

Environmental Solutions & Industrial Dust Control Systems





Introducing / About SISMAK

SISMAK is the first specialized Dust Reduction System producer for the mining industrie, crushing plants and cement factories about more then 25 years in Turkey. It has been patented in year 2000 of the Turkish Patent Institute. We have proven our system in more then 30 countries and nearly 1.000 applications in worldwide companies like, LAFARGE, SET GROUP, ITALCEMENTI, HERACLES CEMENT, HEIDELBERG CEMENT GROUP, AKCANSA-SABACI GROUP, ESAN ECZACIBASI GROUP, CARMEUSE GROUP and etc.

SISMAK in Turkey, UAE, Oman, Saudi Arabia and in Greece is the first preferred and most approved system of the Ministry of Environment and Natural Resources Authority.

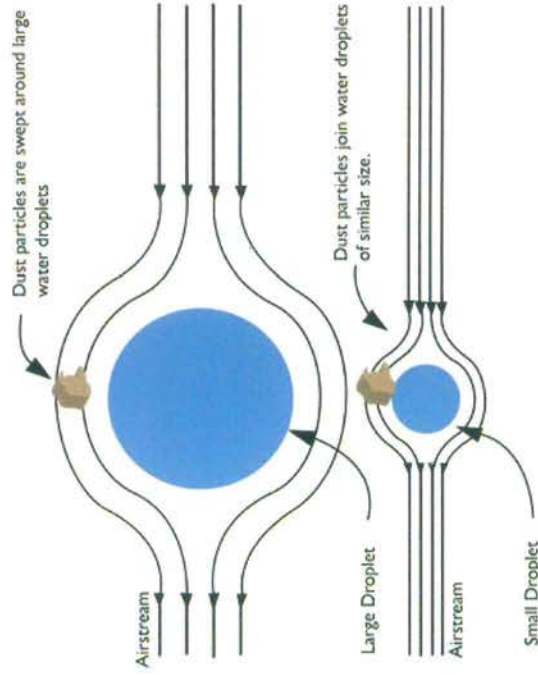
Our mission is to serve our customers with our "25 YEARS" of our knowledge and experience, to offer them the best possible environmental solution with a international recognized quality.

Eray BENK
General Manager



Source of Dust

When a mineral is product is extracted, crushed, screened or handled small Fragments generally below 75 microns particle size and relased into the surrounding Environment. The heavier particlesgenerally above 20 microns seatle out in the Vicinity of the emission source. Wind and air disturbance can influence settlement. Particles below 20 microns move around with the air currents and can remain Suspended for long periods of time. In still air conditions they will eventually settle out. Fine particles below 10 microns are normally not visible in their individual size and it is this fraction that is referred to as airborne dust. Respirable dust is generally below 10 microns.



30 - 40 MICRONS • VISIBILITY THRESHOLD

100 MICRONS

HUMAN HAIR

500 MICRONS

TABLE SALT

1000 MICRONS
THICKNESS OF A DIME



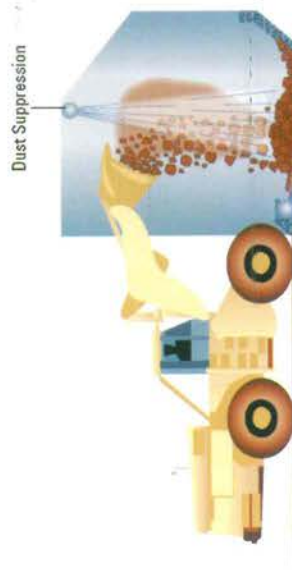


Figure 1

Moisture is added directly to the material to prevent dust from becoming airborne. Airborne dust particles are also captured by sprays during material unloading.

