





## PNEUMATIC CONVEYING SYSTEMS FOR PELLET & BIOMASS STORAGE SILOS CLEANING AND ASH-CLEANER

**PRODUCTS LIST 2016** 

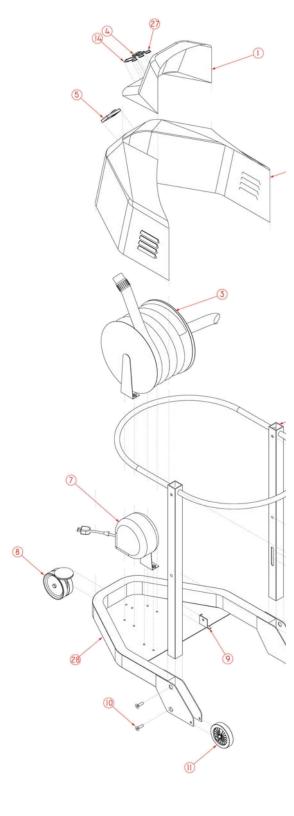






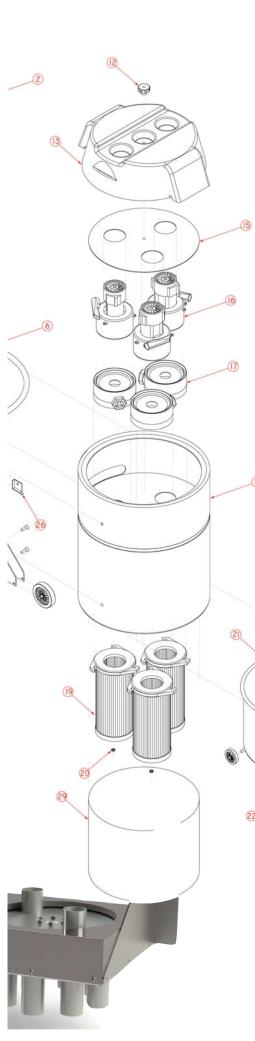








### DENA ASPIRAZIONI INDUSTRIALI Pneumatic conveying systems



Thanks to 40 years of experience in industrial suction plants for clean air our Research and Development department has put on the market our new series of pneumatic conveying systems suitable for granular biomass to feed any kind of home and industrial heating system.

Employing experience combined with high standards of technology Dena has always dealt with project engineering in combination with renewable energy and consequently respect for the environment.

Our pneumatic conveying systems and storage silo solutions offer numerous advantages over traditional fuel feeding solutions as indicated in the catalogue.

A great advantage is the possibility to exploit the return air of the turbine that is conveyed into the suction probe, so that it creates gradual and continuous distribution of pellet or other biomass fuel into the intake circuit.

Moreover it is possible to combine the WX series with the new ash pre-separator in order to clean your boiler or with any other type of silo or self built storage room with flat surface too without the help of mechanical system of extraction.

Our products comply with the regulations as outlined in the European Machinery Directive obtaining the most important European Certifications.

Technology innovation, integrated solutions and comprehensive global service are the strengthens of our company.

dena

#### THE ADVANTAGES OF WX PNEUMATIC CONVEYING SYSTEMS





1	Suction probe	ART NO PR0001
2	Discharge hopper WX10	ART NO WX1001
3	Suction motor WX11	ART NO WX1101
4	Pneumatic conveying hose for pellet	ART NO TB0001
5	Return air hose	ART NO TB0001
6	Self-built storage room	

