Industrial
Vacuums

Centralized
Vacuum
Systems

Pneumatic
Conveyors

spirovac®
High Power
Vacuums

CFM S.p.A. A 50 GB 1000 03 I

Data, technical characteristics, colors and illustrations can be subject to change without prior notice

Industrial **Vacuums**
ATEX compatible

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Information Guide

1 What is the ATEX directive?

In general terms the ATEX directive certifies the requirements needed to enable vacuum cleaners and other machinery work in presence of gas and inflammable powders.
This regulation takes in consideration the complete machine and not just the electrical components. According to the European rules (directive 99/92 for the zones and 94/9 for the product), CFM has achieved the ATEX certificate for various models of its range.

2 By whom and how the zones are classified?

The purchaser has to declare to the manufacturer in which zone the vacuum cleaner will be used. This statement is based on the environmental characteristics represented by the different quantities of explosive powders and gas present in the area. The manufacturer will then provide the customer with the most appropriate machine. The following chart shows the zones classification.

Category	G Gas zone	D Dust zone	Probability of danger
1	0	20	Always
2	1	21	Probable
3	2	22	Possible

Zone 0 Area with a steady explosive atmosphere (gas, mist)
Zone 1 Area with a probable explosive atmosphere (gas, mist)
Zone 2 Area with a possible but improbable explosive atmosphere (gas and mist)
Zone 20 Area with a steady explosive atmosphere (combustible dust)
Zone 21 Area with a probable explosive atmosphere (combustible dust)
Zone 22 Area with a possible but improbable explosive atmosphere (combustible dust)

3 CFM solution for the zone at risk

As the supplier, CFM has to provide the customer with a vacuum cleaner in accordance with the declaration the client issued. With this statement the buyer has defined in which area the machine will be used. The following chart (for instance) shows the zones and the vacuums CFM suggests for each area.

Vacuums	Gas zone 0	1	2	Dust zone 20	21	22
A17/100 DXX A17/60 DXX		x	x		x	x
3307MAG1 3557MAG2 3557MAG3					x	x
3306Z22						x

Operative solutions

Vacuums characteristics

The machines described in this brochure achieved the ATEX certification E/x.
These vacuum cleaners have all the safety features the directive requires as well as the typical power and reliability of the CFM industrial vacuums.

MAG 1, 2, 3

The MAG models are available in three versions, from 2,2 kW up to 5,5 kW of power. INERIS issued the certificate for these vacuums. These machines can work in zones 21 and 22 and are appreciated for their reliability, safety and versatility.

Vacuums for zone 22

CFM self certifies a lot of vacuums operating in zone 22. This self-certification is in accordance with the ATEX directive. It allows the manufacturer to state the minimum safety standard for this zone.

A 17

Air compressed vacuum cleaner available in two versions, with 60 litre and 100 lt capacities. This is the sole model of the CFM range (ATEX certified) running in presence of gas and explosive powders. The filtering chamber and the bin are in stainless steel. Each components is earth connected.

Other models are in phase of certification for II D and II G categories.

		DUST D		GAS G	
Zone		21 22**	22*	1	2
Protection		IP65▲	IP55*	IP65▲	IP65▲
Category Vacuum		II 2 D	II 3 D	II 2 G	II 3 G
Mod	**kW**				
3156 Z22	1,6		A		
3306 Z22	2,2		A		
3307 Z22	2,2		A		
3507 Z22	4		A		
3557 Z22	4		A		
3307 MAG1	2,2	A			
3557 MAG2	4	A			
3557 MAG3	5,5	A			
3507W Z22	4		A		
3707/10 Z22	7,5		A		
3907 Z22	11		A		
3907W Z22	11		A		
3907/18 Z22	13		A		
3997 Z22	22		A		
3997W Z22	22		A		
A17 DXX		A			

*= non conductive dusts
**= conductive dusts
▲= the threephase models are available in IP65