La Medicina del Lavoro Med Lav 2005; *96*, 3: 250-257

Il rischio amianto nel settore tessile: i sistemi frenanti delle macchine di penultima generazione

G. Chiappino, D. Pellissetti*, O Moretto*, Ornella Picchi
Università degli Studi di Milano Centro di Studio e Ricerca sugli Effetti Biologici delle Polveri Inalate, Milano
* SAVIO macchine Tessili, Pordenone

Key words
Mesothelioma; asbestos; textile machinery

Summary
«Asbestos risk in the textile industry: braking systems on machinery used until the 1990's». Background: *We recently described asbestos risk in the non-asbestos textile industry as the result of fibre dispersion from ceilings, pipe insulation and machines.* Objectives: *The widespread use of brakes with asbestos linings on the machines as well as other functional details were considered for a proper evaluation of their role in producing atmospheric pollution.* Methods: *All the information was collected on the basis of the personal technical experience of two of the Authors and by direct observation of the machines.* Results: *All the textile machines (ring spinning, twisting, warping, winding, looms) used until the 1990's were without exception equipped with asbestos-lined mechanical brakes. The heavy action required produced relatively rapid wear of the linings and the dust produced was spread into the atmosphere by the continuous action of the "travelling blowing cleaners" and by the daily cleaning of the machines using compressed air at the end of the shift: violent air blowing undoubtedly caused redispersion of the fine dust from the brakes and also acted as a mechanical grinder on the bundles that sedimented on the machines from the ceilings and pipes, producing more ultrathin respirable fibres.* Conclusions: *the contribution of textile machinery to atmospheric pollution by asbestos fibres was significant and due both to the widespread use of brakes with asbestos-containing materials and to the continuous action on the machines of compressed air blowers. Asbestos pollution was certainly high in all the factories so that in the near future still further mesothelioma cases among ex-workers are to be expected.*