



PNEUMATIC-ELECTROSTATIC DUSTER
Model KWH B 780 (International Patent pending)
Prize winner “Technical Novelty” at EIMA Show 2004 (Bologna/Italy)

A novelty which, for the first time in AGRICULTURE, is able to induce an ATTRACTION FIELD AMONG MICRO-PARTICLES of POWDER MIXTURES (e.g. WINNOWNED SULPHUR) and TREES VEGETATION (e.g. VINEYARDS' LEAVES and GRAPES).

The prototype that was presented to the EIMA 2004 Technical Novelty Competition is an EXPERIMENTAL PROTOTYPE, which was deployed in field TESTS by technicians of the RESEARCH INSTITUTE FOR AGRICULTURAL MECHANIZATION (I.S.M.A) in Monterotondo (Rome-Italy) during 2003, who, among other aspects, have also pointed out that the ELECTROSTATIC effect causes a sulphur **deposit of an additional 29% approximately** on vegetation as compared with the control. (Official results are available upon request).

OPERATING PRINCIPLES

At the exit point of each of the TWO SIDE OUTLETS that supply the POWDER, carried by the high-performance centrifugal KWH FAN's air flow, TWO micronizer NOZZLES supply NEBULIZED WATER at ULTRA-LOW VOLUME simultaneously.

The presence of the HIGH VOLTAGE current and very low amperage ELECTRODE transmits the necessary ELECTROSTATIC CHARGE also to the POWDER cloud, able to induce an ATTRACTION FIELD between itself and the VEGETATION, since the former, according to a PHYSICAL law, automatically charges itself with the opposite sign, while the powder micro-particles having all the same sign, repelling themselves, are never able to converge; therefore any detrimental overlapping of the product will be avoided, thus assuring perfect uniform coverage.

Another IMPORTANT ADVANTAGE is that the operator carrying out the treatment will not be exposed to dusts, since these will be rapidly trapped by the vegetation, therefore remaining only a few seconds suspended in the air.

During 2006 and 2007, further experiments will be carried out in the field under the phyto-sanitary effect.

The final series model will be manufactured starting from 2008; if you wish to receive information relative to price and availability of our Electrostatic Duster, please write to us at: infoweb@martignani.com

KIT for application to KWH MIST SPRAYERS Integral PTO model for 3/p linkage