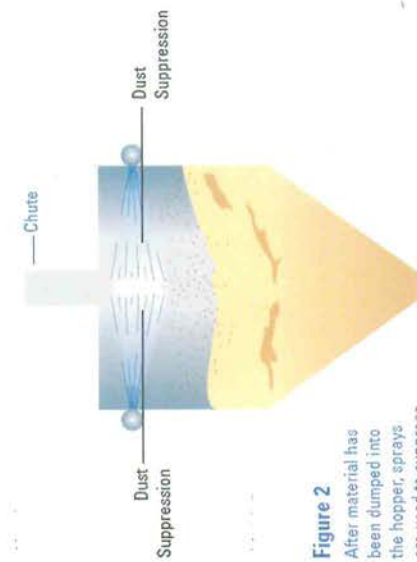


Figure 2

After material has been dumped into the hopper, sprays are used to suppress the airborne dust.

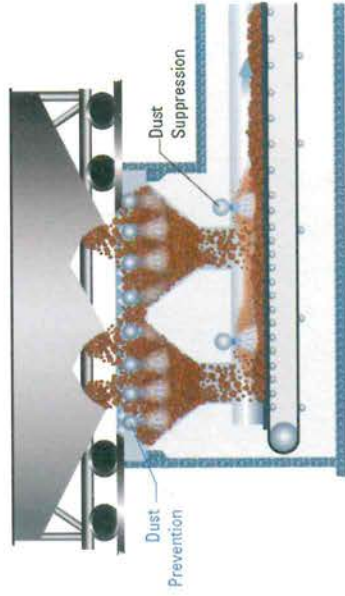


Figure 3

Moisture is added to the material to prevent dust as it is transferred from the hopper car to the hopper bin. Sprays are also used to capture airborne dust as the material moves down the conveyor line.



