



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-2

Chimneys – Requirements for metal chimneys. Part 2: Metal liners and connecting flue pipes

Manufacturer: **DINAK**
 Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS 3CE/CLV SW (MW)**

Product description: Single wall metal chimney

Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 033**



Designations according to EN 1856-2 standard:

0.1	Metal chimney	EN	T250	N1	W	V2-L50040	O
	1.4404/316L	1856-2					
Product description							
Standard number							
Temperature level							
Pressure level							
Condensate resistance (W: wet; D: dry)							
Corrosion resistance and inner wall material							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength
 Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
 0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes



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Designations according to EN 1856-2 standard:

0.1	Metal chimney 1.4521/444	EN 1856-2	T250	N1	W	V2-L99040	O
Product description							
Standard number							
Temperature level							
Pressure level							
Condensate resistance (W: wet; D: dry)							
Corrosion resistance and inner wall material							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength
Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
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Wet working conditions: Yes



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Designations according to EN 1856-2 standard:

0.1	Metal chimney	EN	T250	N1	W	V2-L99050	O
	1.4162/S32101	1856-2					
Product description							
Standard number							
Temperature level							
Pressure level							
Condensate resistance (W: wet; D: dry)							
Corrosion resistance and inner wall material							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength
 Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
 0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes



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Designations according to EN 1856-2 standard:

0.1	Metal chimney 1.4301/304	EN 1856-2	T250	N1	W	Vm- L20040	O
Product description							
Standard number							
Temperature level							
Pressure level							
Condensate resistance (W: wet; D: dry)							
Corrosion resistance and inner wall material							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength
Up to 58 m. See Annex

Flow resistance
Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

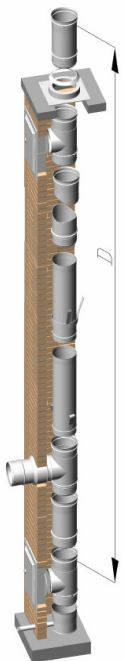
Thermal resistance
0 m²K/W at reference temperature

Mechanical resistance and stability
Tensile strength: up to 111m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes

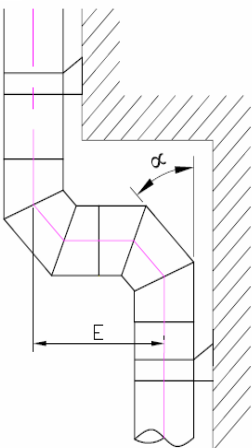
	Characteristics	Units	Ref. EN 1856-2	Values / Levels				Remarks
1.0	Nominal dimensions	mm	4, 5	100, 125, 130, 150, 160, 175, 180, 200, 250, 300				
2.0	Inner diameter (minimum)	mm	4, 5	98,4; 123,4; 128,4; 148,4; 158,4; 173,4; 178,4; 198,4; 248,4; 298,4				
3.0	Inner wall material		4, 5, 6.5.2					
	Quality			1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	
	Nominal thickness (minimum thickness)	mm		0.4 (0.34)	0.4 (0.34)	0.5 (0.44)	0.4 (0.34)	
	Description according to EN 1856-2			L50040	L99040	L99050	L20040	
4.0	Outer wall material		4, 5, 6.5.2	None				
5.0	Insulation		7.2	None				
6.0	Seals		7.2	None				
	Mechanical resistance and stability		6.1					RP: TÜV-A 1445-00/05
7.0	Compressive strength		6.1.1	Up to 58 m.				See Annex
8.0	Tensile strength		6.1.2	Up to 111 m.				See Annex
	Non vertical installation		6.1.3.1					RP: TÜV-A 1445-00/05
9.0	Maximum deflection			90° (horizontal installation)				See Annex
10.0	Maximum length of the slope			Up to 3m				See Annex
11.0	Gas tightness		6.3	Pressure level: N1				RP: TÜV-A 1774-00/08
12.0	Distance to combustible materials at T200	mm	6.2	Not apply (liner)				RP: TÜV-A 1774-00/08
13.0	Accidental human contact		6.4.2	Protection in the traffic area needed				RP: TÜV-A 1774-00/08
14.0	Thermal resistance	m ² K / W	6.4.3	0				RP: TÜV-A 1774-00/08
15.0	Condensate resistance		6.4.4, 6.4.5	Designation: W (wet)				RP: TÜV-A 1774-00/08
16.0	Resistance against rainwater penetration		6.4.6	Not apply (not insulated)				
	Flow resistance		6.4.7					
17.0	Mean value of roughness	mm	6.4.7.1	1 (according to EN 13384-1 standard)				
18.0	Coefficients of flow resistance for fittings		6.4.7.2	Values according to EN 13384-1 standard				
	Terminal							
19.0	Coefficient of flow resistance		6.4.7.3	Values according to EN 13384-1 standard				
20.0	Protection against rainwater		6.4.8.1	N.P.D.				
21.0	Aerodynamic behavior		6.4.8.2	N.P.D.				

	Characteristics	Units	Ref. EN 1856-2	Values / Levels				Remarks
22.0	Corrosion resistance		6.5.1	1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	RP: TÜV-A 1439-00/05
				V2	V2	V2	Vm	
23.0	Freeze / thaw resistance		6.5.3	Fulfilled according to EN 1856-2				
24.0	Dangerous substances		7.2	None				
25.0	Typical installation drawing		7.2					See Annex
26.0	Assembly instructions		7.2					See Annex
27.0	Flow direction		7.2	Installation with the Female at the top				
28.0	Storage instructions		7.2	No corrosive atmosphere				
29.0	Method of application of any sealant required		7.2	None				

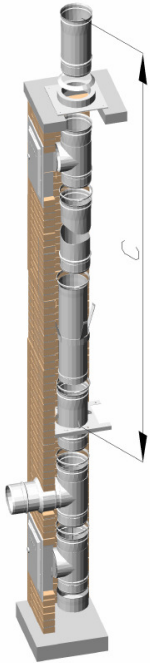


Material	COMPRESSIVE STRENGTH*	TENSILE STRENGTH
	Height – Size D (m)	Height (m)
	1.4301 / 304; 1.4404 / 316L; 1.4521 / 444; 1.4162 / S32101	
100	58	111
125	46	88
130	45	85
150	39	74
160	36	69
175	33	63
180	32	61
200	29	55
250	23	44
300	19	37

* In case a higher resistance is required, check with Dinak the possibility of installing a reinforced Tee



Material	NON VERTICAL INSTALLATION	
	Maximum deflection α (°)	Maximum length of the slope – Size E (m)
	1.4301 / 304; 1.4404 / 316L; 1.4521 / 444; 1.4162 / S32101	
100	90	3
125	90	3
130	90	3
150	90	3
160	90	3
175	90	3
180	90	3
200	90	3
250	90	3
300	90	3



COMPRESSIVE STRENGTH OF THE SUPPORT			
Height (m)			
Model	Adjustable base support closed 853 Size (C)	Adjustable base support extended 853 Size (C)	Adjustable floor support 856*
ND (mm)	100	302	157
	125	241	126
	130	232	121
	150	201	105
	160	188	98
	175	172	90
	180	167	87
	200	151	78
	250	120	63
	300	100	52

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support



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EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer:

DINAK

Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name:

**DINAGAS 3CE/CLV DW
(M1)**

Product description:

Double wall metal chimney with rock wool insulation of 30 to 37,5 mm thickness depending on sizes and models. Inner wall of 0,4 to 0,6 mm thickness depending on diameters.



Name and function of the responsible person:

Íñigo A. Canoa (General Manager)

Notified Body:

**TÜV Industrie Service
GmbH TÜV SÜD Gruppe
0036 CPD 90220 034**

Certificate number:

Designations according to EN 1856-1 standard:

	Metal chimney with seal 1.4404/316L	ND 80-300 ND 350-600	EN 1856-1 EN 1856-1	T200 T200	N1 N1	W W	V2-L50040 V2-L50050	O(00) O(00)
Product description	0.1							
Standard number	0.1							
Temperature level	0.1							
Pressure level	0.1							
Condensate resistance (W: wet; D: dry)	0.1							
Corrosion resistance and inner wall material	0.1							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)	0.1							

Compressive strength

Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance

Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance

From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability

Tensile strength: up to 68 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m; 3 m in Copper. See Annex
Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

Wet working conditions: Yes



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Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**
0036 CPD 90220 034

Certificate number:

Designations according to EN 1856-1 standard:

0.1	Metal chimney with seal 1.4521/444	ND 80-300 ND 350-600	EN 1856-1 EN 1856-1	T200 T200	N1 N1	W W	V2-L99040 V2-L99050	O(00) O(00)
Product description	[Line connects to Product description in table above]							
Standard number	[Line connects to EN 1856-1 in table above]							
Temperature level	[Line connects to T200 in table above]							
Pressure level	[Line connects to N1 in table above]							
Condensate resistance (W: wet; D: dry)	[Line connects to W in table above]							
Corrosion resistance and inner wall material	[Line connects to V2-L99040 in table above]							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)	[Line connects to O(00) in table above]							

Compressive strength
 Up to 21 m. See Annex
 Up to 15 m in Copper. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
 From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

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 Tensile strength: up to 68 m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
 Wind load resistance:
 Maximum length between supports up to 4 m; 3 m in Copper. See Annex
 Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

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Notified Body: **TÜV Industrie Service
GmbH TÜV SÜD Gruppe
0036 CPD 90220 034**

