



### The Company and Society

The human factor There is no company in the world today that does not affirm, among its fundamental principles, the importance of the human factor. People are the heart of the company, are men and women hope to realize the lif'e's dreams through what their work can give them. Men and women who spend most hours of their day in a place where they hope to give meaning to their lives. Hope means trusting someone or something. These people must be made part of the organisation of work at all levels and those who lead the company must take account of this need and try to remove any obstacles.

**Research** The Company's managers are generally focused on the future. Looking ahead is, moreover, part of human nature; it is every man's instinct, a fundamental need for the continuation and development of work. Today, more than ever, whoever hesitates is taking a step backwards, that is how quickly things are changing. So, we need to look ahead with a propulsive drive that looks to the future, aiming to project the company forward over time, as a good that goes beyond personal interests, that keeps in mind the social functions of the company towards those who work there and the surrounding society.

The Environment The world of work is asked every day to take greater care of the environment and reflect on the rate of consumption of our natural resources. One thing which can help us put things into perspective is the indicator called Earth Overshoot Day which has identified 21st August, 2010 as the calendar day on which, at a global level, the demand for resources started to outstrip supply for that year. By the next day we started to affect the natural resources that should have been available for the next year, so beginning to create a shortfall for future generations.

Various studies related to the European Commission's SAVE project have shown that it is possible to save up to 29% of the energy consumed by electric motors. This saving in Italy corresponds to a reduction of CO<sup>2\*</sup> of around 16 million tonnes, equal to over 17% which is what Italy should cut to achieve the Kyoto target.



### High efficiency motors, inverter technology, the computer, software and wireless

High efficiency motors, inverter technology, the computer and software for aspirators, have enabled us to design innovative aspirators: an inverter equipped with a small computer together with its software has allowed us to realise this.

The inverter, technically referred to as the VSD (Variable Speed Driver), is an electrical and electronic device that optimizes the operation of electric motors; the software is an artificial intelligence that constantly monitors the aspirator as a whole.

The VSD and its software reduce the stress on motors and maintain a constant programmed operating head adapting the air capacity to demand in real time.

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AZIENDA CON SISTEMA DI GESTIONE PER LA QUALITÀ CERTIFICATO DA DNV = UNI EN ISO 9001:2008 =

<sup>\*</sup> The data were taken from the newspaper "Electrum" (new technology) ISSN 1129-9584.



Promotional article

### **Self-protection**

Aspirators with VSD are the only ones which react to difficult situations: when a problem arises with the power supply or usage, Turbo-Smart and Micro-Smart do not stop and are not damaged. They display the temperature on a small video screen and the software reacts by lowering the operating head for the time required to regain the operating temperature and, when it has returned to normal, the aspirator continues functioning at the planned operating head. Where there is danger of flooding due to an unexpected flow of liquid, Turbo-Smart and Micro-Smart go into self-protection mode; the aspirator unit slows down and increases power to the centrifugal separator which drains the liquid. Once the emergency is over, the aspirator returns to normal operating mode.

#### Prevention

During operation, any dangerous events are highlighted on the display.

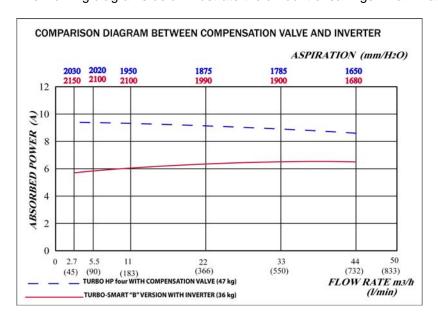
### Wireless connection

Turbo-Smart and Micro-Smart can be connected wirelessly to the computer.

#### **Eco-friendly Aspirators**

Comparing Turbo HP Quattro and Turbo-Smart at the same performance level, we found a saving of raw materials of 11 Kg and electricity savings of 690 W/h compared to fixed speed aspirators.

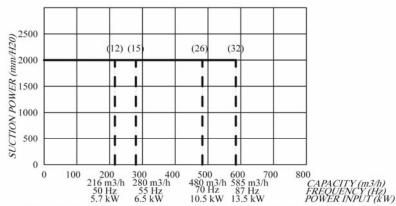
The working diagrams below illustrate the amount of savings in raw materials







# SUCTION CURVE OF A UNI-JET 501 WITH INVERTER AT 2000 mm/H20 DEPRESSION

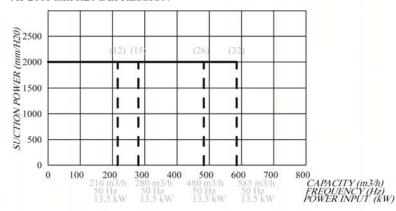


THE NUMBERS IN BRACKETS ARE WORKING PLACES THAT CAN BE SERVICED AT THE SAME TIME.

- FIGURE CALCULATED USING AIR CONSUMPTION OF 18 m3/h (300 N l/min) PER USE -

ASPIRATOR MODEL UNI-JET 501 (88 Kg).

## SUCTION CURVE OF A UNI-JET 1000 WITHOUT INVERTER AT 2000 mm/H20 DEPRESSION



THE NUMBERS IN BRACKETS ARE WORKING PLACES THAT CAN BE SERVICED AT THE SAME TIME.
- FIGURE CALCULATED USING AIR CONSUMPTION OF 18 m3/h (300 N l/min) PER USE.
ASPIRATOR MODEL UNI-JET 1000 (155 Kg).

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### Promotional article

### Comparison between high-efficiency motors and standard motors

		High- efficiency			! !		Standard			l Output
MOTOR	POWER	Motors	<u>Output</u>	Amps	MOTOR	POWER	Motors	<u>Output</u>	Amps	Difference
					į					<u>:</u>
TECNO-T2	kW 0,75	M400	77,40%	2,3	TECNO-T2	kW 0,75	M530	63,00%	2,4	14,40%
UNI JET 75					UNIJET 75					-
2V	kW.0,75	M400	77,40%	2	2V	kW 0,75	M530	70,00%	2	7,40%
FLUX JET	kW.1,1	M400	79,60%	2,7	FLUX JET	kW 1,1	M530	73,00%	3	6,60%
FLUX JET	kW.1,5	M400	81,30%	3,7	FLUX JET	kW 1,5	M530	78,00%	4	3,30%
MEDIO JET	kW.2,2	M400	83,20%	4,7	MEDIO JET	kW 2,2	M530	81,00%	5,2	2,20%
MEDIO JET	kW.3	M400	86,50%	6,4	MEDIO JET	kW 3	M530	83,20%	6,8	3,30%
MEDIO J350	kW.3	M400	86,50%	6,4	MEDIO J350	kW 3	M530	83,20%	6,8	3,30%
MEDIO J 2V	kW.5,5	M400	87,70%	12,4	MEDIO J 2V	kW 5,5	M530	81,00%	13	6,70%
UNI JET 501	kW.7,5	M400	91,10%	14	UNI JET 501	kW 7,5	M530	81,80%	17,3	9,30%
UNI JET1500	kW.15	M400	90,70%	28	UNI J1500	kW 15	M530	85,50%	33,2	5,20%
UNI JET1500	kW.18	M400	91,60%	33	UNIJ1500	kW 18	M530	86,00%	33,2	5,60%
UNI J2200	kW.18,5	M400	91,60%	33	UNI J2200	kW 18,5	M530	88,00%	33,2	3,60%

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