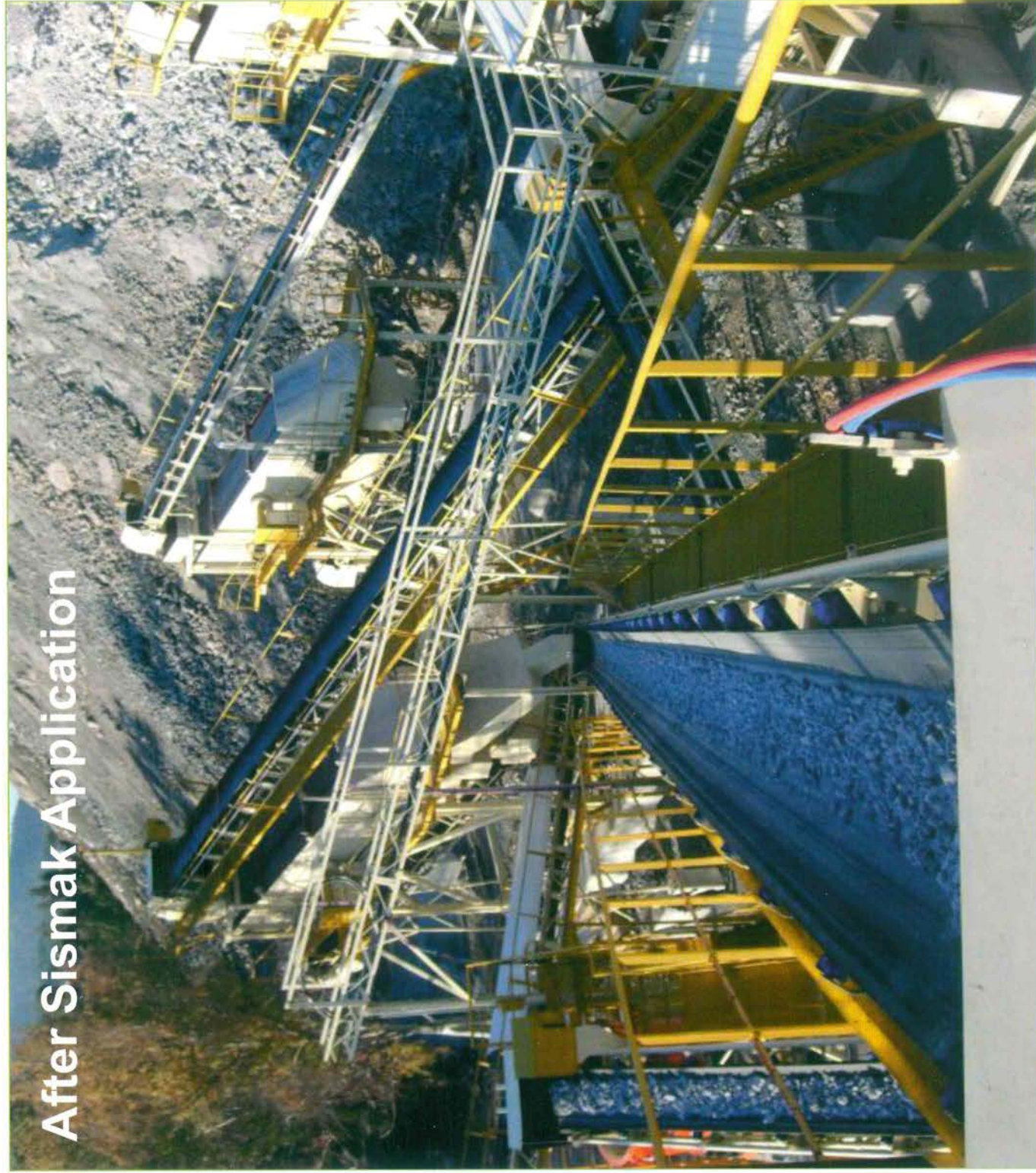
Sismak All-Inn Container Applications

Every thing mounted inside a container; Very easy and fast application, short installation period, less expencess.

- Compressor (With mounted exost to outside)
- Compressor Air Reciever Tank 1.000 Lt.
- Water Pump with connected 10" Washable Water Cartridge Filter
- Water Pump Air Balance Tank
- Include all piping works between the compressor tank and the Air reciever tank and also between the waterpump and the Air balance tank of the waterpump.
- Control Boards
- Electronic Control Unit
- Additional Pump for Dust Ring
- 100 mt Cable Connection for the Remote Controls
- Water and Air outputt tubes to the Nozzles
- Additional Heating / Cooling options

The customer needs only to putt the container in the plant, do the necessary water and electricity connections, connect the tubes to the nozzles and just start up the key.







Sismak -3/3 Control Boards

SISMAK Dust Reduction Water/Air Nozzles Consumptions / Regulations			
NOZZLE TYPE	WATER Consumption / Pressure	AIR Consumption / Pressure	
SM 1	10 Lt/h 2 bar	2 m3/h 3 bar	
SM 2	30 Lt/h 3 bar	3 m3/h 4 bar	
SM 3	40 Lt/h 4 bar	4 m3/h 5 bar	
SM 4	60 Lt/h 4 bar	4 m3/h 5 bar	
SM 5	80 Lt/h 4 bar	4 m3/h 5 bar	
SM 6	100 Lt/h 5 bar	5 m3/h 6 bar	



Sismak Nozzle

Sismak Polyamid

Sismak Metal Holder

Sismak Complete Nozzle Set



Waterpump/Booster Set

MODEL	LINES	NOZZLE / Qty.	Distance to Nozzle	Electrical Board	Water /Air Input
SMC 1/1	1 Line	Up to 10 Pcs.	50-60 mt.	Manual Key Contractors Without PLC	1/2"
SMC 2/2	2 Lines	Up to 20 Pcs. (each line max. 10 pcs.)	50-60 mt.	PLC Unit With Cable Remote	3/4"
SMC 3/3	3 Lines	Up to 30 Pcs. (each line max. 10 pcs.)	50-60 mt.	PLC Unit With Cable Remote	3/4"
SMC 4/4	4 Lines	Up to 40 Pcs. (each line max. 10 pcs.)	50-60 mt.	PLC Unit With Cable Remote	1"