Certificate number:

Designations according to EN 1856-1 standard:

	0.1	Metal chimney with seal 1.4162/S32101	ND 80-600	EN 1856-1	T200	N1	W	V2-L99050	O(00)
Product description									
Standard number									
Temperature level									
Pressure level									
Condensate resistance (W: wet; D: dry)									
Corrosion resistance and inner wall material									
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)									

Compressive strength
Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance
Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability
Tensile strength: up to 68 m. See Annex
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Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

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Íñigo A. Canoa (General Manager)

Notified Body:

**TÜV Industrie Service
GmbH TÜV SÜD Gruppe
0036 CPD 90220 034**

Certificate number:

Designations according to EN 1856-1 standard::

	Metal chimney with seal	ND 80-300	EN 1856-1	T200	N1	W	Vm-L20040	O(00)
0.1	1.4301/304	ND 350-600	EN 1856-1	T200	N1	W	Vm-L20050	O(00)
Product description								
Standard number								
Temperature level								
Pressure level								
Condensate resistance (W: wet; D: dry)								
Corrosion resistance and inner wall material								
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)								

Compressive strength

Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance

Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance

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Mechanical resistance and stability

Tensile strength: up to 68 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m; 3 m in Copper. See Annex
Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

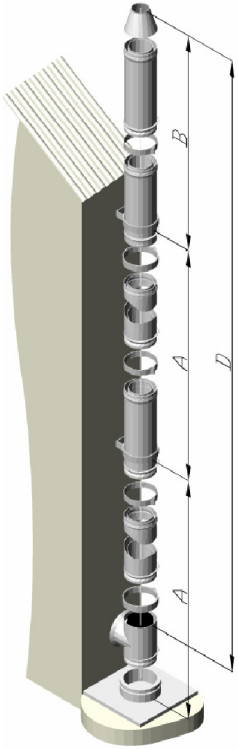
Wet working conditions: Yes



	Characteristics	Units	Ref. EN 1856-1	Values / Levels				Remarks
1.0	Nominal dimensions	mm	4, 5	80, 100, 130, 150, 180, 200, 250, 300, 350, 400, 450, 500, 550, 600				
2.0	Nominal diameter/outer diameter	mm		80/140, 100/160, 130/190, 150/210, 180/240, 200/260, 250/310, 300/360, 350/425, 400/475, 450/525, 500/575, 550/625, 600/675				
3.0	Inner diameter (minimum)	mm	4, 5	78,9; 99,7; 129,9; 149,8; 179,9; 200,0; 249,9; 299,9; 349,5; 399,5; 449,7; 499,7; 549,7; 599,7				
4.0	Inner wall material		4, 5, 6.5.2					
	Quality			1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	
	Nominal thickness (minimum thickness)	mm		ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	ND 80-600: 0,5 (0,44)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	
	Description according to EN 1856-1			ND 80-300: L50040 ND 350-600: L50050	ND 80-300: L99040 ND 350-600: L99050	ND 80-600: L99050	ND 80-300: L20040 ND 350-600: L20050	
5.0	Outer wall material		4, 5, 6.5.2					
	Quality			1.4301 / 304	1.4404 / 316L	Copper	Aluminized Steel	
	Nominal thickness (minimum thickness)	mm		ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44) ND 650-1.000: 0,6 (0,54)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44) ND 650-1.000: 0,6 (0,54)	ND 80-600: 0,5 (0,44)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	
	Description according to EN 1856-1			ND 80-300: L20040 ND 350-600: L20050 ND 650-1.000: L20060	ND 80-300: L50040 ND 350-600: L50050 ND 650-1.000: L50060	ND 80-600: L99050	ND 80-300: L99040 ND 350-600: L99050	
	Quality			1.4521 / 444	1.4509 / 441	1.4075 / 430		
	Nominal thickness (minimum thickness)	mm		ND 80-300: 0,4 (0,34) ND 350-600: 0,6 (0,54)	ND 80-300: 0,4 (0,34) ND 350-600: 0,6 (0,54)	ND 80-300: 0,4 (0,34) ND 350-600: 0,6 (0,54)		
	Description according to EN 1856-1			ND 80-300: L99040 ND 350-600: L99060	ND 80-300: L99040 ND 350-600: L99060	ND 80-300: L99040 ND 350-600: L99060		
6.0	Insulation		7.2					
	Type			MANTA SPINTEX 342 100 VR DN				
	Density	kg / m ³		100				
	Thermal conductivity (λ)	W / mK		< 0,06 a 200 °C				
	Working temperature	°C		700				
	Composition			SiO ₂ : 43-49%; Al ₂ O ₃ : 11-16%; Fe ₂ O ₃ : 3-9%; CaO: 18-29%; MgO: 8-13%; Na ₂ O: 1-3%; K ₂ O: 0,3-0,5%; MnO: 0,1-0,6%				

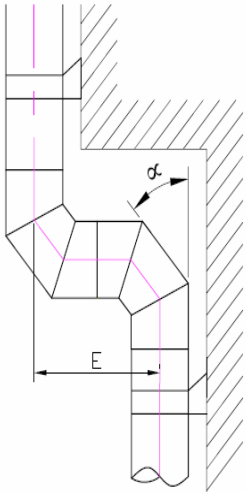
	Characteristics	Units	Ref. EN 1856-1	Values / Levels	Remarks
	Thickness	mm		ND 80-300: 30 ND 350-600: 37,5	
7.0	Seals		7.2		RP: IMQ-01SG00017
	Designation according to EN 14241-1 standard			EN 14241-1 T200 W 2 K2 I	
	Hardness	ShA		55-60	
	Density	g/cm ³		1.20 ± 0.1	
	Permanent deformation	%		≤ 25	
	Tensile strength	N/m ²		≥ 4.5	
	Lengthening strength to 100%	N/m ²		≥ 1.2	
	Nominal dimensions			80, 100, 130, 150, 180, 200, 250, 300, 350, 400, 450, 500, 550, 600	
	Mechanical resistance and stability		6.1		RP: TÜV-A 1445-00/05
8.0	Compressive strength		6.1.1	Up to 21 m. Copper up to 15 m	See Annex
9.0	Tensile strength		6.1.2	Up to 68 m.	See Annex
10.0	Wind load resistance		6.1.3.2	Maximum length from the last support: up to 3 m. Maximum length between supports: up to 4 m.	See Annex
	Non vertical installation		6.1.3.1		RP: TÜV-A 1445-00/05
11.0	Maximum deflection			90° (horizontal installation)	See Annex
12.0	Maximum length of the slope			Up to 3 m. Copper up to 1 m	See Annex
13.0	Gas tightness		6.3	Pressure level: N1	RP: TÜV-A 1423-00/05
14.0	Distance to combustible materials at T200	mm	6.2	0 (O00)	RP: TÜV-A 1423-00/05
15.0	Accidental human contact at T200		6.4.2	Protection in the traffic area needed	RP: TÜV-A 1423-00/05
16.0	Thermal resistance (@ 200 °C)	m ² K / W	6.4.3	ND 80-300: 0,288-0351 ND 350-600: 0,442-0,459	RP: TÜV-A 1423-00/05
17.0	Condensate resistance		6.4.4, 6.4.5	Designation: W (wet)	RP: TÜV-A 1423-00/05
18.0	Resistance against rainwater penetration		6.4.6	The chimney is resistant against rainwater penetration	RP: TÜV-A 1423-00/05
	Flow resistance		6.4.7		
19.0	Mean value of roughness	mm	6.4.7.1	1 (according to EN 13384-1 standard)	
20.0	Coefficients of flow resistance for fittings		6.4.7.2	Values according to EN 13384-1 standard	
	Terminal				
21.0	Coefficient of flow resistance		6.4.7.3	Values according to EN 13384-1 standard	
22.0	Protection against rainwater		6.4.8.1	N.P.D	

	Characteristics	Units	Ref. EN 1856-1	Values / Levels				Remarks
23.0	Aerodynamic behavior		6.4.8.2	N.P.D				
24.0	Corrosion resistance		6.5.1	1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	RP: TÜV-A 1439-00/05
				V2	V2	V2	Vm	
25.0	Freeze / thaw resistance		6.5.3	Fulfilled according to EN 1856-1				
26.0	Dangerous substances		7.2	None				
27.0	Typical installation drawing		7.2					See Annex
28.0	Installation instructions		7.2					See Annex
29.0	Flow direction		7.2	Installation with the outer Male at the top				
30.0	Storage instructions		7.2	No corrosive atmosphere				
31.0	Method of application of any sealant required		7.2	None				

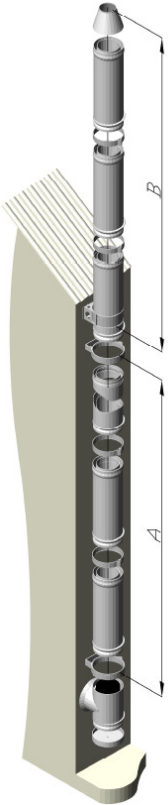


DINAK M1						
COMPRESSIVE STRENGTH*				TENSILE STRENGTH		
Height – Size D (m)				Height (m)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper
80	21	21	15	68	68	NPD**
100	18	18	13	58	58	NPD
130	15	15	11	48	48	NPD
150	13	13	9	43	43	NPD
160	13	13	9	41	41	NPD
180	11	11	8	37	37	NPD
200	10	10	7	34	34	NPD
250	9	9	6	28	28	NPD
300	7	7	5	24	24	NPD
350	6	6	5	16	16	NPD
400	6	6	5	14	14	NPD
450	5	5	5	13	13	NPD
500	4	4	4	11	11	NPD
550	4	4	4	10	10	NPD
600	4	4	4	10	10	NPD