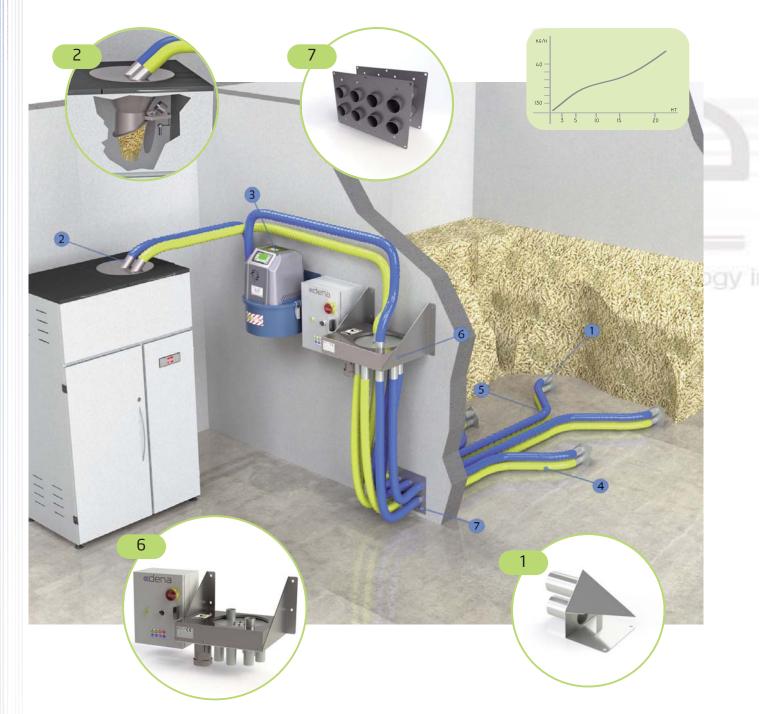


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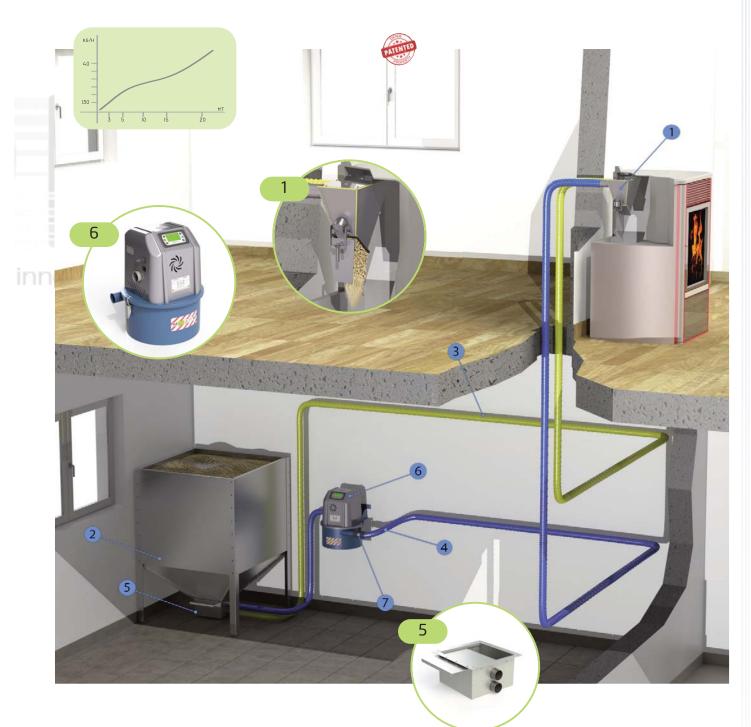
info@denawx.com

SOLUTION D: suction system and pellet pneumatic loading with four suction probes with authomatic changeover unit



1	Suction probe	ART NO PR0001
2	Discharge hopper WX10	ART NO WX1001
3	Suction motor WX11	ART NO WX1101
4	Pneumatic conveying hose for pellet	ART NO TB0001
5	Return air hose	ART NO TB0001
6	Automatic changeover unit	ART NO SPAUT4
7	Hose wall plate connector	ART NO PP0004
8	Ash-preseparator	ART NO PRC01

# SOLUTION E: suction system and pellet pneumatic loading for pellet stove or insert fireplace with storage silo



1	Discharge hopper WX5	ART NO WX5005
2	Storage silo 1 m <sup>3</sup>	ART NO SL001M
3	Pneumatic conveying hose for pellet	ART NO TB0001
4	Return air hose	ART NO TB0001
5	Pellet extraction mudule	ART NO PROOES
6	Suction motor WX11	ART NO WX1101
7	Rubber sleeve Ø50	ART NO MG50E





1	Suction probe	ART NO PR0001
2	Discharge hopper WX10 C	ART NO WX1011
3	Suction motor WX11	ART NO WX1101
4	Return air hose	ART NO TB0001
5	Manual change over unit	ART NO PR0013
6	Pneumatic conveying hose for pellet	ART NO TB0001

SOLUTION G: suction system and pellet pneumatic loading with suction from big-bag



1	Big bag suction probe	ART NO PR3669
2	Pneumatic conveyor WX15	ART NO WX1015
3	Pneumatic conveying hose for pellet	ART NO TB0001
4	Return air hose	ART NO TB0001

SOLUTION H: suction system and pellet pneumatic loading from underground storage silo



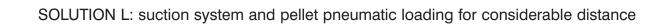
1	Pneumatic conveyor WX15	ART NO WX1015
2	Return air hose	ART NO TB0001
3	Pneumatic conveying hose for pellet	ART NO TB0001



