MEDIUMS AND ADHESIVES FOR MICRO GRITS

The current production standards of porcelain stoneware provide for the frequent use of glass finishes that are obtained through the wet application of micro-grits.



These applications may undergo further processes such as polishing or the more delicate lapping, which have the purpose of producing extremely shiny and brilliant surfaces giving to the material an appearance qualitatively of great value. Depending on the choice of the type of final treatment, the quantities of material applied change significantly, which can vary from a few grams to many tens. These important differences mean that the mediums with which these grits are applied are very different from each other. In applications that require only a slight surface removal, it must be possible to ensure maximum flatness and compactness to the applied material.

Surface irregularities, such as holes or cissings, must be absolutely avoided to prevent defects emerging after lapping with consequent downgrading of the produced material. On the other hand, when large quantities of grit are applied to create a strong effect of depth in the finished product, the medium with which we work must be characterized by a reduced organic load, it is essential that no combustion gas is released in the firing area, as the micro -bubbles that form, remaining trapped in the glass would make it opaque causing a drastic loss of contrast in the underlying decoration.

From the above it can be deducted that the choice of a suitable medium is of fundamental importance to guarantee a good performance.

As we have seen, this particular type of product must satisfy much more than one need to allow a good final result.

They must guarantee an excellent leveling of the glass component, have a reduced organic contribution, but mainly they must also be able to guarantee a suitable suspension.

This parameter is of fundamental importance at an industrial level as suspensions not sufficiently performing tend to clog filters if not even the air-less nozzles, forcing the department managers to frequent stops with easily imaginable consequences.



Dry grits

A valid alternative to suspensions in medium are the dry applications of micro-grits on a bed of previously applied adhesive. This is an old technology recently revived as it allows to reduce the water intake for the same weight of grit applied and given the increasingly rapid firing cycles or the very specific needs of large slabs it is a type of application that is taking more and more space within this sector.

Mistral with its own laboratory is able to tackle and study any type of problem and to propose the most appropriate solutions for every type of production requirement, it has a proven experience in all these sectors and it boasts important application results both in terms of airless applications and with regard to bell applications, tendentially preferred for the manufacture of wall covering material.

In Mistral we believe it is very important to carry out preliminary laboratory tests calibrated directly on the compound to be applied in order to maximize the final result and reduce the industrialization times of the products.

This type of product helps to keep the grits suspended over time and to spread them on the surface of the tile. Feature of our products:

application density around 1500 gr/lt and good suspension over time.

Before proceeding with an industrial check, we prefer to check in our laboratories which product is more suitable for the customer's GRIT.

It is necessary:

• 2 kgs of grit with technical information on its application.



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