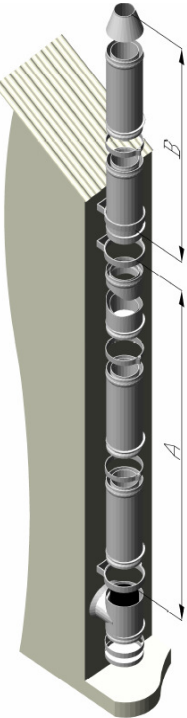
* In case a higher resistance is required, check with Dinak the possibility of installing a reinforced Tee
 ** NPD: No performance determined



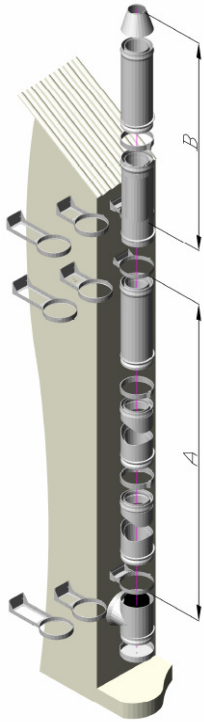
NON VERTICAL INSTALLATION						
MAX. DEFLECTION α (°)				MAX. LENGTH OF THE SLOPE – Size E (m)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	90	90	90	3	3	1
100	90	90	90	3	3	1
130	90	90	90	3	3	1
150	90	90	90	3	3	1
160	90	90	90	3	3	1
180	90	90	90	3	3	1
200	90	90	90	3	3	1
250	90	90	90	3	3	1
300	90	90	90	3	3	1
350	90	90	90	3	3	1
400	90	90	90	3	3	1
450	90	90	90	3	3	1
500	90	90	90	3	3	1
550	90	90	90	3	3	1
600	90	90	90	3	3	1



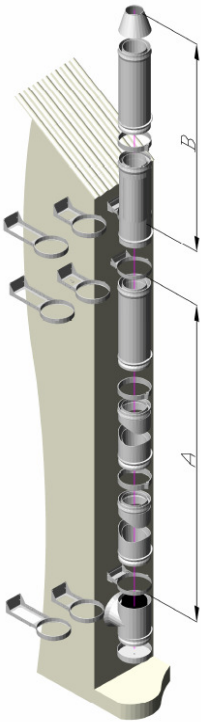
DINAK M1						
WIND LOAD RESISTANCE						
CONFIGURATION 1: WALL SUPPORTS 080 / SELF-STANDING SUPPORT 861						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80						
100						
130	4			2,5		
150	4			2,5		
160	4			2,5		
180	4			2,5		
200	4			2,5		
250	4			2,5		
300	4			2,5		
350	4			2,5		
400	4			2,5		
450	4			2,5		
500	4			2,5		
550	4			2,5		
600	4			2,5		



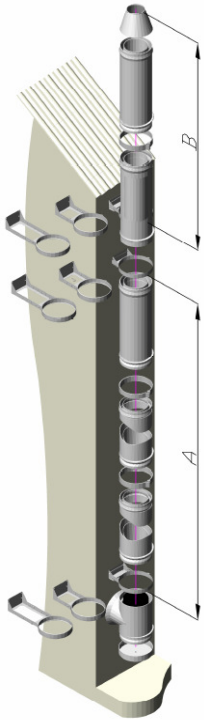
CONFIGURATION 2: WALL SUPPORTS 080 / FLAT WALL SUPPORT 086						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	4		3	1,5		1,5
100	4		3	1,5		1,5
130	4		3	1,5		1,5
150	4		3	1,5		1,5
160	4		3	1,5		1,5
180	4		3	1,5		1,5
200	4		3	1,5		1,5
250	4		3	1,5		1,5
300	4		3	1,5		1,5
350	4		3	1,5		1,5
400	4		3	1,5		1,5
450	4		3	1,5		1,5
500	4		3	1,5		1,5
550	4		3	1,5		1,5
600	4		3	1,5		1,5



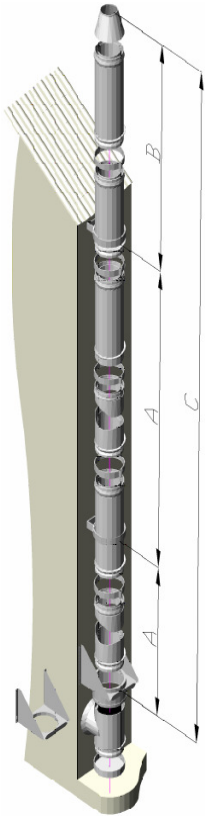
CONFIGURATION 3: ADJUSTABLE WALL SUPPORTS 083 / FLAT ADJ. WALL SUPPORTS 831						
Distance to wall (083/831) : 70-120 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	3	X	2	1,5	X	1,5
100	3		2	1,5		1,5
130	3		2	1,5		1,5
150	3		2	1,5		1,5
160	3		2	1,5		1,5
180	3		2	1,5		1,5
200	3		2	1,5		1,5
250						
300						
350						
400						
450						
500						
550						
600						



CONFIGURATION 4: SHORT CUTTABLE WALL SUPPORTS 835 / FLAT SHORT CUTTABLE WALL SUPPORTS 836						
Distance to wall (835/836) : 100-250 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	3	X	X	1,5	X	X
100	3			1,5		
130	3			1,5		
150	3			1,5		
160	3			1,5		
180	3			1,5		
200	3			1,5		
250	3			1,5		
300	3			1,5		
350	3			1,5		
400	3			1,5		
450	3			1,5		
500	3			1,5		
550	3			1,5		
600	3			1,5		

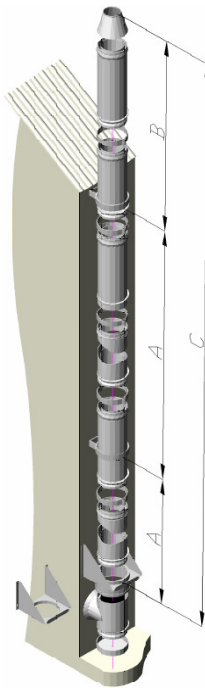


CONFIGURATION 5: LONG CUTTABLE WALL SUPPORTS 845 / FLAT LONG CUTTABLE WALL SUPPORTS 846						
Distance to wall (845/846) : 250-430 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
ND (mm)						
80	2			1,5		
100	2			1,5		
130	2			1,5		
150	2			1,5		
160	2			1,5		
180	2			1,5		
200	2			1,5		
250	2			1,5		
300	2			1,5		
350	2			1,5		
400	2			1,5		
450	2			1,5		
500	2			1,5		
550	2			1,5		
600	2			1,5		



DINAK M1			
COMPRESSIVE STRENGTH OF THE SUPPORT			
MAX. LOAD (m)			
Outer material	1.4301 / 304 ; 1.4404 / 316L 1.4521 / 444; 1.4509 / 441 1.4075 / 430; Aluminized steel		
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 856*
80	85	46	44
100	73	39	38
130	60	32	31
150	53	29	28
160	51	27	26
180	46	25	24
200	42	22	22
250	35	19	18
300	30	16	15
350	25	17	16
400	22	15	15
450	20	13	13
500	18	12	12
550	16	11	11
600	15	10	10

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support



MAX. LOAD (m)			
Outer material	Copper		
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 856*
80	74	40	38
100	63	34	33
130	52	28	27
150	47	25	24
160	44	24	23
180	40	21	21
200	37	20	19
250	31	16	16
300	26	14	13
350	24	16	16
400	21	14	14
450	19	13	12
500	17	12	11
550	16	11	10
600	14	10	9

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer:

DINAK

Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name:

**DINAGAS 3CE+/CLV+ DW
(M2)**

Product description:

Double wall metal chimney with rock wool insulation of 30 to 37,5 mm thickness depending on sizes and models. Inner wall of 0,4 to 0,6 mm thickness depending on diameters.



Name and function of the responsible person:

Íñigo A. Canoa (General Manager)

Notified Body:

**TÜV Industrie Service
GmbH TÜV SÜD Gruppe
0036 CPD 90220 029**

Certificate number:

Designations according to EN 1856-1 standard:

	Metal chimney with seal 1.4404/316L	ND 80-300	ND 350-600	EN 1856-1	EN 1856-1	T200	T200	P1	P1	W	W	V2-L50040	V2-L50050	O(00)	O(00)
Product description															
Standard number															
Temperature level															
Pressure level															
Condensate resistance (W: wet; D: dry)															
Corrosion resistance and inner wall material															
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)															

Compressive strength

Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance

Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance

From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability

Tensile strength: up to 68 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m; 3 m in Copper. See Annex
Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer:

DINAK

Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name:

DINAGAS 3CE+/CLV+ DW (M2)

Product description:

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Name and function of the responsible person:

Íñigo A. Canoa (General Manager)

Notified Body:

TÜV Industrie Service GmbH TÜV SÜD Gruppe
0036 CPD 90220 029

Certificate number:

Designations according to EN 1856-1 standard:

0.1	Metal chimney with seal 1.4521/444	ND 80-300	EN 1856-1	T200	P1	W	V2-L99040	O(00)
		ND 350-600	EN 1856-1	T200	P1	W	V2-L99050	O(00)
Product description								
Standard number								
Temperature level								
Pressure level								
Condensate resistance (W: wet; D: dry)								
Corrosion resistance and inner wall material								
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)								

Compressive strength
Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance
Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability
Tensile strength: up to 68 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m; 3 m in Copper. See Annex
Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer:

DINAK

Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name:

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(M2)**

Product description:

Double wall metal chimney with rock wool insulation of 30 to 37,5 mm thickness depending on sizes and models. Inner wall of 0,4 to 0,6 mm thickness depending on diameters.