- 4 Return air hose
- 5 Pneumatic conveying hose for pellet
- 6 Storage silo 1 m<sup>3</sup>
- 7 Interception hopper for burners
- 8 Rubber sleeve Ø50

ART NO PRODES ART NO WX1001 ART NO WX1101 ART NO TB0001 ART NO TB0001 ART NO SL001M ART NO WX1005 ART NO MG50E







1	Connection module extraction with screw	ART NO CE00WX
2	Discharge hopper WX10C	ART NO WX1011
3	Pneumatic conveying hose for pellet	ART NO TB0001
4	Vacuum hose	ART NO TB0001
5	Fixed suction base WX52	ART NO BFS52
6	Storage silo 1 m <sup>3</sup>	ART NO SL001M
7	Ash-preseparator	ART NO PRC01
8	Fixed filtering base	ART NO BFR01
9	Hole accessory kit with noozle	ART NO KTA02
10	Rubber sleeve Ø50	ART NO MG50E

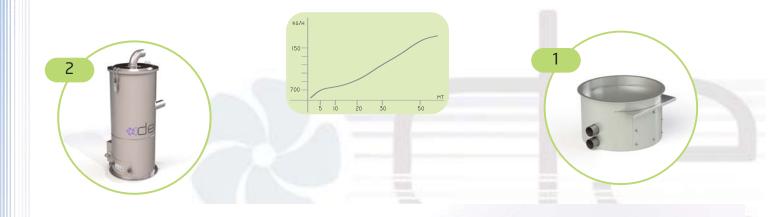


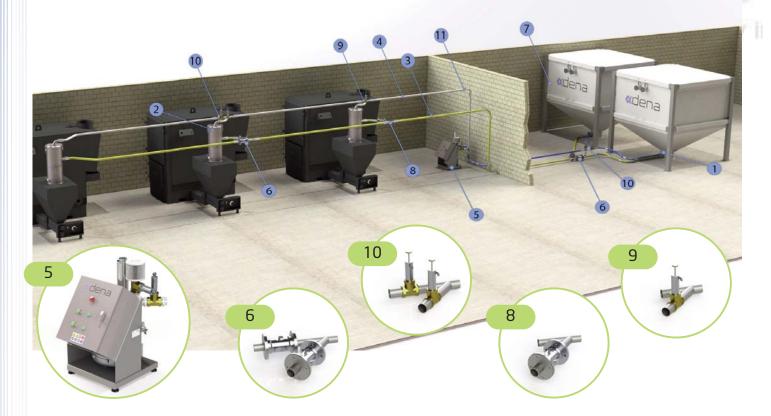


1	Suction probe for silo SIT type	ART NO PR12ES
2	Discharge hopper WX52	ART NO WXG115
3	Pneumatic conveying hose for pellet	ART NO TB0002
4	Vacuum hose	ART NO TB0002
5	Fixed suction base WX52	ART NO BFS52
6	Fabric storage silo 10 m <sup>3</sup>	ART NO SIT10
7	Hose clamp Ø50	ART NO FS0002



SOLUTION N: Suction system and pellet pneumatic loading with centralized suction motor





1	Suction probe for silo SIT type	ART NO PR12ES
2	Discharge hopper WX54 (with minimal level sensor)	ART NO WXG116
3	Pneumatic conveying hose for pellet	ART NO TB0002
4	Vacuum hose	ART NO TB0002
5	Fixed suction base WX55 for three hoppers	ART NO BFS55x3
6	Y deviation valve 2 ways for pellet hose	ART NO VAY-P
7	Storage fabric silo 10 m <sup>3</sup>	ART NO SIT10
8	Y deviation valve for pellet hose	ART NO VAY-P1
9	Y deviation valve for return air hose	ART NO VAY-V1
10	Y deviation valve 2 ways for return air hose	ART NO VAY-V
11	Compression clamp Ø50	ART NO FS0002





All accessories and componets are Made in Italy. They are extremely versatile and can be easily assembled and combined together. Our range of products garantees great injection distance, optimum fuel distribution and flexilbe set up options.





#### ASH-PRESEPARATOR

Our ash-preseparators can be used together with ash-cleaners and with our suction conveying systems WX. Any residue of dirt that your ash-cleaner cannot remove, can be sucked up by our preseparator. It vacuums hygienically and simply liquids, ash, humid dirt etc, that means waste disposal without dust because of its plastic bag.

