including Non-Members & Sheet Plants)

	2017	2018
Austria	51,4	52,4
Benelux	35,4	31,9
Czech Republic	35,3	33,6
France	n.a.	n.a.
Germany	48,7	48,8
Hungary	59,4	58,8
Italy	n.a.	n.a.
Norway	57,5	58,0
Poland	40,5	40,2
Romania	38,0	49,0
Spain	n.a.	n.a.
Sweden	n.a.	n.a.
Turkey	n.a.	n.a.
United Kingdom	48,4	47,6
TOTAL EUROPE as weighted average	45,7	45,6

**Total Consumption of Raw Materials in 000's Tonnes
(including Non-Members)**

	2017	2018	% Change 2017/2018
Austria	562	550	-2,14
Benelux	1 130	1 134	0,35
Czech Republic	435	419	-3,68
France	n.a.	n.a.	n.a.
Germany	5 598	5 719	2,16
Hungary	304	306	0,66
Italy	3 905	4 003	2,51
Norway	111	115	3,60
Poland	2 088	2 150	2,97
Romania	450	412	-8,44
Spain	3 078	3 074	-0,13
Sweden	363	335	-7,71
Turkey	n.a.	n.a.	n.a.
United Kingdom	2 462	2 549	3,53
TOTAL EUROPE	20 486	20 766	1,40

Consumption of White or Colored Kraftliner

(CCB Classification 02-04-06-08-91-98 ; as % of the total consumption of Raw Materials)

	2017	2018
Austria	8,6	9,0
Benelux	6,0	6,1
Czech Republic	3,4	4,0
France	n.a.	n.a.
Germany	5,2	5,0
Hungary	2,9	2,6
Italy	8,3	8,6
Norway	10,0	10,0
Poland	1,7	1,6
Romania	1,0	1,0
Spain	5,7	4,6
Sweden	n.a.	1,0
Turkey	1,4	1,6
United Kingdom	2,8	3,5
TOTAL EUROPE as weighted average	5,2	5,2

Brown Kraftliner

CCB Classification 00-09-90-92-97 ; as % of the total consumption of Raw Materials)

	2017	2018
Austria	13,8	14,2
Benelux	13,8	14,1
Czech Republic	9,2	10,1
France	n.a.	n.a.
Germany	14,5	14,2
Hungary	14,6	14,8
Italy	19,5	18,6
Norway	15,0	14,0
Poland	8,8	8,3
Romania	10,5	10,0
Spain	15,4	14,4
Sweden	n.a.	28,0
Turkey	18,0	17,0
United Kingdom	16,0	15,7
TOTAL EUROPE as weighted average	14,9	14,5

WHITE TOP TESTLINER

CCB Classification 70-71-72 ; as % of the total consumption of Raw Materials)

	2017	2018
Austria	5,7	14,8
Benelux	9,0	8,8
Czech Republic	9,3	9,0
France	n.a.	n.a.
Germany	8,3	8,8
Hungary	3,1	4,6
Italy	3,3	3,8
Norway	11,0	15,0
Poland	11,1	11,8
Romania	36,9	33,0
Spain	5,6	5,6
Sweden	n.a.	32,0
Turkey	5,3	6,0
United Kingdom	n.a.	n.a.
TOTAL EUROPE as weighted average	7,7	8,2

Consumption of Testliners
(CCB Classification 10-11-12-20-21-22-30-32-38-50-55 ;
as % of the total consumption of Raw Materials)

	2017	2018
Austria	27,4	18,4
Benelux	37,2	36,7
Czech Republic	36,2	32,8
France	n.a.	n.a.
Germany	31,6	31,9
Hungary	36,1	34,1
Italy	16,2	16,3
Norway	15,0	13,0
Poland	35,8	36,3
Romania	5,7	6,0
Spain	20,4	21,4
Sweden	n.a.	n.a.
Turkey	18,1	21,2
United Kingdom	37,2	38,2
TOTAL EUROPE as weighted average	27,7	27,8

