









Less than **3 YEARS** of return on investement.



MARINI RETROFIT - INVERTER on FILTER

COMPONENTS PRICE LIST for EACH POWER

Item No	lo.	Description	Code	Q.ty	Total Price [€uro]
1.0		INTERTER (vfd) FOR EXHAUST FAN			
1.1		INVERTER (vfd) TYPE 1 of 75 Kw for exhaust fan	UR1	1	
		Screnned elettrical cables.	UR2	1	
		Electric actuators.	UR5	1	
		protective cover / canopy	UR3	1	
		Wiring diagram update	-	1	
		NET DRIGE			
		NET PRICE			19.500,00
1.2		INVERTER (vfd) TYPE 1 of 90 Kw for exhaust fan	UR1	1	
		Screnned elettrical cables.	UR2	1	
		Electric actuators.	UR5	1	
1		protective cover / canopy	UR3	1	
		Wiring diagram update		1	
		NET PRICE			21.000,00
1.3		INVERTER (vfd) TYPE 1 of 110 Kw for exhaust fan	UR1	1	
		Screnned elettrical cables.	UR2	1	
		Electric actuators.	UR5	1	
		protective cover / canopy	UR3	1	
		Wiring diagram update	-	1	
		NET FRICE			23.500,00
1.4		INVERTER (vfd) TYPE 1 of 132 Kw for exhaust fan	UR1	1	
		Screnned elettrical cables.	UR2	1	
		Electric actuators.	UR5	1	
		protective cover / canopy	UR3	1	
		Wiring diagram update	-	1	
		NET PRICE			25.000,00

RETROFIT



Item No.	Description	Code	Q.ty	Total Price [€uro]
1.5	INVERTER (vfd) TYPE 1 of 160 Kw for exhaust fan Screnned elettrical cables. Electric actuators. protective cover / canopy Wiring diagram update	UR1 UR2 UR5 UR3 -	1 1 1 1 1	
	NET PRICE			28.000,00
	PRICE INCLUDES: SUPPORT AND ASSEMBLY TESTING WITH OUR TECHNICAL ENGINEER (# 1 Electrician) Accommodation and lodging excluded, charged to the customer, as well as necessary staff for help (See supply and general conditions) + lifting equipment. N.B - The Inverter (VFD) will be installed below the exhaust fan within proper canopy cover.			



TECHNICAL DESCRIPTION

1.0 INVERTER (VFD) FOR EXHAUST FAN

Inverter with maximum power of 160 kW for the exhaust fan cleaner to be installed under shelter repair it from the elements.

The inverter will be positioned under the bag filter, the electrical connections from the inverter to the electric motor will be with shielded cables to prevent electromagnetic disturbances.



RETROFIT



BENEFITs

The reduction of the speed has a significant effect on power consumption as the latter is manifested as a function of the cube of the speed: reducing by 50% the speed of the mechanism reduces the power consumption to one eighth. The insertion of an inverter therefore allow to respond to the required reduction of 50% of capacity of a plant by reducing the speed of 50% with a power saving absorbed equal to 87.5%.

Summarise:

- ✓ LESS MAINTENANCE
- ✓ LESS WEAR PARTS (bearings, belts and rollers)
- ✓ LESS REACTIVE POWER IN STARTING
- ✓ INVERTER (VFD) as "SOFT-STARTER"

RETURN ON INVESTMENT

		1	2	3	Д	5
	MOTOR TYPE	75 KW	90 KW	110 KW	132 KW	160 KW
	COST SAVING					
	<u>Return of Investment [years]</u>	3,13	2,74	2,34	2,04	1,91
	AC MOTOR DATA					
	Power [kW]	75,0	90,0	110,0	132,0	160,0
	Efficiency [%]	82,0	82,5	83,0	83,5	84,0
	DRIVE DATA					
	Power [kW]	75,0	90,0	110,0	132,0	160,0
	Efficiency [%]	97,0	97,0	97,0	97,0	97,0
	Cost [€]	20.000	21.000	22.000	23.000	26.000
	ELETTRICITY					
	Cost per kWh [€]	0,130	0,130	0,130	0,130	0,130
	Incentives [€]	0,000	0,000	0,000	0,000	0,000
	ENERGY SAVING					
	<u>system individual cost</u>					
	Hours/yr	2400,000	2400,000	2400,000	2400,000	2400,000
	Energy annual cost [€]	23.400	28.080	34.320	41.184	49.920
	Other cost [€]	0,000	0,000	0,000	0,000	0,000





DRIVE COST					
Drive cost [€]	20.000	21.000	22.000	23.000	26.000
Initial cost [€]	0	0	0	0	0
Energy annual cost [€]	17.002	20.403	24.937	29.924	36.272
Other cost [€]	0	0	0	0	0







RETROFIT