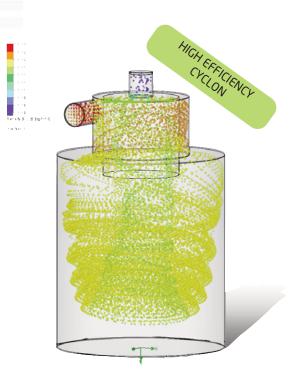
#### Standard equipment

Accessory to collect dirt into the plastic bag

### innovation for clean air

Model	Unit of mesure	PRC	PRC15	PRC15H
capacity	lt	20	150	150
material	/	steel	steel	steel
dimensions	mm	300 x 450	550 x 950	550 x 950
IN/OUT hoses	mm	Ø 50	Ø 50	Ø 50





2

Accessories

Hose kit Ø40 3mt with noozle	ART NO KTA002		Hose kit Ø40 3mt with handle	ART NO KTA001
Hose kit Ø40	ART NO		Hose kit Ø40	ART NO
6mt with noozle	KTA003		6mt with handle	KTA004
Rubber sleeve for con-	ART NO			ART NO
nection hoses flex Ø50	MG50C	Ũ	compression clamp	FS0001
g 19	www.denaw	vx.com		

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#### PNEUMATIC CONVEYOR WX5

The WX5 pneumatic conveyor is the ideal solution for dosing granular biomass to automate your stove system with minimal costs and maintenance. It works as ash-cleaner too.

⇒ IDEAL SYSTEM TO FEED BIOMASS STOVES AND INSERT FIREPLACES

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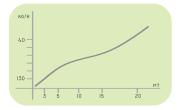
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- ⇒ AUTOMATIC OPERATION
- ⇒ ADAPTABLE TO ANY HEATING SYSTEM- AUTOMATIC OPERATION
- ⇒ CHRONO TIME SETTING
- ⇒ REMOTE CONTROL PER 3G/LAN

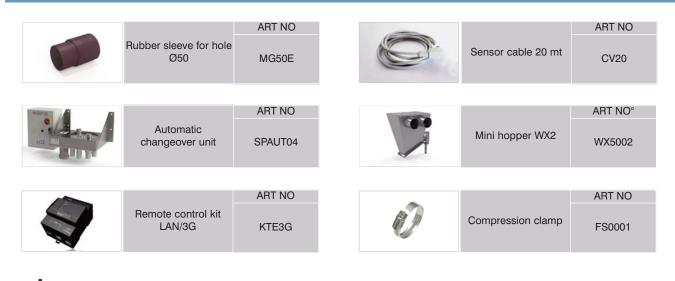
#### Standard equipment

- ♦ Control panel with black-lit lcd display
- Polyester cartridge filter
- ♦ level sensor
- ♦ Product exhaust valve
- ♦ Alimentation shuko cable 2 mt
- $\diamond$  Sensor alimentation cable 10 mt

MODEL	Unit of measure	WX5
Rated electrical power	W	1500
Rated voltage	V	110/220
Rated frequency	Hz	50/60
Internal hopper capacity	lt	3
Max vacuum rate	Mbar	275
Filter cleaning system	/	Self-cleaning cartridge
Structure	Material	Steel/ ABS
Total weight	kg	20
Motor dimensions	mm	390 x 390 x H 498
IN/OUT holes	mm	Ø 50
Hopper dimensions	mm	153 x 273 x H 250



#### Accessories



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#### PNEUMATIC CONVEYOR WX10

The WX10 pneumatic conveyor is the ideal solution for dosing granular biomass to automate your heating system with minimal costs and mantainance. It works as ash-cleaner too.

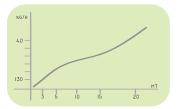
- IDEAL SYSTEM TO FEED ANY PELLET BOILER ⇔
- ⇔ AUTOMATIC OPERATION
- ADAPTABLE TO ANY HEATING SYSTEM ⇒
- CHRONO TIME SETTING ⇒
- REMOTE CONTROL PER 3G/LAN ⇒

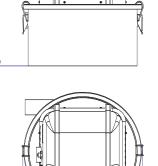
#### Standard equipment

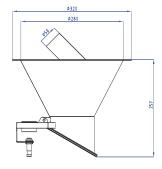
- Control panel with black-lit lcd display  $\diamond$
- Polyester filter  $\diamond$
- Level sensor  $\diamond$
- $\diamond$ Product exhaust valve
- $\Diamond$ Alimentation shuko cable 2 mt
- Sensor connection cable 10 mt  $\diamond$