Name and function of the responsible person:

Íñigo A. Canoa (General Manager)

Notified Body:

**TÜV Industrie Service
GmbH TÜV SÜD Gruppe
0036 CPD 90220 029**

Certificate number:

Designations according to EN 1856-1 standard:

	Metal chimney with seal	ND	EN	T200	P1	W	V2-L99050	O(00)
	0.1	80-600	1856-1					
	1.4162/S32101							
Product description								
Standard number								
Temperature level								
Pressure level								
Condensate resistance (W: wet; D: dry)								
Corrosion resistance and inner wall material								
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)								

Compressive strength

Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance

Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance

From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability

Tensile strength: up to 68 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m; 3 m in Copper. See Annex
Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer:

DINAK

Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name:

**DINAGAS 3CE+/CLV+ DW
(M2)**

Product description:

Double wall metal chimney with rock wool insulation of 30 to 37,5 mm thickness depending on sizes and models. Inner wall of 0,4 to 0,6 mm thickness depending on diameters.



Name and function of the responsible person:

Íñigo A. Canoa (General Manager)

Notified Body:

**TÜV Industrie Service
GmbH TÜV SÜD Gruppe
0036 CPD 90220 029**

Certificate number:

Designations according to EN 1856-1 standard::

0.1	Metal chimney with seal	ND 80-300	EN 1856-1	T200	P1	W	Vm-L20040	O(00)
	1.4301/304	ND 350-600	EN 1856-1	T200	P1	W	Vm-L20050	O(00)
	Product description							
	Standard number							
	Temperature level							
	Pressure level							
	Condensate resistance (W: wet; D: dry)							
	Corrosion resistance and inner wall material							
	Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength

Up to 21 m. See Annex
Up to 15 m in Copper. See Annex

Flow resistance

Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance

From 0,288 to 0,459 m²K/W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability

Tensile strength: up to 68 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m; 3 m in Copper. See Annex
Maximum length from the last support up to 3 m; 1,5 m in Copper. See Annex

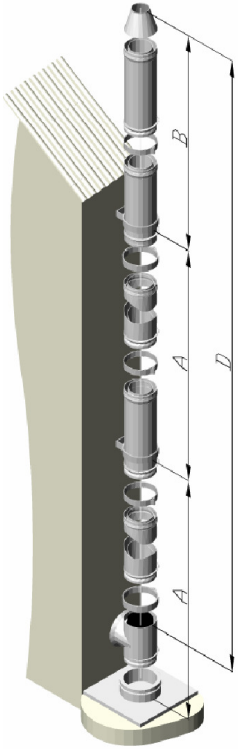
Wet working conditions: Yes



	Characteristics	Units	Ref. EN 1856-1	Values / Levels				Remarks
1.0	Nominal dimensions	mm	4, 5	80, 100, 130, 150, 180, 200, 250, 300, 350, 400, 450, 500, 550, 600				
2.0	Nominal diameter/outer diameter	mm		80/140, 100/160, 130/190, 150/210, 180/240, 200/260, 250/310, 300/360, 350/425, 400/475, 450/525, 500/575, 550/625, 600/675				
3.0	Inner diameter (minimum)	mm	4, 5	78,9; 99,7; 129,9; 149,8; 179,9; 200,0; 249,9; 299,9; 349,5; 399,5; 449,7; 499,7; 549,7; 599,7				
4.0	Inner wall material		4, 5, 6.5.2					
	Quality			1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	
	Nominal thickness (minimum thickness)	mm		ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	ND 80-600: 0,5 (0,44)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	
	Description according to EN 1856-1			ND 80-300: L50040 ND 350-600: L50050	ND 80-300: L99040 ND 350-600: L99050	ND 80-600: L99050	ND 80-300: L20040 ND 350-600: L20050	
5.0	Outer wall material		4, 5, 6.5.2					
	Quality			1.4301 / 304	1.4404 / 316L	Copper	Aluminized Steel	
	Nominal thickness (minimum thickness)	mm		ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44) ND 650-1.000: 0,6 (0,54)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44) ND 650-1.000: 0,6 (0,54)	ND 80-600: 0,5 (0,44)	ND 80-300: 0,4 (0,34) ND 350-600: 0,5 (0,44)	
	Description according to EN 1856-1			ND 80-300: L20040 ND 350-600: L20050 ND 650-1.000: L20060	ND 80-300: L50040 ND 350-600: L50050 ND 650-1.000: L50060	ND 80-600: L99050	ND 80-300: L99040 ND 350-600: L99050	
	Quality			1.4521 / 444	1.4509 / 441	1.4075 / 430		
	Nominal thickness (minimum thickness)	mm		ND 80-300: 0,4 (0,34) ND 350-600: 0,6 (0,54)	ND 80-300: 0,4 (0,34) ND 350-600: 0,6 (0,54)	ND 80-300: 0,4 (0,34) ND 350-600: 0,6 (0,54)		
	Description according to EN 1856-1			ND 80-300: L99040 ND 350-600: L99060	ND 80-300: L99040 ND 350-600: L99060	ND 80-300: L99040 ND 350-600: L99060		
6.0	Insulation		7.2					
	Type			MANTA SPINTEX 342 100 VR DN				
	Density	kg / m ³		100				
	Thermal conductivity (λ)	W / mK		< 0,06 a 200 °C				
	Working temperature	°C		700				
	Composition			SiO ₂ : 43-49%; Al ₂ O ₃ : 11-16%; Fe ₂ O ₃ : 3-9%; CaO: 18-29%; MgO: 8-13%; Na ₂ O: 1-3%; K ₂ O: 0,3-0,5%; MnO: 0,1-0,6%				

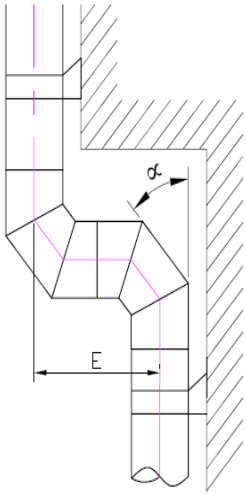
	Characteristics	Units	Ref. EN 1856-1	Values / Levels	Remarks
	Thickness	mm		ND 80-300: 30 ND 350-600: 37,5	
7.0	Seals		7.2		RP: IMQ-01SG00017
	Designation according to EN 14241-1 standard			EN 14241-1 T200 W 2 K2 I	
	Hardness	ShA		55-60	
	Density	g/cm ³		1.20 ± 0.1	
	Permanent deformation	%		≤ 25	
	Tensile strength	N/m ²		≥ 4.5	
	Lengthening strength to 100%	N/m ²		≥ 1.2	
	Nominal dimensions			80, 100, 130, 150, 180, 200, 250, 300, 350, 400, 450, 500, 550, 600	
	Mechanical resistance and stability		6.1		RP: TÜV-A 1445-00/05
8.0	Compressive strength		6.1.1	Up to 21 m. Copper up to 15 m	See Annex
9.0	Tensile strength		6.1.2	Up to 68 m.	See Annex
10.0	Wind load resistance		6.1.3.2	Maximum length from the last support: up to 3 m. Maximum length between supports: up to 4 m.	See Annex
	Non vertical installation		6.1.3.1		RP: TÜV-A 1445-00/05
11.0	Maximum deflection			90° (horizontal installation)	See Annex
12.0	Maximum length of the slope			Up to 3 m. Copper up to 1 m	See Annex
13.0	Gas tightness		6.3	Pressure level: P1	RP: TÜV-A 1423-00/05
14.0	Distance to combustible materials at T200	mm	6.2	0 (O00)	RP: TÜV-A 1423-00/05
15.0	Accidental human contact at T200		6.4.2	Protection in the traffic area needed	RP: TÜV-A 1423-00/05
16.0	Thermal resistance (@ 200 °C)	m ² K / W	6.4.3	ND 80-300: 0,288-0351 ND 350-600: 0,442-0,459	RP: TÜV-A 1423-00/05
17.0	Condensate resistance		6.4.4, 6.4.5	Designation: W (wet)	RP: TÜV-A 1423-00/05
18.0	Resistance against rainwater penetration		6.4.6	The chimney is resistant against rainwater penetration	RP: TÜV-A 1423-00/05
	Flow resistance		6.4.7		
19.0	Mean value of roughness	mm	6.4.7.1	1 (according to EN 13384-1 standard)	
20.0	Coefficients of flow resistance for fittings		6.4.7.2	Values according to EN 13384-1 standard	
	Terminal				
21.0	Coefficient of flow resistance		6.4.7.3	Values according to EN 13384-1 standard	
22.0	Protection against rainwater		6.4.8.1	N.P.D	