Consumption of Other Liners
(CCB Classification 53-74 ; as % of the total consumption of Raw Materials)

	2017	2018
Austria	3,1	2,3
Benelux	1,7	4,2
Czech Republic	0,4	3,6
France	n.a.	n.a.
Germany	1,5	1,2
Hungary	5,2	5,9
Italy	6,2	5,9
Norway	20,0	21,0
Poland	2,6	2,1
Romania	9,8	11,0
Spain	7,4	7,5
Sweden	n.a.	14,0
Turkey	8,0	7,0
United Kingdom	n.a.	n.a.
TOTAL EUROPE as weighted average	4,1	4,2

Consumption of Semi-Chemical Fluting
(CCB Classifications 40-46-47 ; as % of the total consumption of Raw Materials)

	2017	2018
Austria	8,0	7,1
Benelux	1,1	0,9
Czech Republic	0,7	0,6
France	n.a.	n.a.
Germany	1,1	1,1
Hungary	2,3	2,8
Italy	9,9	9,0
Norway	29,0	27,0
Poland	1,1	0,8
Romania	1,0	4,0
Spain	7,5	6,7
Sweden	n.a.	25,0
Turkey	n.a.	4,2
United Kingdom	1,7	0,9
TOTAL EUROPE as weighted average	4,2	3,8

Consumption of Other Fluting (Recycled paper basis)

(CCB Classifications 41-43-44-45-60-61 ; as % of the total consumption of Raw Materials)

	2017	2018
Austria	33,4	34,2
Benelux	31,2	29,2
Czech Republic	40,8	39,9
France	n.a.	n.a.
Germany	38,8	38,9
Hungary	35,8	35,2
Italy	36,6	37,8
Norway	100,0	100,0
Poland	38,8	39,1
Romania	35,1	35,0
Spain	38,0	39,8
Sweden	n.a.	100,0
Turkey	49,2	43,0
United Kingdom	42,3	41,7
TOTAL EUROPE as weighted average	38,4	38,8

Total Number of Personnel

	2017		2018	
	Production Employees	Total Employees	Production Employees	Total Employees
Austria	1 435	1 968	1 327	1 889
Benelux	2 590	3 885	2 587	3 880
Czech Republic	1 306	1 602	1 319	1 569
France	7 720	11 600	7 720	11 600
Germany	14 363	19 921	14 861	20 498
Hungary	1 357	1 980	1 340	2 014
Italy	6 080	13 690	6 300	14 190
Norway	325	508	320	500
Poland	5 174	7 613	5 453	7 716
Romania	1 400	1 910	1 700	2 300
Spain	8 490	11 140	8 568	11 225
Sweden	1 160	1 663	1 195	1 748
Turkey	5 993	7 692	6 027	7 811
United Kingdom	10 796	16 357	10 733	16 262
TOTAL EUROPE	68 189	101 529	69 450	103 202

Production per Head in 1000 m²

	2017	2018
Austria	705	775
Benelux	798	817
Czech Republic	852	845
France	672	667
Germany	719	715
Hungary	435	434
Italy	1 112	1 112
Norway	665	688
Poland	787	776
Romania	555	464
Spain	613	617
Sweden	566	562
Turkey	712	723
United Kingdom	446	467
TOTAL EUROPE	690	694

Nominal Working Time and Productivity per Head

	Working Time [hours / year]		Productivity [m ² /Person hour]	
	2017	2018	2017	2018
Austria	1 691	1 697	417	456
Benelux	n.a.	1 789	n.a.	457
Czech Republic	1 812	1 861	470	454
France	n.a.	n.a.	n.a.	n.a.
Germany	1 850	1 743	388	410
Hungary	1 816	1 848	239	235
Italy	2 000	2 024	556	549
Norway	1 725	1 702	385	404
Poland	2 000	2 000	393	388
Romania	1 992	1 873	279	247
Spain	1 768	1 768	346	349
Sweden	1 486	1 479	381	380
Turkey	2 024	2 000	352	361
United Kingdom	1 710	1 710	261	273
TOTAL EUROPE	1 823	1 807	372	382