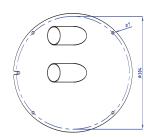
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MODEL	Unit of measure	WX10
Electric rated power	W	1500
Rated voltage	V	110/220
Rated frequency	Hz	50/60
Internal hopper capacity	lt	5
Max vacuum rate	Mbar	275
Tipo di filtro	/	Self-cleaning cartridge
Structure	Material	Steel / ABS
Total Weight	kg	22
Motor Dimensions	mm	390 x 390 x H 498
IN/OUT hoses	mm	Ø 50
Hopper Dimensions	mm	Ø 280 x H 270









#### Accessories

-		ART NO			ART NO
	Suction probe	PR0001		Flexible antistatic tube Ø 50 (min oder 20mt)	TB0001
<b>.</b>		ART NO			ART NO
	Ash preseparator	PRC01	FOR	Hopper WX10M with motorized valve	WX1003
1		ART NO			ART NO
	Manual changeover unit	PR0013		Interception hopper	WX1005



#### PNEUMATIC CONVEYOR WX10C

The WX10C pneumatic conveyor is the ideal solution for dosing granular biomass to automate your heating system with minimal costs and maintenance. It works as ash-cleaner too.

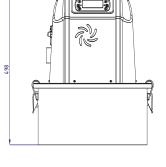
- ⇒ IDEAL SYSTEM TO FEED BOILERS WITH DUSTY BIOMASS
- ⇒ AUTOMATIC OPERATION
- ⇒ ADAPTABLE TO ANY HEATING SYSTEM
- ⇒ CHRONO TIME SETTING
- ⇒ REMOTE CONTROL PER 3G/LAN

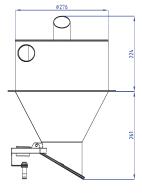
#### Standard equipment

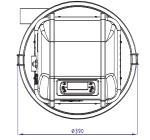
- ♦ Control panel with black-lit lcd display
- ♦ Polyester cartridge filter
- Level sensor
- ♦ Exhaust valve product
- ♦ Alimentation shuko cable 2 mt
- ♦ Sensor connection cable 10 mt

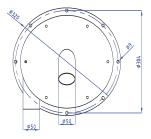
MODEL	Unit of measure	WX10
Electrical rated power	W	1500
Rated voltage	V	110/220
Rated frequency	Hz	50/60
Internal hopper capacity	lt	6
Max vacuum rate	Mbar	275
Type of filter	/	Self-cleaning cartridge
Structure	Material	Steel / ABS
Total weight	kg	23
Motor dimensions	mm	390 x 390 x H 498
IN/OUT hoses	mm	Ø 50
Hopper dimensions	mm	Ø 280 x H 470











#### ACCESSORIES

		ART NO			ART N
	Rubber sleeve for hose Ø50	MG50E		Sensor cable 20 mt	CV20
Clerta A		ART NO			ART N
	Automatic changeover unit	SPAUT04	SPAUT04	Fluidising	SL000
		ART NO			ART N
	Remote control kit LAN/3G	KTE3G		Interception hopper	WX100



#### PNEUMATIC CONVEYOR WX15

The pneumatic conveyor model WX15 is the ideal solution for dosing biomass products to automate your heating system with minimal costs and maintenance.

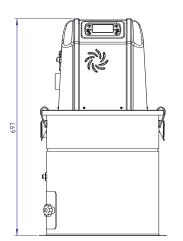
- ⇒ IDEAL SYSTEM TO FEED PELLET BOILERS
- ⇒ AUTOMATIC OPERATION
- ⇒ ADAPTABLE TO ANY HEATING SYSTEM
- ⇒ CHRONO TIME SETTING
- ⇒ REMOTE CONTROL PER 3G/LAN

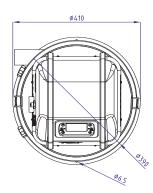
#### Standard equipment

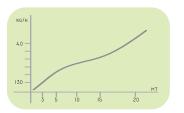
- ♦ Control panel with black-lit lcd display
- ♦ Polyester cartrige filter
- ♦ Level sensor
- ♦ Exhaust valve product
- ♦ Sensor connector cable 10 mt

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MODEL	Unit of measure	WX15
Electrical rated power	W	1500
Rated voltage	V	230
Rated frequency	Hz	50
Internal hopper capacity	lt	7
Max. vacuum rate	Mbar	275
Type of filter	/	Self-cleaning
Structure	material	carbon steel
Total weight	kg	24
Dimensions	mm	390 x H700
IN/OUT hoses Ø	mm	Ø 50