	Characteristics	Units	Ref. EN 1856-1	Values / Levels				Remarks
23.0	Aerodynamic behavior		6.4.8.2	N.P.D				
24.0	Corrosion resistance		6.5.1	1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	RP: TÜV-A 1439-00/05
				V2	V2	V2	Vm	
25.0	Freeze / thaw resistance		6.5.3	Fulfilled according to EN 1856-1				
26.0	Dangerous substances		7.2	None				
27.0	Typical installation drawing		7.2					See Annex
28.0	Installation instructions		7.2					See Annex
29.0	Flow direction		7.2	Installation with the outer Male at the top				
30.0	Storage instructions		7.2	No corrosive atmosphere				
31.0	Method of application of any sealant required		7.2	None				

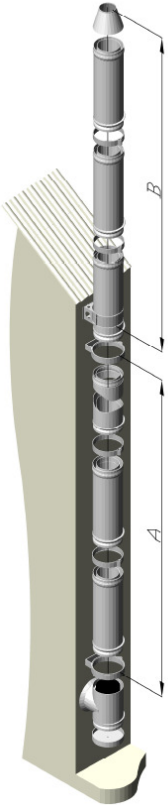


DINAK M2						
Outer material	COMPRESSIVE STRENGTH*			TENSILE STRENGTH		
	Height – Size D (m)			Height (m)		
	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper
80	21	21	15	68	68	NPD**
100	18	18	13	58	58	NPD
130	15	15	11	48	48	NPD
150	13	13	9	43	43	NPD
160	13	13	9	41	41	NPD
180	11	11	8	37	37	NPD
200	10	10	7	34	34	NPD
250	9	9	6	28	28	NPD
300	7	7	5	24	24	NPD
350	6	6	5	16	16	NPD
400	6	6	5	14	14	NPD
450	5	5	5	13	13	NPD
500	4	4	4	11	11	NPD
550	4	4	4	10	10	NPD
600	4	4	4	10	10	NPD

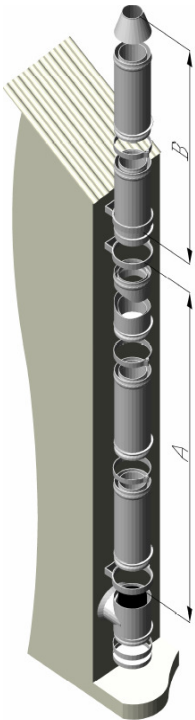
* In case a higher resistance is required, check with Dinak the possibility of installing a reinforced Tee
 ** NPD: No performance determined



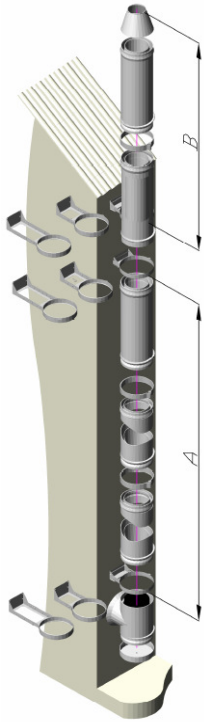
NON VERTICAL INSTALLATION						
Outer material	MAX. DEFLECTION α (°)			MAX. LENGTH OF THE SLOPE – Size E (m)		
	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	90	90	90	3	3	1
100	90	90	90	3	3	1
130	90	90	90	3	3	1
150	90	90	90	3	3	1
160	90	90	90	3	3	1
180	90	90	90	3	3	1
200	90	90	90	3	3	1
250	90	90	90	3	3	1
300	90	90	90	3	3	1
350	90	90	90	3	3	1
400	90	90	90	3	3	1
450	90	90	90	3	3	1
500	90	90	90	3	3	1
550	90	90	90	3	3	1
600	90	90	90	3	3	1



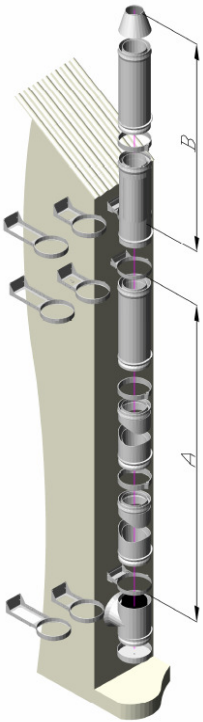
DINAK M2						
WIND LOAD RESISTANCE						
CONFIGURATION 1: WALL SUPPORTS 080 / SELF-STANDING SUPPORT 861						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
ND (mm) 80						
100						
130	4			2,5		
150	4			2,5		
160	4			2,5		
180	4			2,5		
200	4			2,5		
250	4			2,5		
300	4			2,5		
350	4			2,5		
400	4			2,5		
450	4			2,5		
500	4			2,5		
550	4			2,5		
600	4			2,5		



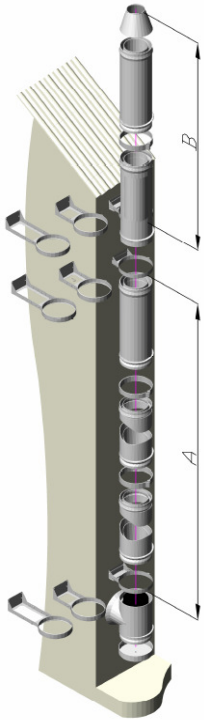
CONFIGURATION 2: WALL SUPPORTS 080 / FLAT WALL SUPPORT 086						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
ND (mm) 80	4		3	1,5		1,5
100	4		3	1,5		1,5
130	4		3	1,5		1,5
150	4		3	1,5		1,5
160	4		3	1,5		1,5
180	4		3	1,5		1,5
200	4		3	1,5		1,5
250	4		3	1,5		1,5
300	4		3	1,5		1,5
350	4		3	1,5		1,5
400	4		3	1,5		1,5
450	4		3	1,5		1,5
500	4		3	1,5		1,5
550	4		3	1,5		1,5
600	4		3	1,5		1,5



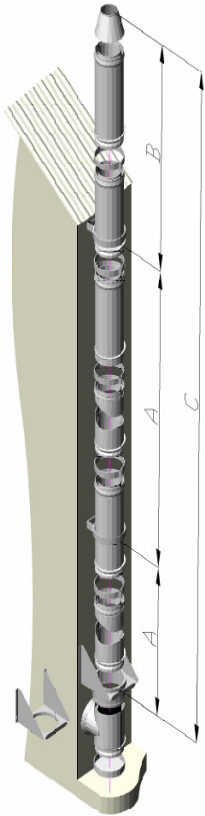
CONFIGURATION 3: ADJUSTABLE WALL SUPPORTS 083 / FLAT ADJ. WALL SUPPORTS 831						
Distance to wall (083/831) : 70-120 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	3	X	2	1,5	X	1,5
100	3		2	1,5		1,5
130	3		2	1,5		1,5
150	3		2	1,5		1,5
160	3		2	1,5		1,5
180	3		2	1,5		1,5
200	3		2	1,5		1,5
250						
300						
350						
400						
450						
500						
550						
600						



CONFIGURATION 4: SHORT CUTTABLE WALL SUPPORTS 835 / FLAT SHORT CUTTABLE WALL SUPPORTS 836						
Distance to wall (835/836) : 100-250 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	3	X	X	1,5	X	X
100	3			1,5		
130	3			1,5		
150	3			1,5		
160	3			1,5		
180	3			1,5		
200	3			1,5		
250	3			1,5		
300	3			1,5		
350	3			1,5		
400	3			1,5		
450	3			1,5		
500	3			1,5		
550	3			1,5		
600	3			1,5		

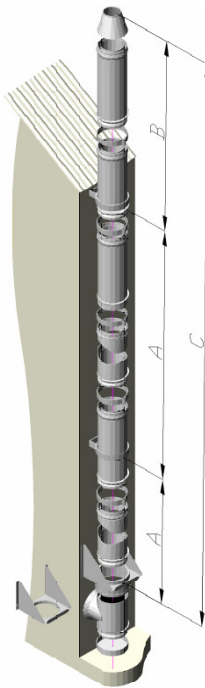


CONFIGURATION 5: LONG CUTTABLE WALL SUPPORTS 845 / FLAT LONG CUTTABLE WALL SUPPORTS 846						
Distance to wall (845/846) : 250-430 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Aluminized steel 1.4075 / 430	Copper
80	2	X	X	1,5	X	X
100	2			1,5		
130	2			1,5		
150	2			1,5		
160	2			1,5		
180	2			1,5		
200	2			1,5		
250	2			1,5		
300	2			1,5		
350	2			1,5		
400	2			1,5		
450	2			1,5		
500	2			1,5		
550	2			1,5		
600	2			1,5		



DINAK M2			
COMPRESSIVE STRENGTH OF THE SUPPORT			
MAX. LOAD (m)			
Outer material	1.4301 / 304 ; 1.4404 / 316L 1.4521 / 444; 1.4509 / 441 1.4075 / 430; Aluminized steel		
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 856*
80	85	46	44
100	73	39	38
130	60	32	31
150	53	29	28
160	51	27	26
180	46	25	24
200	42	22	22
250	35	19	18
300	30	16	15
350	25	17	16
400	22	15	15
450	20	13	13
500	18	12	12
550	16	11	11
600	15	10	10

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support



MAX. LOAD (m)			
Outer material	Copper		
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 856*
80	74	40	38
100	63	34	33
130	52	28	27
150	47	25	24
160	44	24	23
180	40	21	21
200	37	20	19
250	31	16	16
300	26	14	13
350	24	16	16
400	21	14	14
450	19	13	12
500	17	12	11
550	16	11	10
600	14	10	9