Shipments to CONVERTERS (in % of total shipments of m²)

	2017	2018	% Change 2017/2018
Austria	15,0	15,0	0
Benelux	15,0	15,0	0
Czech Republic	35,0	39,0	11,43
France	n.a.	n.a.	n.a.
Germany	6,0	6,0	0
Hungary	97,0	95,0	-2,06
Italy	39,0	38,0	-2,56
Norway	10,0	11,0	10,00
Poland	31,0	27,0	-12,90
Romania	n.a.	25,0	n.a.
Spain	16,0	15,0	-6,25
Sweden	n.a.	n.a.	n.a.
Turkey	n.a.	n.a.	n.a.
United Kingdom	29,0	28,0	-3,45
TOTAL EUROPE	0,0	314,0	

Shipments to TRADERS
(in % of total shipments of m²)

	2017	2018	% Change 2017/2018
Austria	7,0	8,0	14,29
Benelux	n.a.	n.a.	n.a.
Czech Republic	n.a.	n.a.	n.a.
France	n.a.	n.a.	n.a.
Germany	8,0	8,0	0
Hungary	3,0	5,0	66,67
Italy	n.a.	n.a.	n.a.
Norway	2,0	1,0	-50,00
Poland	n.a.	n.a.	n.a.
Romania	n.a.	n.a.	n.a.
Spain	n.a.	n.a.	n.a.
Sweden	n.a.	n.a.	n.a.
Turkey	n.a.	n.a.	n.a.
United Kingdom	n.a.	n.a.	n.a.
TOTAL EUROPE	20,0	0,0	

Classification of shipment by end-use sector, as a percentage of turnover 2018

	Austria	Benelux	Czech Republic	France	Germany	Hungary	Italy	Norway	Poland	Romania	Spain	Sweden	Turkey	United Kingdom	Weighted Average
1	20,0	13,1	4,5	0,0	1,4	2,8	11,2	22,0	12,8	6,6	0,0	0,0	6,0	0,0	3,8
2	11,0	6,9	0,0	0,0	1,4	3,1	3,8	19,0	4,5	1,0	0,0	0,0	8,0	0,0	1,9
3	4,7	6,5	9,1	0,0	1,4	5,6	10,0	15,0	5,6	4,6	0,0	0,0	0,2	0,0	2,4
4	8,1	24,3	8,8	0,0	29,9	9,7	26,3	20,0	4,9	2,4	0,0	0,0	23,8	0,0	14,4
5	7,1	6,6	6,4	0,0	4,9	2,6	10,8	2,0	4,4	7,7	0,0	0,0	5,2	0,0	3,4
6	4,1	10,4	15,5	0,0	0,0	24,6	5,8	4,0	23,1	19,0	0,0	0,0	19,1	0,0	5,2
7	6,3	3,1	13,8	0,0	20,4	3,9	4,1	0,0	10,3	28,0	0,0	0,0	6,7	0,0	10,2
8	2,0	0,2	4,0	0,0	3,0	12,6	2,1	18,0	6,3	0,1	0,0	0,0	1,2	0,0	2,4
9	3,6	2,8	5,0	0,0	3,6	5,3	4,7	0,0	1,2	5,8	0,0	0,0	5,8	0,0	2,1
10	4,6	2,5	1,7	0,0	0,0	3,2	3,4	0,0	4,1	1,3	0,0	0,0	0,8	0,0	0,9
11	2,5	2,5	1,0	0,0	0,0	3,2	1,8	0,0	0,1	0,1	0,0	0,0	4,3	0,0	0,3
12	2,8	1,7	8,1	0,0	3,9	0,0	2,2	0,0	4,4	0,1	0,0	0,0	0,1	0,0	2,3
13	3,5	7,9	16,1	0,0	3,7	12,8	12,0	0,0	5,7	6,6	0,0	0,0	4,0	0,0	3,7
14	19,7	11,5	6,0	0,0	26,4	10,6	1,8	0,0	12,6	16,7	0,0	0,0	14,8	0,0	13,0
Total	100,0	100,0	100,0	n.a.	100,0	100,0	100,0	100,0	100,0	100,0	n.a.	n.a.	100,0	n.a.	

