G. Metal Finishing Work, Filling and Cleanliness

Please note that adequate metal finishing can save much time spent on filling. On all paint jobs, cleanliness is of the utmost importance. During sanding, water should not be allowed to dry on, and there must be no sand marks on the car body. It is therefore advisable to clean the surface to be painted with gasoline and a clean cloth between the various finishing processes. Instead of gasoline, MB Synthetic Resin Thinner can be used for cleaning. Before spraying on top of enamel coats, carefully remove all residue of polishing agents, particularly of those containing silicones. Always use clean cloths to make sure that silicone residues are not transferred to other parts of the body.

Silicone polishers should never be kept or used in paint shops since minute traces of silicone in the air or on the car panels may produce fish-eyes in the synthetic enamel!

The spray booths should always be under pressure and the compressed air must be completely clean.

Note: Nitro-cellulose spray may ignite if it combines with synthetic resin spray. For this reason it is imperative carefully to clean the spraying booths whenever a changeover is made from nitro-cellulose lacquers to synthetic resin enamels.

H. Metal Sheen Enamels

Metal sheen enamel finishes are difficult to touch up. Touching-up requires a high degree of skill. When larger areas are sprayed, it should be remembered that the color shade is largely dependent on the method of applying the enamel, since the metal bronze will show poor flow-out if sprayed on irregularly. For this reason, color matching should be attempted not by mixing the enamels, but by varying the spraying technique. Full wet coats produce darker shades and moist coats produce lighter shades.

Synthetic resin metal sheen enamels can be air-dried or dried at a temperature of 80° C.

I. Bodywork Protection During Spraying Operations

The parts of the car body which are not to be refinished should be protected by crepe paper masking tape or by stripping lacquer. If the finish is to be dried at temperatures above 80° C, all parts likely to be affected by high temperatures should be protected or removed; this applies in particular to laminated glass (windshield glass) and to plastic lighting assemblies (brake light, flash direction signal, and license plate light). Plastic license plates should always be removed.

Note: At drying temperatures above 100° C even masked plastic parts may be destroyed.

K. Paint Shop Equipment

Before starting on a paint job, thoroughly stir the paint in order to avoid differences in color shades, unsatisfactory drying or similar flaws. We recommend nozzles with a diameter of 0.8 mm for the

spraying of synthetic resin enamels. The drying of baking enamels requires an infra-red drying lamp bank which contains the following lamps, distributed over an area of 68 × 48 cm:

13 Osram-Siccatherm infra-red lamps, 250 Watts or
13 Philips Infra-red drying lamps, 275 Watts } 220—225 v

L. Preparation and Priming

Bare metal should be well sanded with a 220 paper and all rusty parts should be carefully cleaned. After cleaning with MB Synthetic Resin Surfacer put on a gray priming coat. Adjust the material to the correct degree of viscosity (see instructions for use, or Information Sheet DBA 3100).

Application: Apply an undercoat, and then 1—2 cross coats.

Drying: About 30—40 minutes with the lamps at a distance of 35 cm.

When the coat has cooled off, sand first with 360 paper and then with 400 paper. Surface irregularities are filled with red-brown MB Synthetic Baking Filler. Before applying the filler, sand with 280 paper, dry and clean. It is advisable to apply the filler in a number of layers rather than in one thick coat in order to prevent pores and sagging. Dry each filler layer for about 5 minutes at a lamp distance of 35 cm and bake the complete filler coat for 10 minutes before sanding. Use 280 paper for the final sanding of the cold filler coat. After cleaning, again apply 1½ cross coats of synthetic resin surfacer, dry and sand.

M. Finish-Coating Large Areas

The synthetic resin baking enamel should only be applied to an absolutely clean and completely smooth, mat-sanded surface. If the cover is unsatisfactory (e.g. in the case of red, ivory, or dark blue), it may be necessary to apply two finish coats. In this case, the first coat should be lightly sanded with 600 paper when cold.

The following instructions should be observed:

a) Black Finish

The repair area is sanded as usual with 600 paper and sprayed with baking enamel; apply a fog coat to the edge of the wet enamel, using a diluted enamel (proportion 1 part of baking enamel to 3 parts of baking enamel thinner). Even after this operation a narrow strip of the feather-edged enamel should remain visible. After that bake with infra-red drying lamps and polish as usual when the coat is cold.

b) Colored Finish

Sand the repair area with 400 paper. Contrary to the method used on the black finish, the whole sanded repair area is sprayed with baking enamel. Apply a wet coat of thinned enamel to the edges of the wet enamel and the adjacent non-sanded coat (proportion 1 part of baking enamel to 3 parts of baking enamel thinner). Bake in accordance with instructions and take care not to sand the finished coat excessively. Because of the danger of graying and in order to avoid halos it is necessary to use particular care in the baking of colored baking enamels.