#### Accessories

ART NO ART NO   Suction probe from big-bag PR3669   ART NO Connection plate   ART NO			ART NO			ART NO
Suction probe from big-bag PR3669 Connection plate PP0004   ART NO ART NO ART NO	Ex	Suction Probe	PR0001		Interception hopper	WX1005
ART NO ART NO			ART NO			ART NO
		Suction probe from big-bag	PR3669	2000	Connection plate	PP0004
			ART NO			ART NO
		Manual change over unit		Ø	Compression clamp	FS0001

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#### PNEUMATIC CONVEYOR WX52BFR

The pneumatic conveyor model WX52 is the ideal solution to load granular biomass products at considerable distance with rate flow up to 500kg/h.

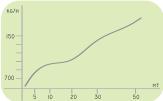
- IDEAL SOLUTION TO FEED INDUSTRIAL HEATING PLANTS ⇔
- ⇔ AUTOMATIC OPERATION
- ADAPTABLE TO ANY HEATING SYSTEM ⇔
- CHRONO TIME SETTING ⇔
- MOTOR PROTECTION THROUGHT A SOFT START ⇒
- IT WORKS 24H/24 ⇒

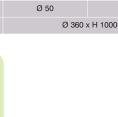
#### Standard equipmemt

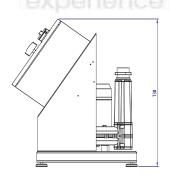
- $\diamond$
- Electrical display Self-cleaning filter cartridge  $\diamond$
- $\diamond$ Level Sensor
- $\diamond$ Exhaust valve product

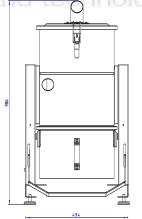
 $\diamond$ Alimentation cable hopper 20 mt

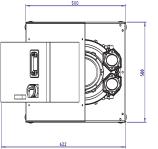
Model	Unit of measure	WX52BFR	WX52BFR-T
Rated electrical power	kW	1,5	1,5
Rated voltage	V	230 (inverter)	380 (soft start)
Rated frequency	Hz	50	50
Internal hopper capacity	lt	6	6
Max vacuum rate	Mbar	275	250
Type of filter	/	Self-cleani	ng cartridge
Pressure cleaning system	Air	6	bar
Structure	material	carbo	n steel
Total weight	kg	95	95
Motor dimension	mm	500x 500 x H 700	500x 500 x H 700
IN/OUT holes Ø	mm	Ø 50	Ø 50
Filtering base dimensions	mm	Ø 360 :	к Н 1000

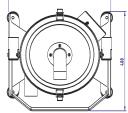












#### Accessories

		ART NO			ART NO
	Suction probe	PR0001	(((((((((((()))))))))))))))))))))))))))	Flexible antistatic hose Ø 50 (min. order 20mt)	TB0001
6		ART NO	No. 1		ART NO
	Compressor 6 It	EINE01		Fluidising	SL0001
		ART NO	-		ART NO
	90° steel bend CA5001	CA5001		Ash preseparator	PRC01

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#### PNEUMATIC CONVEYOR WX52

The pneumatic conveyor model WX52 is the ideal solution to load granular biomass at considerable distance with rate flow up to 500kg/h.

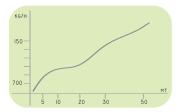
- IDEAL SOLUTION TO FEED INDUSTRIAL HEATING PLANTS ⇔
- ⇔ AUTOMATIC OPERATION
- ADAPTABLE TO ANY HEATING SYSTEM ⇒
- CHRONO TIME SETTING ⇒
- MOTOR PROTECTION THROUGH SOFT START ⇔
- IT WORKS 24H/24 ⇔

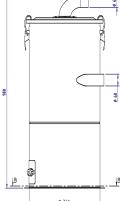
#### Standard equipment

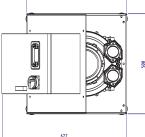
- $\diamond$
- Electrical display Self-cleaning filter cartridge  $\diamond$
- Level sensor  $\diamond$
- $\diamond$ Exhaust valve product
- ♦ Alimentation cable sensor 20 mt

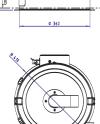
#### innovation for clear INTERNAL CYCLONE