Sismak Remote Controls

Sismak fog Cannons



sismak
DUST SOLUTIONS

SFC 80 | Up to 80 mt

SFC 60 | Up to 60 mt

SFC 40 | Up to 40 mt

SFC 80

SFC 60

SFC 40

40 mt

60 mt

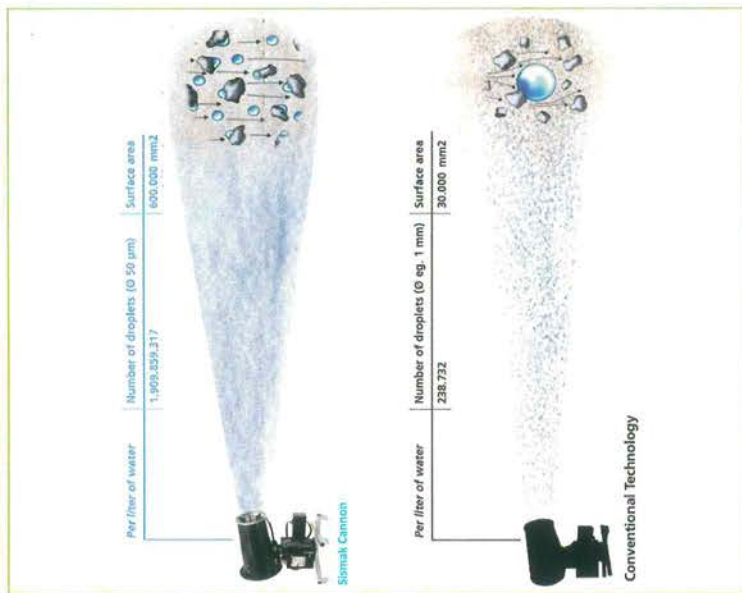
80 mt

SFC SERIES **SISMAK** FOG CANNONS

SISMAK SFC SERIES FOG CANNONS SPECIFICATIONS

	SFC 40	SFC 60	SFC 80
Throw	40mt (windless conditions)	60 mt (windless conditions)	80 mt (windless conditions)
Nozzle / Qty	36 pcs.	36 pcs.	72 pcs.
Size Of Droplets	50-150 microns	50-150 microns	50-150 microns
Power Supply	3 Phase 400 V AC, 50-60Hz	3 Phase 400 V AC, 50-60Hz	3 Phase 400 V AC, 50-60Hz
Water Consumption	4.000 - 8.000 l/h	4.000 - 8.000 l/h	8.000 - 15.000 l/h
Fan	7,5 kW	15 kW	30 kW
Booster Pump	5,5 kW	5,5 kW	5,5 kW





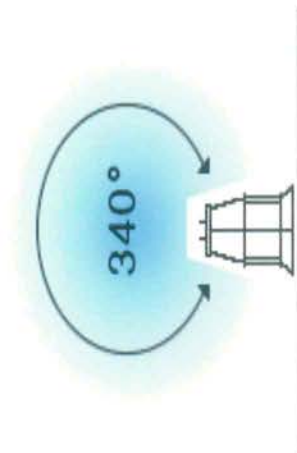
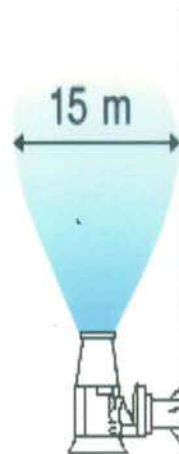
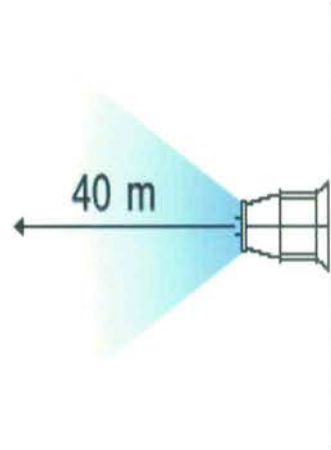
SFC SERIES STANDARD DESIGN

- One stainless steel nozzle ring
- Nozzles made of brass
- Automatic horizontal oscillation 0 - 340°
- Booster pump
- Flowmeter
- Water filter (mesh size 80 microns)
- Electric control panel
- Protection against dry - run
- Low noise fan