Categories for classification:

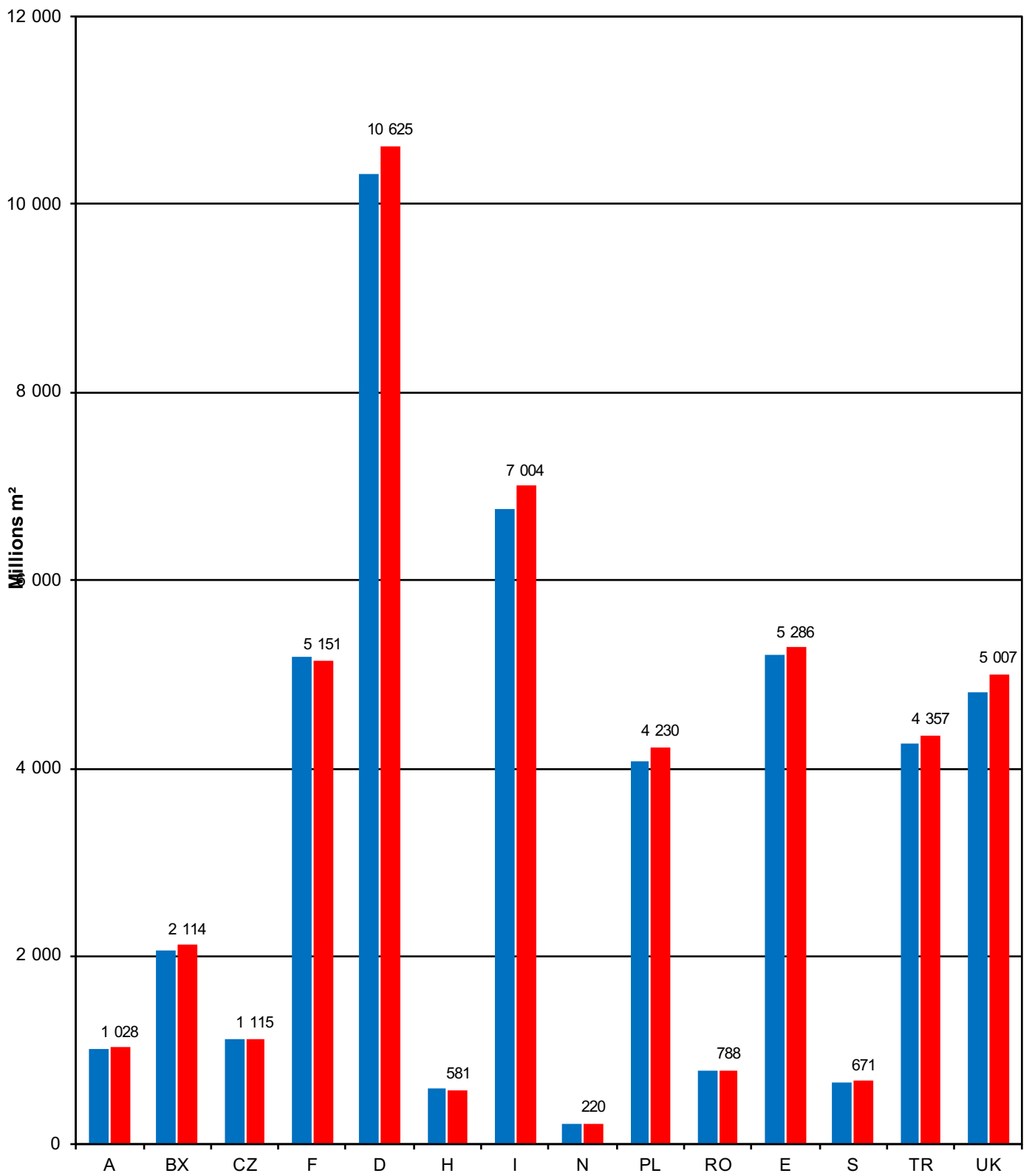
- | | |
|----------------------|-----------------------------|
| 1 Produce | 8 IT, Communication & Audio |
| 2 Fresh meat & fish | 9 Capital goods |
| 3 Dairy products | 10 Auxiliary goods |
| 4 Processed food | 11 Logistics |
| 5 Beverages | 12 Packaging for ecommerce |
| 6 FMCG | 13 Other paper products |
| 7 Long lasting goods | 14 Other excluding sheets |

