The fixed sampler in the area of the highest concentration gave a dust concentration of 21 mg/m³ and the personal sampler, 2·7 mg/m³.

An improvement in controlling the release of dust had been obtained but was not considered completely satisfactory and an alternative approach was sought.

CONDITIONS OBTAINED USING A MODIFIED TECHNIQUE

After some preliminary experiments, the following general technique was devised. Firstly, the loose deposits of dusts inside the brake drum and on readily accessible surfaces of brake shoes and the brake assembly were removed, using the smallest brush supplied with the cleaner—the equipment being used as a vacuum cleaner. A much narrower, tubular brush, made from available materials was then used to remove deposits from less accessible surfaces. Finally, a rag, soaked in water and wrung fairly dry, was used to remove adherent deposits. No visible emissions of dust were observed but a few particles were detected by the objective methods, as shown in Table 3.

Table 3. Results of Konimeter samples during modified technique

Sample	Number of brake dust particles/5 cm³
Brushing with standard brush	16–25
Brushing with tubular brush	20–25
Rag wiping	1–5

No fibres were detected and the mass concentrations involved were too low to determine.

CONCLUSIONS

The objective measurements made seem to confirm that vacuum cleaning provides a useful contribution towards obtaining satisfactory dust control when brake assemblies are cleaned. The design of the particular cleaner chosen prevents the discharge of particles back into the environment and the collection in a paper bag enables suitable disposal methods to be adopted. This work was completed in the early part of 1968 and subsequently the method described was recommended for use until such time as the results of studies being carried out elsewhere in the Motor Industry were known and detailed requirements subsequently formulated.

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REFERENCES

Addingley, C. G. (1966), *Ann. occup. Hyg.* **9**, 73.
Higgins, R. I. and Dewell, P. in *Instruction Leaflet* 3107/A1, C. F. Casella.