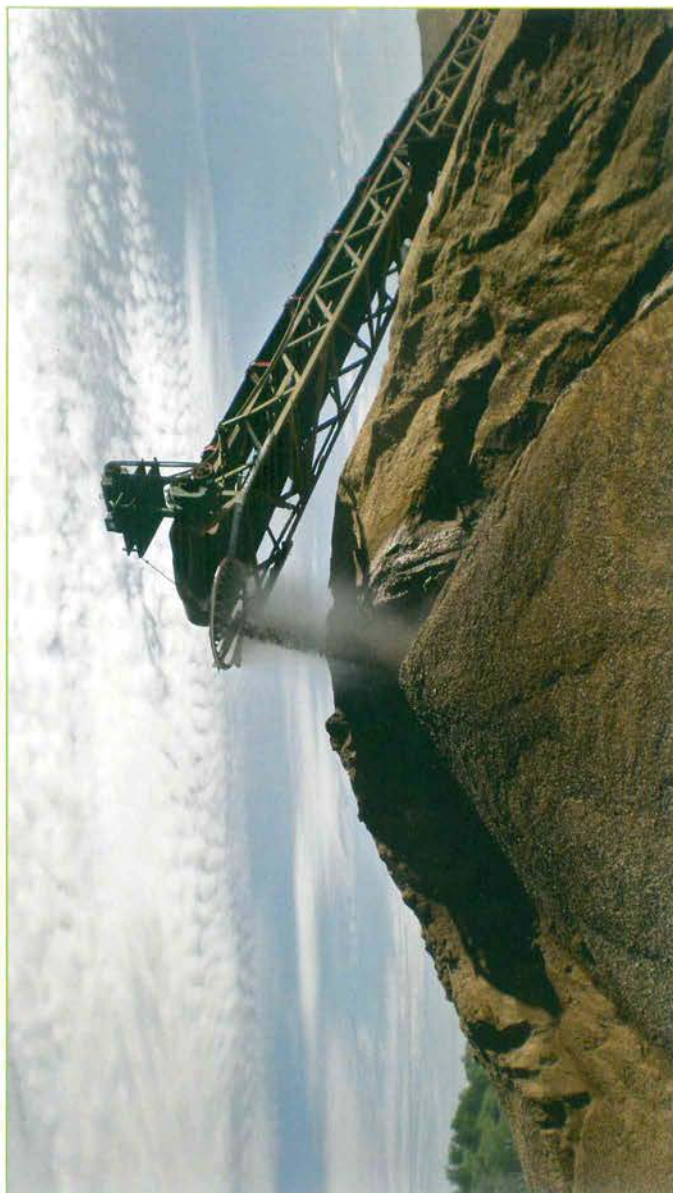
SFC SERIES ADDITIONAL ACCESSORIES

- Remote control (fog cannon On & Off)
- Wheeled trailer
- Electrical vertical tilting (10-40°)
- Chemical additives for dust or odour suppression
- Additional pump to increase the inlet pressure
- Diesel generator

SFC 40



Sismak Dust Ring



SISMAK DUST RING Specifications / Options

PART	SPECIFICATION / OPTION
01-Ring	Stainless Steel / Galvanized
02-Nozzle	Stainless Steel / Brass / Ceramic
03-Hose/Tube	Hydraulic / High Pressure Tube
04-Connections	Screwed
05-Water Consumption	SDRS (Low Pressure Model) / Each Nozzle 50 Lt/h with 5-7 bar pressure Up to 50 mt Distance SDRS (Low Pressure Model) / Each Nozzle 50 Lt/h with 8-10 bar pressure Up to 100 mt Distance SDRH (High Pressure Model) / Each Nozzle 80 Lt/h with 10-20 bar pressure Up to 100 mt Distance SDRH (High Pressure Model) / Each Nozzle 80 Lt/h with 20-30 bar pressure Up to 200 mt Distance
06-Ring	Diameters min. 400mm up to 2.800mm / Ring Diameter Calculation / Belt width + 200mm
07-Control Unit	Start / Stop key / connected to the waterpump
08-Regulation	Pressure Regulator with manometer
09-Waterpump	SDRS Models 5-10 bar pressure pumps. Pump capacity is related to the application conditions SDRH Models 10-30 bar High pressure type pumps. Pump capacity is related to the application conditions
10-Installation	Installation Set , for easy installation; Adjustable connection foods with degree setting possibility.