Fluting Types in % of Total Shipments 2018

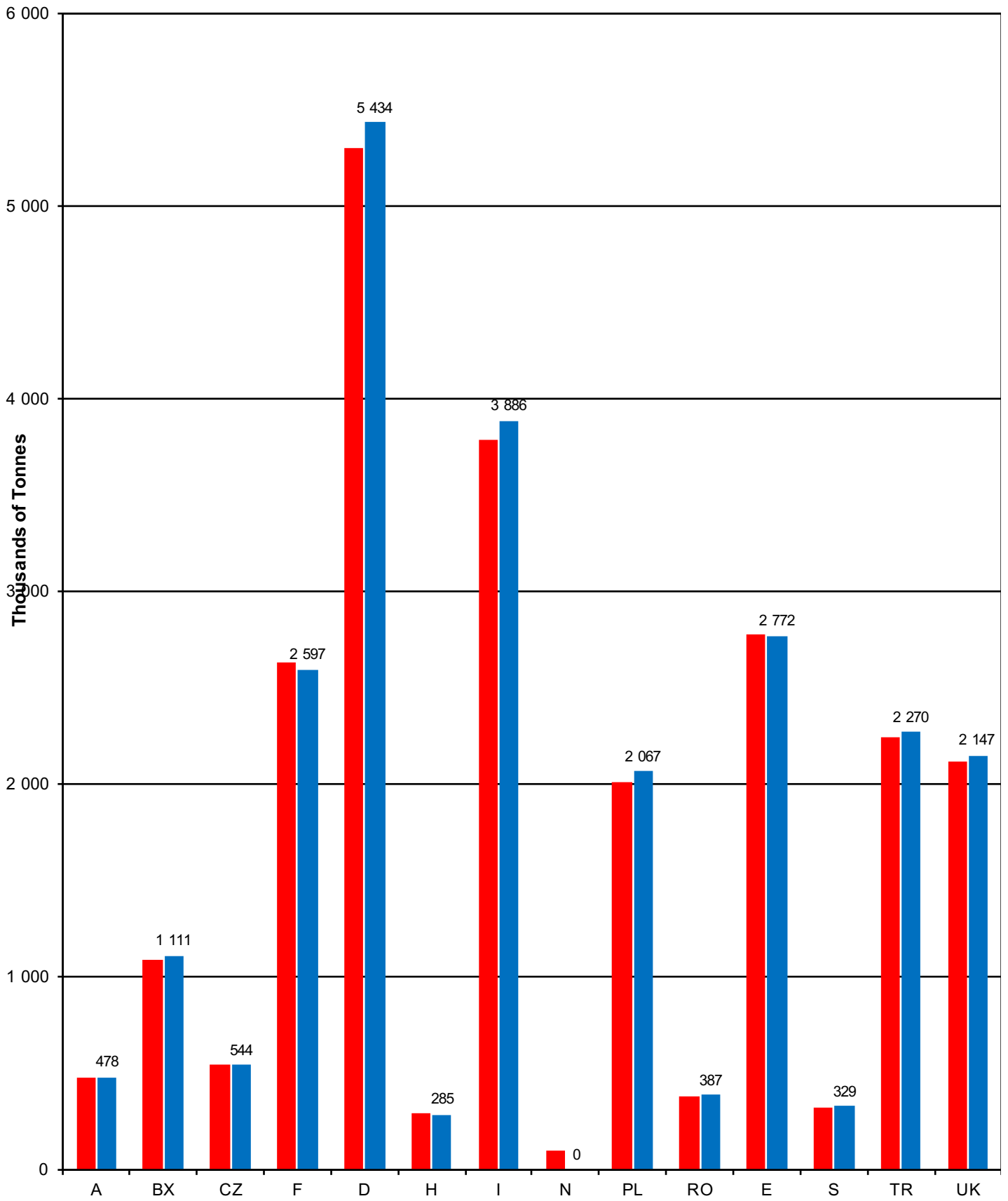
	B-flute	C-flute	BC-flute	E-flute	Micro-FI	Others
Austria	37,6	16,3	11,5	18,9	1,4	14,3
Benelux	47,7	12,8	11,0	5,3	0,4	22,8
Czech Republic	49,4	7,2	12,8	15,7	1,1	13,8
France	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	36,0	12,1	16,5	14,2	3,4	17,8
Hungary	39,1	16,6	16,8	16,5	0,6	10,4
Italy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Norway	46,0	28,0	7,0	14,0	1,0	4,0
Poland	42,7	16,1	10,6	14,0	0,0	16,5
Romania	35,0	24,0	22,0	12,0	0,0	7,0
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Turkey	18,2	19,0	54,0	5,5	0,4	2,9
United Kingdom	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Europe as weighted average	25,8	11,6	16,0	8,4	0,4	8,4