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-2

Chimneys – Requirements for metal chimneys. Part 2: Metal liners and connecting flue pipes

Manufacturer: **DINAK**
 Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS 3CE+/CLV+ SW (MW2)**

Product description: Single wall metal chimney

Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 032**



Designations according to EN 1856-2 standard:

0.1	Metal chimney with seal1.4404/316L	EN 1856-2	T200	P1	W	V2-L50040	O
Product description							
Standard number							
Temperature level							
Pressure level							
Condensate resistance (W: wet; D: dry)							
Corrosion resistance and inner wall material							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength
 Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
 0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-2

Chimneys – Requirements for metal chimneys. Part 2: Metal liners and connecting flue pipes

Manufacturer: **DINAK**
 Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS 3CE+/CLV+ SW (MW2)**

Product description: Single wall metal chimney

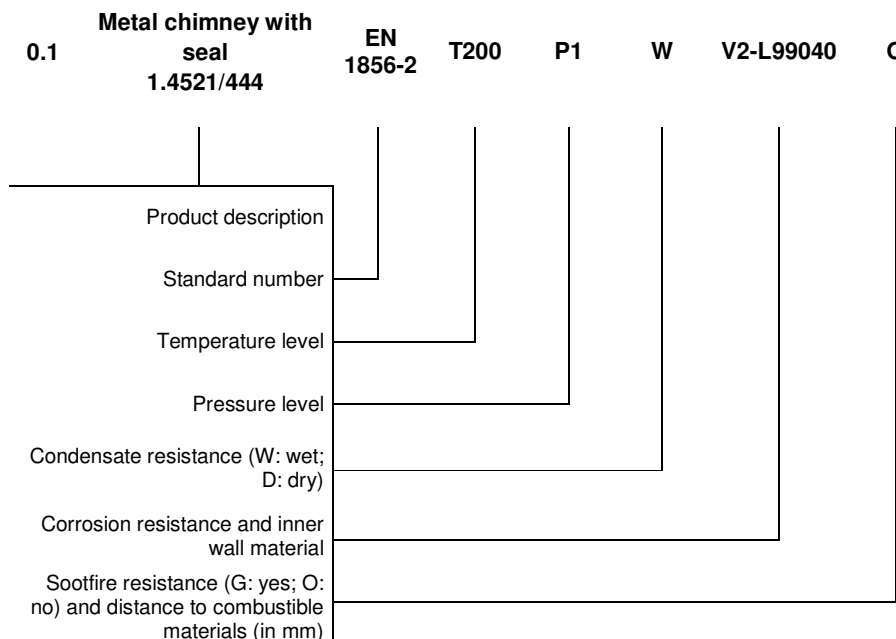
Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 032**



Designations according to EN 1856-2 standard:



Compressive strength
 Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
 0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-2

Chimneys – Requirements for metal chimneys. Part 2: Metal liners and connecting flue pipes

Manufacturer: **DINAK**
 Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS 3CE+/CLV+ SW (MW2)**

Product description: Single wall metal chimney

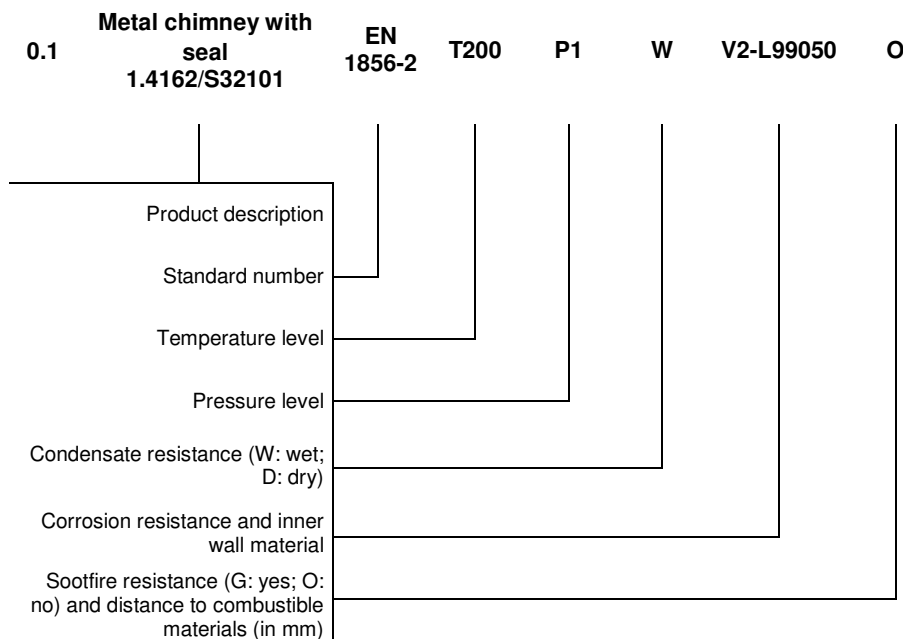
Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 032**



Designations according to EN 1856-2 standard:



Compressive strength
Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-2

Chimneys – Requirements for metal chimneys. Part 2: Metal liners and connecting flue pipes

Manufacturer: **DINAK**
 Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS 3CE+/CLV+ SW (MW2)**

Product description: Single wall metal chimney

Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 032**



Designations according to EN 1856-2 standard:

	0.1	Metal chimney with seal 1.4301/304	EN 1856-2	T200	P1	W	Vm-L20040	O
Product description								
Standard number								
Temperature level								
Pressure level								
Condensate resistance (W: wet; D: dry)								
Corrosion resistance and inner wall material								
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)								

Compressive strength
 Up to 58 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

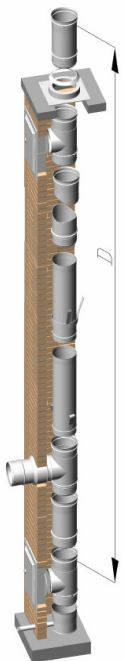
Thermal resistance
 0 m²K/W at reference temperature

Mechanical resistance and stability
 Tensile strength: up to 111m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m. See Annex

Wet working conditions: Yes

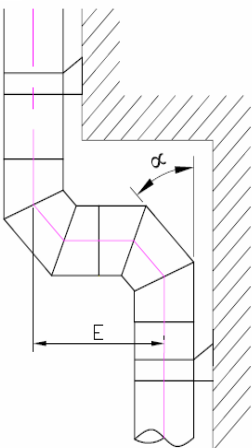
	Characteristics	Units	Ref. EN 1856-2	Values / Levels				Remarks
1.0	Nominal dimensions	mm	4, 5	100, 125, 130, 150, 160, 175, 180, 200, 250, 300				
2.0	Inner diameter (minimum)	mm	4, 5	98,4; 123,4; 128,4; 148,4; 158,4; 173,4; 178,4; 198,4; 248,4; 298,4				
3.0	Inner wall material		4, 5, 6.5.2					
	Quality			1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	
	Nominal thickness (minimum thickness)	mm		0.4 (0.34)	0.4 (0.34)	0.5 (0.44)	0.4 (0.34)	
	Description according to EN 1856-2			L50040	L99040	L99050	L20040	
4.0	Outer wall material		4, 5, 6.5.2	None				
5.0	Insulation		7.2	None				
6.0	Seals		7.2					RP: IMQ-01SG00017
	Designation according to EN 14241-1 standard			EN 14241-1 T200 W 2 K2 I				
	Hardness	ShA		55-60				
	Density	g/cm ³		1.20 ± 0.1				
	Permanent deformation	%		≤ 25				
	Tensile strength	N/mm ²		≥ 4.5				
	Lengthening strength to 100%	N/mm ²		≥ 1.2				
	Nominal dimensions			100, 125, 130, 150, 160, 175, 180, 200, 250, 300				
	Mechanical resistance and stability		6.1					RP: TÜV-A 1445-00/05
7.0	Compressive strength		6.1.1	Up to 58 m.				See Annex
8.0	Tensile strength		6.1.2	Up to 111 m.				See Annex
	Non vertical installation		6.1.3.1					RP: TÜV-A 1445-00/05
9.0	Maximum deflection			90° (horizontal installation)				See Annex
10.0	Maximum length of the slope			Up to 3m				See Annex
11.0	Gas tightness		6.3	Pressure level: P1				RP: TÜV-A 1774-00/08
12.0	Distance to combustible materials at T200	mm	6.2	Not apply (liner)				RP: TÜV-A 1774-00/08
13.0	Accidental human contact		6.4.2	Protection in the traffic area needed				RP: TÜV-A 1774-00/08
14.0	Thermal resistance	m ² K / W	6.4.3	0				RP: TÜV-A 1774-00/08
15.0	Condensate resistance		6.4.4, 6.4.5	Designation: W (wet)				RP: TÜV-A 1774-00/08
16.0	Resistance against rainwater penetration		6.4.6	Not apply (not insulated)				
	Flow resistance		6.4.7					