JVAUOTIN		eanan	
MODEL	Unit of measure	WX52	WX52i
Rated electrical power	kW	1,5	2,2
Rated voltage	V	380 (soft start)	220 (inverter)
Rated frequency	Hz	50	50
Internal hopper capacity	lt		12
Max vacuum rate	Mbar	250	275
Type of filter	/	Self-claening	g cartridge filter
Pressure cleaning system	Air	6	bar
Structure	material	Carb	on steel
Total weight	kg	95	97
Motor dimensions	mm	500x 50	00 x H 700
IN/OUT hoses Ø	mm	Ø	ð 60
Hopper dimensions	mm	Ø 360	x H 1000









#### Accessories

	_	ART NO	Risrue A		ART NO
-	Remote control KIT LAN/3G	KTE3G		Automatic changeover unit	SPAUT04
*		ART NO			ART NO
	Tracking preseparator 150lt	PRC15	and the second s	Compression clamp Ø50	FS0002
		ART NO			ART NO
	Manual changeover unit	PR0013		Interception hopper	WX1005



#### PNEUMATIC CONVEYOR WX55

The pneumatic conveyor model WX 55 is the ideal system to load granular biomass at considerable distance and with flow rate up to 1000kg/h.

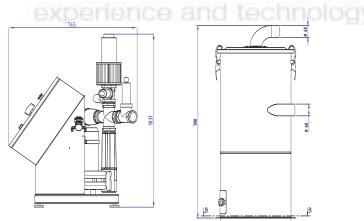
- IDEAL SYSTEM TO FEED INDUSTRIAL HEATING PLANTS ⇔
- ⇔ AUTOMATIC OPERATION
- ⇔ ADAPTABLE TO ANY HEATING SYSTEM
- CHRONO TIME SETTING ⇔
- MOTOR PROTECTION THROUGH SOFT START UP ⇒
- IT WORKS 24H/24 ⇒

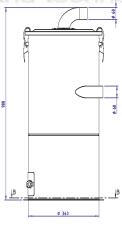
#### Standard equipment

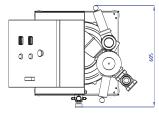
- $\diamond$ Electrical panel installed on the base of the motor
- Self-cleaning cartridge filter  $\diamond$
- $\diamond$ Min/max level sensor
- $\diamond$ Exhaust valve product
- $\Diamond$ Hopper alimentation cable 20 mt

 $\diamond$ Vacuum breaker

MODEL	Unit of measure	WX55	WX60i
Rated electrical power	kW	3	4
Rated voltage	V	380	
Rated frequency	Hz	50	
Internal hopper capacity	lt	12	
Max vacuum rate	Mbar	275	325
Type of filter	/	Self-cleaning	cartridge filter
Cleaning system alimentation	Air	6 bar	
Structure	Material	Carbon steel	
Total weight	kg	105	107
Motor dimensions	mm	600x 600 x H 1300	600x 600 x H 1300
IN/OUT hoses Ø	mm	Ø	60
Hopper dimensions	mm	Ø 360 :	к Н 1000









#### Accessories

10 20

KG/H

150-

700

~	_	ART NO	ß		ART NO
	pipe reduction from Ø60 to Ø 50	RI0050		Emptying hose valve	VLS001
		ART NO	h - 14		ART NO
	galvanized steel pipe Ø 50	TB0002	- Con	Deviating valve type y 2 pellet line	VAY-P
		ART NO	T		ART NO
	bend steel 90°	CA5001		Deviating valve type y 2 return air line	VAY-V

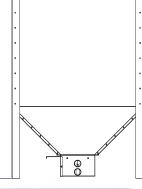
IX55 FAIRED

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### innovation for clean air

ART NO	Volume (m <sup>3</sup> )	Weight (kg)	Height A (cm)	Dimensions BxC (cm)	Extraction system
SL0001M	1	650	140	103x103	pneumatic
SL0001M	1	650	140	103x103	screw (0,18kw)
SL0015M	1.5	975	190	103x103	pneumatic
SL0015M	1.5	975	190	103x103	screw (0,18kw)
SL0003M	3	1950	190	103x206	pneumatic
SL0003M	3	1950	190	103x206	screw (0,18kw)



9

Bx0





Accessories

		ART NO			ART N
3	Pneumatic extraction module	PR00ES		Silo extention module 0,5 m <sup>3</sup>	ES005
		Articolo n°			ART NO
	Pneumatic extraction module with screw	CE00WX	$\bigcirc$	Safety greed	GR000
		ART NO			ART N
88	Kit for loading from tanker (for SL0001M)	KITSUM1	88	Kit for loading from tanker (for SL0003M)	KITSUN





#### FABRIC STORAGE SILO

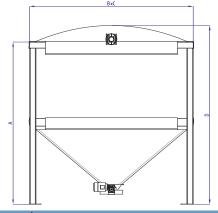
The silo for pellet model SIT, is a professional silo compatible with all systems of pneumatic extraction, the ideal solution for storage rooms and indoor places. It can be equipped with extraction unit through pneumatic or motorized screw.