Countries	% of the Products by Number of Printing Colours										% Changes				
	2017					2018					2017 / 2018				
	0	1	2	3	> 3	0	1	2	3	> 3	0	1	2	3	> 3
Austria	35,9	35,9	10,2	7,8	10,2	35,0	35,0	10,3	8,4	11,3	-2,5	-2,5	1,0	7,7	10,8
Benelux	34,5	40,0	14,1	5,4	6,0	35,0	39,2	14,5	5,5	5,8	1,4	-2,0	2,8	1,9	-3,3
Czech Republic	29,8	40,4	15,0	6,3	8,5	26,9	43,9	16,9	6,7	5,6	-9,7	8,7	12,7	6,3	-34,1
France	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	26,8	34,6	15,3	10,3	13,0	27,7	33,9	15,1	9,4	14,0	3,4	-2,0	-1,3	-8,7	7,7
Hungary	43,5	29,5	11,8	6,6	8,6	42,5	29,8	11,7	7,0	9,0	-2,3	1,0	-0,8	6,1	4,7
Italy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Norway	22,4	23,3	20,8	19,3	14,2	22,0	24,0	20,0	20,0	14,0	-1,8	3,0	-3,8	3,6	-1,4
Poland	50,6	19,0	8,7	11,6	10,1	47,2	21,0	10,2	12,1	9,6	-6,7	10,5	17,2	4,3	-5,0
Romania	32,0	32,0	21,0	11,0	4,0	39,0	37,0	13,0	9,0	2,0	21,9	15,6	-38,1	-18,2	-50,0
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Turkey	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United Kingdom	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