	Characteristics	Units	Ref. EN 1856-2	Values / Levels				Remarks
17.0	Mean value of roughness	mm	6.4.7.1	1 (according to EN 13384-1 standard)				
18.0	Coefficients of flow resistance for fittings		6.4.7.2	Values according to EN 13384-1 standard				
	Terminal							
19.0	Coefficient of flow resistance		6.4.7.3	Values according to EN 13384-1 standard				
20.0	Protection against rainwater		6.4.8.1	N.P.D.				
21.0	Aerodynamic behavior		6.4.8.2	N.P.D.				
22.0	Corrosion resistance		6.5.1	1.4404 / 316L V2	1.4521 / 444 V2	1.4162 / S32101 V2	1.4301 / 304 Vm	RP: TÜV-A 1439-00/05
23.0	Freeze / thaw resistance		6.5.3	Fulfilled according to EN 1856-2				
24.0	Dangerous substances		7.2	None				
25.0	Typical installation drawing		7.2					See Annex
26.0	Assembly instructions		7.2					See Annex
27.0	Flow direction		7.2	Installation with the Female at the top				
28.0	Storage instructions		7.2	No corrosive atmosphere				
29.0	Method of application of any sealant required		7.2	None				

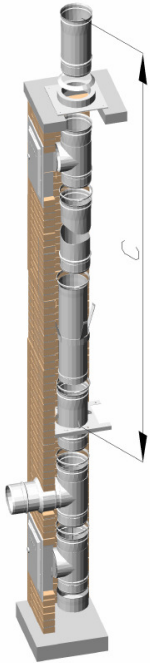


Material	COMPRESSIVE STRENGTH*	TENSILE STRENGTH
	Height – Size D (m)	Height (m)
	1.4301 /304; 1.4404 / 316L; 1.4521 / 444; 1.4162 / S32101	
100	58	111
125	46	88
130	45	85
150	39	74
160	36	69
175	33	63
180	32	61
200	29	55
250	23	44
300	19	37

* In case a higher resistance is required, check with Dinak the possibility of installing a reinforced Tee



Material	NON VERTICAL INSTALLATION	
	Maximum deflection α (°)	Maximum length of the slope – Size E (m)
	1.4301 /304; 1.4404 / 316L; 1.4521 / 444; 1.4162 / S32101	
100	90	3
125	90	3
130	90	3
150	90	3
160	90	3
175	90	3
180	90	3
200	90	3
250	90	3
300	90	3



COMPRESSIVE STRENGTH OF THE SUPPORT			
Height (m)			
Model	Adjustable base support closed 853 Size (C)	Adjustable base support extended 853 Size (C)	Adjustable floor support 856*
ND (mm)	100	302	157
	125	241	126
	130	232	121
	150	201	105
	160	188	98
	175	172	90
	180	167	87
	200	151	78
	250	120	63
	300	100	52

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer: **DINAK**
Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS A**

Product description: Double wall metal chimney with rock wool insulation of 30 to 37,5 mm thickness depending on sizes

Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service
GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 012**



Designations according to EN 1856-1:

Designation	Product description	Standard number	Temperature level	Pressure level	Condensate resistance (W: wet; D: dry)	Corrosion resistance and inner wall material	Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)
0.1	Metal chimney with seal 1.4404/316L	EN 1856-1	T200	N1	W	V2-L50040	O(00)
0.2	Metal chimney 1.4404/316L	EN 1856-1	T450	N1	W	V2-L50040	G(60)

Compressive strength
Up to 16 m. See Annex

Flow resistance
Inner roughness: 1 mm
(according to EN 13384-1 Standard)
Flow resistance coefficients ζ
according to EN 13384-1 Standard

Thermal resistance
From 0,316 to 0,351 m² K / W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability
Tensile strength: up to 50 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m.
Maximum length from the last support up to 3 m. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

EN 1856-1

Chimneys – Requirements for metal chimneys. Part 1: System chimney products

Manufacturer: **DINAK**
 Camiño do Laranxo, 19. 36216, VIGO (ESPAÑA)

Product commercial name: **DINAGAS A**

Product description: Double wall metal chimney with rock wool insulation of 30 to 37,5 mm thickness depending on sizes

Name and function of the responsible person: Íñigo A. Canoa (General Manager)

Notified Body: **TÜV Industrie Service GmbH TÜV SÜD Gruppe**

Certificate number: **0036 CPD 90220 012**



Designations according to EN 1856-1:

Designation	Product description	Standard number	Temperature level	Pressure level	Condensate resistance (W: wet; D: dry)	Corrosion resistance and inner wall material	Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)
0.1	Metal chimney with seal 1.4521/444	EN 1856-1	T200	N1	W	V2-L99040	O(00)
0.2	Metal chimney 1.4521/444	EN 1856-1	T450	N1	W	V2-L99040	G(60)

Compressive strength
Up to 16 m. See Annex

Flow resistance
Inner roughness: 1 mm (according to EN 13384-1 Standard)
Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
From 0,316 to 0,351 m² K / W at reference temperature depending on sizes. See the chart

Mechanical resistance and stability
Tensile strength: up to 50 m. See Annex
Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.
Wind load resistance:
Maximum length between supports up to 4 m.
Maximum length from the last support up to 3 m. See Annex

Wet working conditions: Yes



DECLARATION OF CONFORMITY AND PRODUCT DESCRIPTION

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Designations according to EN 1856-1:

0.1	Metal chimney with seal 1.4162/S32101	EN 1856-1	T200	N1	W	V2-L99050	O(00)
Product description							
Standard number							
Temperature level							
Pressure level							
Condensate resistance (W: wet; D: dry)							
Corrosion resistance and inner wall material							
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)							

Compressive strength
Up to 16 m. See Annex

Flow resistance
Inner roughness: 1 mm
(according to EN 13384-1
Standard)
Flow resistance coefficients ζ
according to EN 13384-1
Standard

Thermal resistance
From 0,316 to 0,351 m² K / W at
reference temperature depending
on sizes. See the chart

**Mechanical resistance and
stability**
Tensile strength: up to 50 m. See
Annex
Non vertical installation: maximum
deflection 90° and maximum
length of the slope up to 3 m.
Wind load resistance:
Maximum length between
supports up to 4 m.
Maximum length from the last
support up to 3 m. See Annex

Wet working conditions: Yes



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Designations according to EN 1856-1:

	0.1	0.2	EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Product description	Metal chimney with seal 1.4301/304	Metal chimney 1.4301/304	EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Standard number	1.4301/304	1.4301/304	EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Temperature level			EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Pressure level			EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Condensate resistance (W: wet; D: dry)			EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Corrosion resistance and inner wall material			EN 1856-1	T200	N1	W	Vm-L20040	O(00)
Sootfire resistance (G: yes; O: no) and distance to combustible materials (in mm)			EN 1856-1	T200	N1	W	Vm-L20040	O(00)

Compressive strength
 Up to 16 m. See Annex

Flow resistance
 Inner roughness: 1 mm (according to EN 13384-1 Standard)
 Flow resistance coefficients ζ according to EN 13384-1 Standard

Thermal resistance
 From 0,316 to 0,351 m² K / W at reference temperature depending on sizes. See the chart

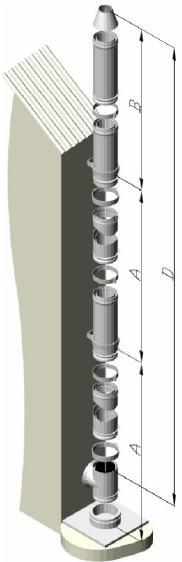
Mechanical resistance and stability
 Tensile strength: up to 50 m. See Annex
 Non vertical installation: maximum deflection 90° and maximum length of the slope up to 3 m.

Wind load resistance:
 Maximum length between supports up to 4 m.
 Maximum length from the last support up to 3 m. See Annex

Wet working conditions: Yes

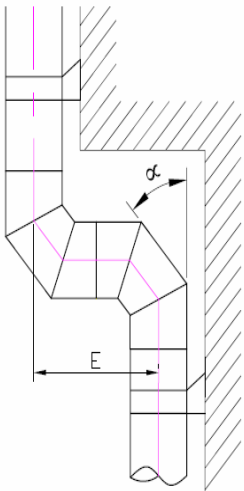
	Characteristics	Units	Ref. EN 1856-1	Values / Levels				Remarks
1.0	Nominal dimensions	mm	4, 5	125, 150, 175, 200, 250, 300				
2.0	Inner/ outer diameters	mm		125/185, 150/210, 175/235, 200/260, 250/310, 300/360				
3.0	Inner diameter (minimum)	mm	4,5	121,5; 146,3; 171,5; 196,3; 246,6; 295,3				
4.0	Inner wall material		4, 5, 6.5.2					
	Quality			1.4404 / 316L	1.4521 / 444	1.4162 / S32101	1.4301 / 304	
	Nominal thickness (minimum thickness)	mm		0,4 (0,34)	0,4 (0,34)	ND 125-350: 0,5 (0,44)	0,4 (0,34)	
	Description according to EN 1856-1			L50040	L99040	L99050	L20040	
5.0	Outer wall material		4, 5, 6.5.2					
	Quality			1.4301 / 304	1.4404 / 316L	Copper	Aluminized steel	
	Nominal thickness (minimum thickness)	mm		0,4 (0,34)	0,4 (0,34)	0,5 (0,44)	0,4 (0,34)	
	Description according to EN 1856-1			L20040	L50040	L99050	L99040	
	Quality			1.4521 / 444		1.4509 / 441	1.4075 / 430	
	Nominal thickness (minimum thickness)	mm		0,4 (0,34)		0,4 (0,34)	0,4 (0,34)	
	Description according to EN 1856-1			L99040		L99040	L99040	
6.0	Insulation		7.2					
	Type			MANTA SPINTEX 342 100 VR DN				
	Density	kg / m ³		100				
	Thermal conductivity (λ)	W/mK		< 0,06 at 200 °C				
	Working temperature	°C		700				
	Composition			SiO ₂ : 43-49%; Al ₂ O ₃ : 11-16%; Fe ₂ O ₃ : 3-9%; CaO: 18-29%; MgO: 8-13%; Na ₂ O: 1-3%; K ₂ O: 0,3-0,5%; MnO: 0,1-0,6%				
	Thickness	mm		ND 125-300: 30 ND 350: 37,5				
7.0	Seals		7.2					RP: IMQ-01SG00017
	Designation according to EN 14241-1 standard			EN 14241-1 T200 W 2 K2 I				
	Hardness	ShA		55-60				
	Density	g/cm ³		1.20 ± 0.1				
	Permanent deformation	%		≤ 25				
	Tensile strength	N/mm ²		≥ 4.5				
	Lengthening strength to 100%	N/mm ²		≥ 1.2				
	Mechanical resistance and stability		6.1					RP: TÜV-A 1445-00/05
8.0	Compressive strength		6.1.1	Up to 16 m.				See Annex