FORCE Model Screw Type Air Compressors are specially produced for SISMAK to serve in Heavy Duty Conditions for the mining and crushing Industrie. Special designed and isolated cabin with high performance filtration units, cooling and oiling systems will support our customers for a trouble free / long life usage. All Force models are produced in Turkey and have the certifications of CE / ISO / TSE.



MODEL	PRESSURE		CAPACITY	AIR RECIEVER TANK	MOTOR POWER	CONNECTION	DIMENSIONS			WEIGHT
	Bar	kg	m3/min	It	kW/HP		WIDTH	DEPTH	HEIGHT	kg
FORCE 3	7	0,33		270	2,2 / 3,0	1/2"	1570	753	1520	170
	10	0,26								
	13	-								
FORCE 4	7	0,44		270	3,0 / 4,0	1/2"	1570	753	1520	177
	10	0,35								
	13	-								
FORCE 5	7	0,59		270	4,0 / 5,5	1/2"	1570	753	1520	188
	10	0,48								
	13	-								
FORCE 7	7	0,80		270	5,5 / 7,5	1/2"	1570	753	1520	198
	10	0,67								
	13	-								
FORCE 10	7	1,15		500	7,5 / 10	3/4"	1800	690	1600	440
	10	0,92								
	13	0,75								
FORCE 15	7	1,75		500	11 / 15	3/4"	1800	690	1600	450
	10	1,40								
	13	1,15								
FORCE 20	7	2,65		500	15 / 20	1"	1840	790	1780	520
	10	2,05								
	13	1,70								



MODEL	CAPACITY			MOTOR POWER kW/HP	CONNECTION	DIMENSIONS			WEIGHT kg
	7 Bar	10 Bar	13 Bar			WIDTH	DEPTH	HEIGHT	
FORCE 20	2,65	2,05	1,70	15 / 20	G 1"	940	790	1140	375
FORCE 25	3,20	2,70	2,30	18,5 / 25	G 1"	940	790	1140	390
FORCE 30	3,80	3,20	2,70	22 / 30	G 1"	940	790	1140	435
FORCE 40	5,10	4,40	3,80	30 / 40	G 1"	1195	820	1495	678
FORCE 50	6,10	5,60	4,80	37 / 50	G 1 1/4"	1200	1000	1800	764
FORCE 60	7,20	6,20	5,80	45 / 60	G 1 1/2"	1200	1000	1800	892
FORCE 75	9,50	8,10	7,00	55 / 75	G 1 1/2"	1300	1200	1900	1175
FORCE 100	12,00	10,60	9,40	75 / 100	G 2"	1850	1360	1940	1600
FORCE 125	15,80	13,50	12,20	90 / 125	G 2"	1850	1360	1940	2100
FORCE 150	18,20	15,80	14,20	110 / 150	G 2"	2100	1500	1950	2440
FORCE 180	23,30	19,50	16,90	132 / 180	DN 80	2510	1900	1910	3480
FORCE 220	27,80	23,60	19,80	160 / 220	DN 80	2510	1900	1910	3560
FORCE 270	35,00	29,10	23,60	200 / 270	DN 100	3040	2350	2500	5140
FORCE 340	43,80	37,20	31,00	250 / 340	DN 100	3040	2350	2500	5840
FORCE 430	54,00	43,00	37,50	315 / 430	DN 100	3040	2350	2500	6100

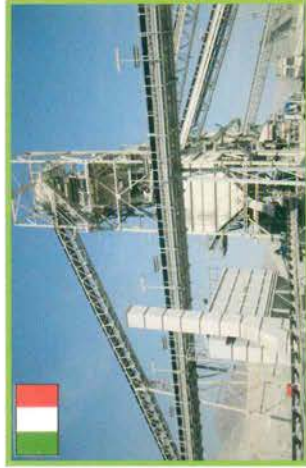
Worldwide Sismak

Sismak is in more than 30 world countries in use.

In different sectors like aggregate, cement, ceramics, coal, glass, metal and other fine material processes and handling is our system worldwide approved.

Sismak have in Turkey in different industries more then 800 references, additional 200 international references shows the succes of SISMAK products.

We as SISMAK family will continniu to serve our customers with our 25 years worldwide experience.



● Sismak

SISMAK
DUST SOLUTIONS



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