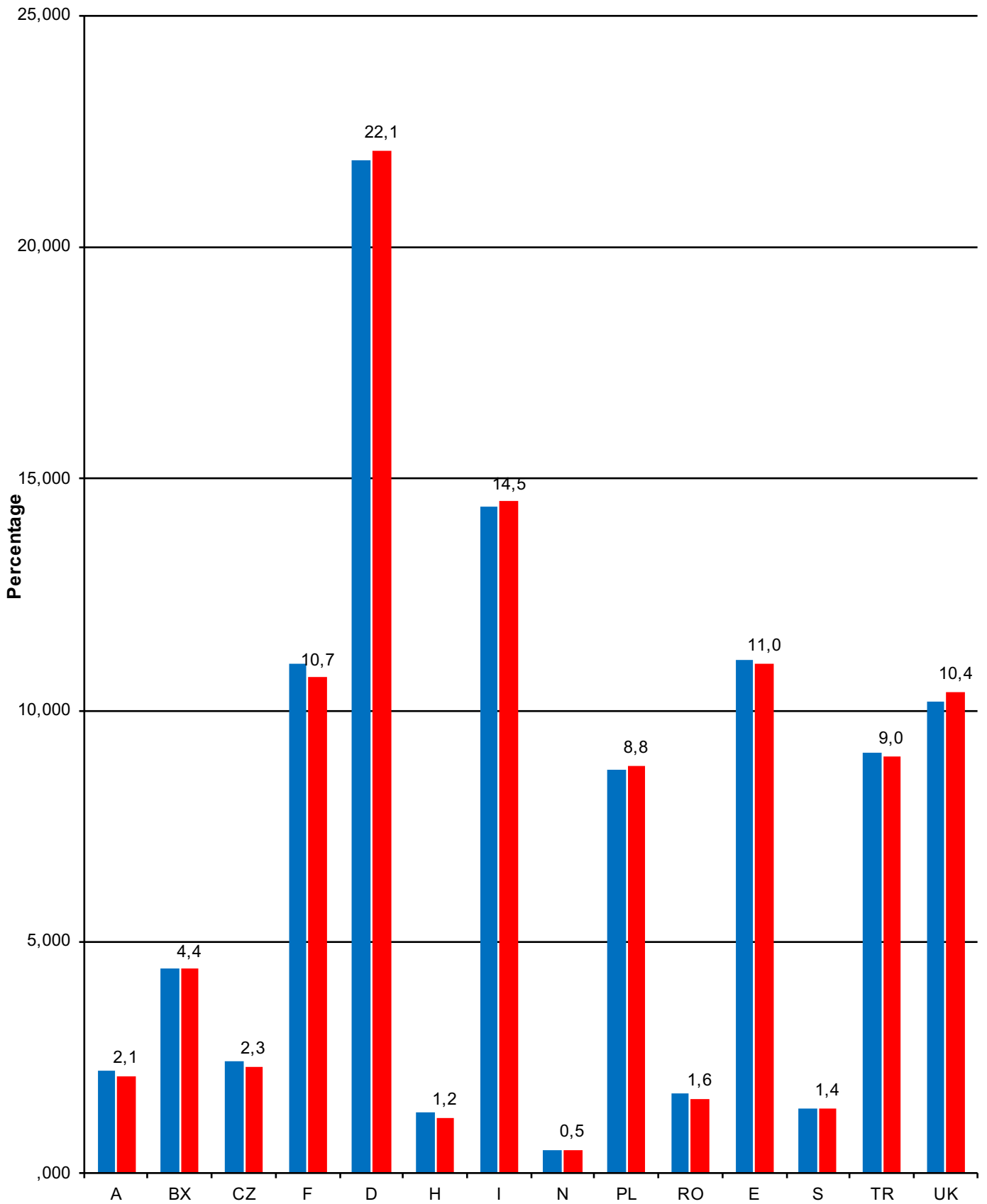
Shipments in Millions m²



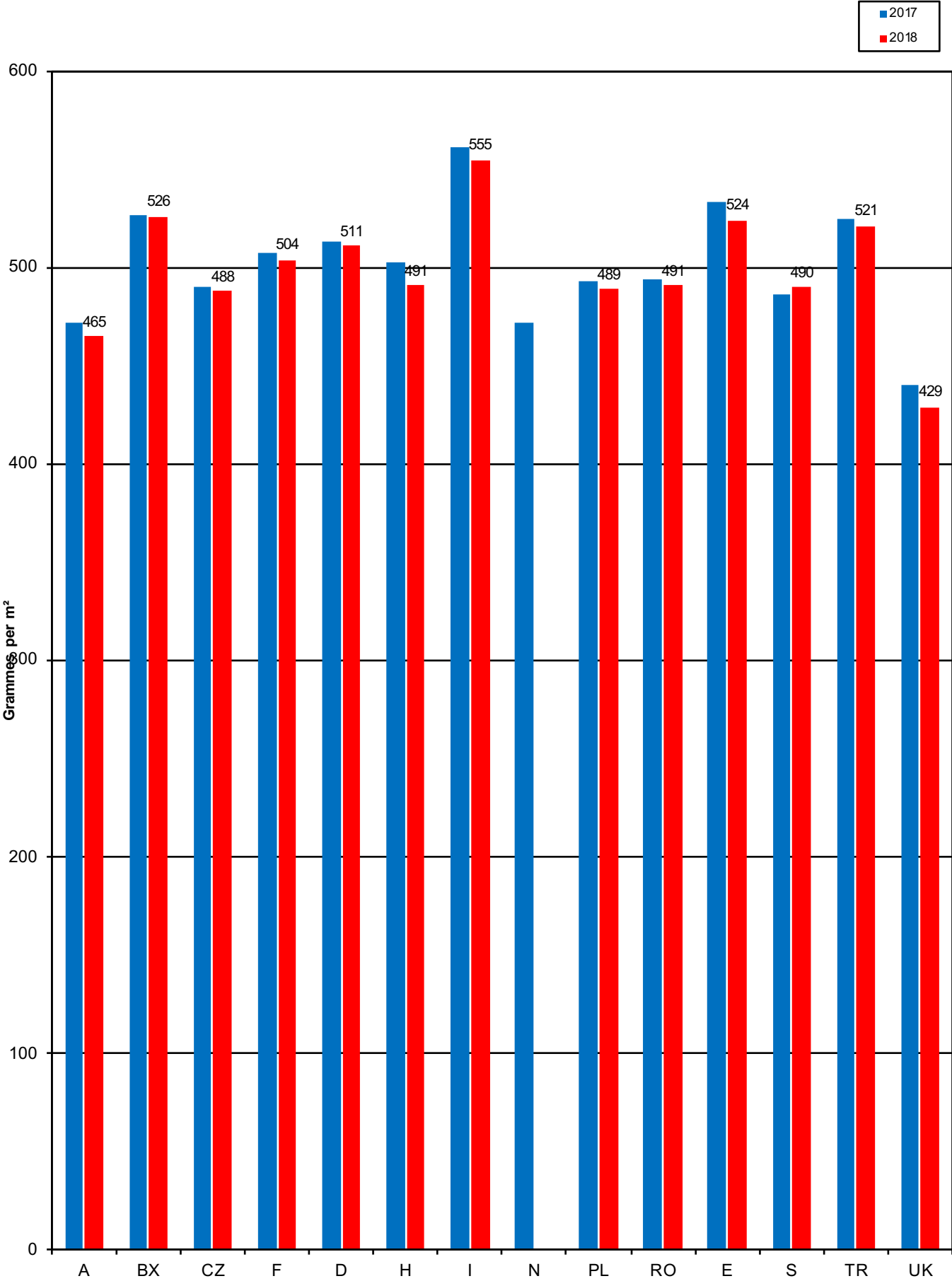
Shipments in '000 Tonnes



Relative Share of Total Shipments by Country (based on m²)



Average Weight of Corrugated Board by Country



Fluting Type