- GALVANIZED STEEL FRAME/ QUICK CONNECTION TO SUCTION PROBE ADAPTABLE TO ANY KIND OF WX SUCTION SYSTEM ⇒
- ⇒
- FILLING THROUGH FUEL FILLER STORZ TYPE ⇔
- ⇔ ANTISTATIC, HIGH RESISTANT POLYESTER FABRIC 355 gr/m<sup>2</sup>
- IT IS PROVIDED IN PACKAGED PIECES/ QUICK ASSEMBLY ⇒

#### Standard equipmemt

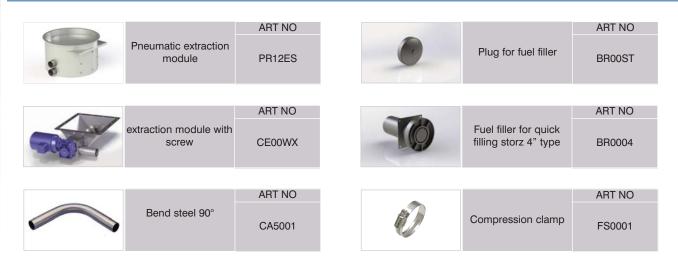
- $\diamond$ Opening with manual loading
- $\diamond$ Bolts kit
- Fuel filler for quick filling storz 4" type  $\diamond$

					rhenen	ce and t
ART NO	Volume (m <sup>3</sup> )	Weight (ton)	Height A (cm)	Dimensions BxC (cm)	Height D (cm)	Extraction system
SIT5	5.3	3.2	220	214x214	225	pneumatic
SIT5-C	5.3	3.2	220	214x214	225	screw (0,18kw)
SIT8	6.7	4	230	240x240	235	pneumatic
SIT8-C	6.7	4	230	240x240	235	screw(0,18kw)
SIT10	10	6	250	250x250	255	pneumatic
SIT10-C	10	6	250	250x250	255	screw (0,18kw)



Silos up to 30 m<sup>3</sup> are available to request

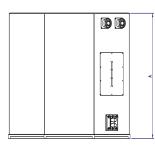
#### Accessories

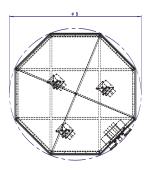




### innovation for clean air

ART NO	Volume (m <sup>3</sup> )	Weight (ton)	Height A (cm)	Dimensions Ø B (cm)	Extraction systems
ESA160-16	2.6	1.56	165	160 (8 lati)	NO 3 suction probes
ESA160-19	3	1.8	195	160 (8 lati)	NO 3 suction probes
ESA200-16	4.3	2.58	165	200 (8 lati)	NO 3 suction probes
ESA200-19	5	3	195	200 (8 lati)	NO 3 suction probes
ESA250-16	6.9	4.14	165	250 (10 lati)	NO 3 suction probes
ESA250-19	8	4.8	195	250 (10 lati)	NO 3 suction probes





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#### Accessories

-		ART NO		ART NO
The second	Suction probe	PR0001	Plug for fuel filler	BR00S
		ART NO		ART NO
	Galvanized steel pipe Ø 50	TB0002	Fuel filler for quick filling storz 4" type	BR0004
		ART NO		ART NO
	Automatic manual changeover	SPAUT04	Rubber protection	GR000

		SPAR	E PARTS		
	-	ART NO	0	Cartridge filter	ART NO
	Single phase motor	MBP015		WX52 / BFR	CAR218H26
-		ART NO			ART NO
	Selenoid valve	ELE001		Inductive sensor	SENSO1
	-	ART NO			ART NO
<b>N S</b>	Motor brushes kit	MSP015		Lcd control panel	CEQ001
		Articolo n°	experie		ART NO
$\diamond$	Seal for hopper WX5	GRZ005	$\bigcirc$	Seal for hopper WX10-10C-15-52	GRZ010
		Articolo n°			
	Filtering cartridge				



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