

## INSTRUCTIONS

### FOR APPLYING PAINT FOR HORIZONTAL ROAD MARKING - DEKO PROFESSIONAL TERMPOPLASTIC

#### PREPARATION BEFORE WORK

Prior to working with Deco Professional Thermoplastic make sure that the heating cauldron and the “system” of the application machine are fully emptied and cleaned from remnants of previous operations with other substances. The contamination of Deco Professional Thermoplastic with other substances/materials left in the cauldron or the machine could affect negatively the further operational characteristics of the product.

#### APPLICATION

- ● Filling:

Fill in the whole bag (Deco Professional Thermoplastic together with the melting polyethylene bag) in the cauldron. Initially put the necessary quantity of thermoplastic until reaching 30% of the maximum limit of the cauldron; heat it to temperature 200-210 degrees and stir the mixture so that it becomes homogeneous. Gradually add the rest of Deco Professional Thermoplastic to fill up the cauldron and reach the final homogeneity.

- ● Stirring/Mixing:

Make sure that Deco Professional Thermoplastic has been completely melted in the cauldron and stir continuously at least 15-20 min the so prepared mixture; make sure that all components of the mixture have been well stirred and the mixture has turned into a homogeneous mass.

- ● Heating:

Maximum heating temperature: 230<sup>0</sup> C.

Temperature for applying the thermoplastic: 180-200<sup>0</sup> C.

Do not heat Deco Professional Thermoplastic at temperatures higher than the prescribed ones. Make sure that then temperature of the applied thermoplastic is in the defined limits so that the dropped from above pearls will manage to sufficiently sink into the melted mass and permanently remain there.

The maximum 230<sup>0</sup> C heating temperature shall not be exceeded; the same applies to the indicated 1 hour duration of the process in order to avoid damage to the pigments and the cohesive substance.

- ● Preparing the base:

The road pavement should be dry, clean from dust; the existence of oily stains, salt and other contamination could lead to weak adhesion of Deco Professional Thermoplastic with the base and to seriously damage its operational qualities at a later stage.

The temperature of the road pavement shall be from 5 to 35<sup>0</sup> C.

Do not forget that if Deco Professional Thermoplastic is applied to new or unusually warm asphalt this could lead to change of its main colour or to its erasure by the softened bitumen being taken away by the automobiles' tyres.

Deco Professional Thermoplastic could be applied upon old thermoplastic if the latter is sufficiently sound. All other type of road marking shall be removed in advance before applying Deco Professional Thermoplastic.

Upon very old and worn out asphalt pavement, upon concrete base, as well as upon extraordinary smooth pavement (texture on the surface smaller than 0.200mm) preliminary priming with Deco Professional Specialized Primer for Horizontal Road Marking is recommended.

Melted and hardened Deco Professional Thermoplastic, left unused in the cauldron, can (cannot) be heated again and be used in case it has not stayed there for more than 5 hours. The second heating must be done gradually and slowly in order to avoid its burning.

- ● Weather conditions:

Air temperature - over 5<sup>0</sup> C.

Air humidity- without special requirements (Deco Professional Thermoplastic shall not be applied during rain or in foggy weather).

- ● Applying “Screed process/” Extruder”:

After melting the thermoplastic in advance in the cauldron it shall be transferred to the road marking machine tank. The melted thermoplastic shall be moved to the “shoe” naturally (by using the gravitation) or by the help of an extruder. It shall be applied in the form of a line to the chosen surface while the road marking machine shall at slow speed proceed forward. The chosen breadth of the marked line is achieved by defining the breadth of the”shoe”. The use of a special “shoe” of automatic remotely controlled mechanism allows controlling the thickness of the applied thermoplastic for the purpose of achieving the “ribbing” effect of the marking line.

Recommended thickness of the applied layer:

- - “Screed process”: 2-5mm
- - Extruding: 2.5-3.5mm

- ● Applying pearls upon Deco Professional Thermoplastic:

Right after “pouring” the thermoplastic onto the pavement it is possible to drop onto it pearls or mixture of pearls and anti-skid materials which comply with the requirements of EN1423. The normal consumption standard of these “drop-on” materials is 250 g/m<sup>2</sup>.

Manual application of Thermoplastic

The area to be marked is preliminary defined and on the basis of square surface the quantity to be used is calculated. Thermoplastic shall be put into the melting vessel. By heating device the bottom of the vessel shall be indirectly heated to temperature 200-210 degrees of the Thermoplastic. By the help of a mechanical stirrer /with driller or a pneumatic type of it/ the Thermoplastic shall be made homogeneous for about 15-20 min. After the complete melting and achieving good homogeneity the mixture shall be poured into prepared in advance metal stencils

of the form we wish to mark. The Thermoplastic cools down very quickly when in contact with the asphalt or concrete surface. After cooling to such degree so that it loses its volatility /after about 3 minutes/ but still not completely cooled /from 5 to 10 minutes/ the stencils shall be lifted and removed without impairing the integrity of the coating.

- ● Further maintenance

In case of normal car traffic, at moderate temperature of the surrounding environment and availability of periodical rains Deco Professional Thermoplastic does not need additional maintenance and washing.