9.0	Tensile strength		6.1.2	Up to 50 m.			See Annex
10.0	Wind load resistance		6.1.3.2	Maximum length from the last support: up to 3 m. Maximum length between supports: up to 4 m.			See Annex
	Non vertical installation		6.1.3.1				RP: TÜV-A 1445-00/05
11.0	Maximum deflection			90° (horizontal installation)			See Annex
12.0	Maximum length of the slope			Up to 3 m.			See Annex
13.0	Gas tightness		6.3	Pressure level: N1			RP: TÜV-A 1412-00/05
14.1	Distance to combustible materials at T200	mm	6.2	0 (O00)			RP: TÜV-A 1412-00/05
14.2	Distance to combustible materials at T450 and sootfire resistance	mm	6.2	60 (G60)			RP: TÜV-A 1412-00/05
15.1	Accidental human contact at T200		6.4.2	Protection in the traffic area not needed			RP: TÜV-A 1412-00/05
15.2	Accidental human contact at T450		6.4.2	Protection in the traffic area needed			RP: TÜV-A 1412-00/05
16.0	Thermal resistance (@ 200 °C)	m ² K / W	6.4.3	0,316-0,351			RP: TÜV-A 1412-00/05
17.0	Condensate resistance		6.4.4, 6.4.5	Designation: W (wet)			RP: TÜV-A 1412-00/05
18.0	Resistance against rainwater penetration		6.4.6	The chimney is resistant against rainwater penetration			RP: TÜV-A 1412-00/05
	Flow resistance		6.4.7				
19.0	Mean value of roughness	mm	6.4.7.1	1 (according to EN 13384-1 standard)			
20.0	Coefficients of flow resistance for fittings		6.4.7.2	Values according to EN 13384-1 standard			
	Terminal						
21.0	Coefficient of flow resistance		6.4.7.3	Values according to EN 13384-1 standard			
22.0	Protection against rainwater		6.4.8.1	N.P.D.			
23.0	Aerodynamic behavior		6.4.8.2	N.P.D.			
24.0	Corrosion resistance at inner wall		6.5.1	1.4404 / 316L V2	1.4521 / 444 V2	1.4162 / S32101 V2	1.4301 / 304 Vm RP: TÜV-A 1439-00/05
25.0	Freeze / thaw resistance		6.5.3	Fulfilled according to EN 1856-1			
26.0	Dangerous substances		7.2	None			
27.0	Typical installation drawing		7.2				See Annex
28.0	Assembly instructions		7.2				See Annex
29.0	Flow direction		7.2	Installation with the outer Male at the top			
30.0	Storage instructions		7.2	No corrosive atmosphere			
31.0	Method of application of any sealant required		7.2	None			

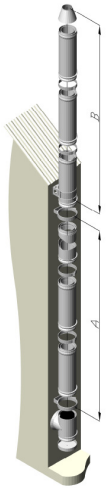


Outer material	COMPRESSIVE STRENGTH			TENSILE STRENGTH		
	Height – Size D (m)			Height (m)		
	Aluminized steel	Copper		Aluminized steel	Copper	
1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430				1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430		
125	13	12	9	43	40	N.P.D*
150	12	11	8	38	35	N.P.D
175	11	10	7	34	31	N.P.D
200	9	9	7	31	28	N.P.D
250	8	7	5	26	24	N.P.D
300	7	6	5	22	20	N.P.D

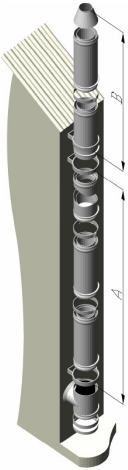
• N.P.D.: No performance determined



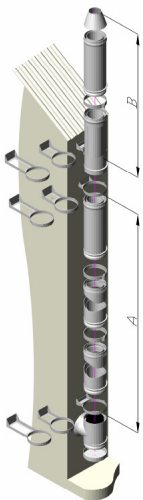
Outer material	NON VERTICAL INSTALLATION					
	Maximum deflection α (°)			Maximum length of the slope – Size E (m)		
	Aluminized steel	Copper		Aluminized steel	Copper	
1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430				1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430		
125	90	90	90	3	3	1
150	90	90	90	3	3	1
175	90	90	90	3	3	1
200	90	90	90	3	3	1
250	90	90	90	3	3	1
300	90	90	90	3	3	1



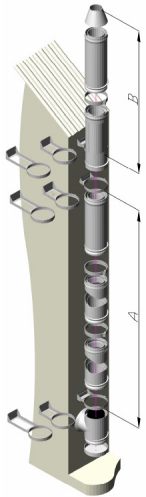
WIND LOAD RESISTANCE							
Configuration 1 (wall supports 080 with a self-standing support 861 at highest position)							
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)			
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	
ND (mm)	125	4	X	X	3	2,5	X
	150	4			3	2,5	
	175	4			3	2,5	
	200	4			3	2,5	
	250	4			3	2,5	
	300	4			3	2,5	



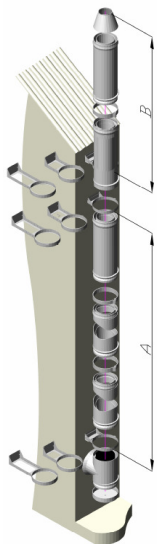
WIND LOAD RESISTANCE							
Configuration 2 (wall supports 080 with a flat wall support 086 at highest position)							
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)			
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	
ND (mm)	125	4	X	3	1,5	X	2
	150	4		3	1,5		2
	175	4		3	1,5		2
	200	4		3	1,5		2
	250	4		3	1,5		2
	300	4		3	1,5		2



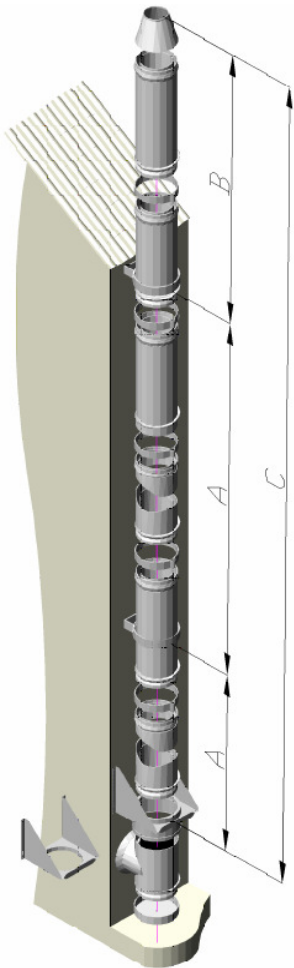
WIND LOAD RESISTANCE									
Configuration 3 (adjustable supports 083 and a flat adjustable support 831 at highest position)									
Distance to wall (083/831) : 70-120 mm									
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)					
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper			
ND (mm)	125	3	X	2	1,5	X	2		
	150	3		2	1,5		2		
	175	3		2	1,5		2		
	200	3		2	1,5		2		
	250	X		X	X		X	X	X
	300								



Configuration 4 (short cuttable supports 835 and a flat short cuttable support 836 at highest position)						
Distance to wall (835/836) : 100-250 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper
ND (mm)	125	3	X	1,5	X	X
	150	3		1,5		
	175	3		1,5		
	200	3		1,5		
	250	3		1,5		
	300	3		1,5		



Configuration 5 (long cuttable supports 845 and a flat long cuttable support 846 at highest position)						
Distance to wall (845/846) : 250-430 mm						
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)		
Outer material	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Aluminized steel	Copper
ND (mm)	125	2	X	1,5	X	X
	150	2		1,5		
	175	2		1,5		
	200	2		1,5		
	250	2		1,5		
	300	2		1,5		



COMPRESSIVE STRENGTH OF THE SUPPORT				
Height				
Outer material	1.4301 / 304 ; 1.4404 / 316L 1.4521 / 444; 1.4509 / 441 1.4075 / 430; Aluminized steel			
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 855	
ND (mm)	125	50	26	50
	150	44	23	44
	175	39	21	39
	200	36	19	36
	250	30	16	30
	300	26	14	26
Height				
Outer material	Copper			
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 855	
ND (mm)	125	48	25	48
	150	42	22	42
	175	38	20	38
	200	34	18	34
	250	29	15	29
	300	25	13	25