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Advances and Developments in Emissions Control: a Review of the 1992 SAE International Congress. Noble metal catalysts, particularly in gasoline applications, are very much a part of a control system involving engine management strategies and other engine components. Noble metal catalysts are also finding use in diesel emissions control. The substitution of Pt or Rh by Pd is being examined by a number of companies.

Cited: *Platinum Metals Review*, 36(2), 1992, 86-89 [in English]. PHOTOCOPY ORDER NUMBER: 199301-61-0064.

Hazardous Air Pollutants: a Challenge to the Metalcasting Industry. The identification, quantification and control of air emissions from the metalcasting industry has become a significant environmental issue over the last decade. The focus during the 1970s and early 1980s was on reducing workplace exposure to foundry emissions by increasing air exchange rates and venting the emissions to the outdoor environment. However, over the last ten years, a greater focus has been placed on the identification and quantification of foundry emissions into the environment. State and local hazardous air pollutant programs and the 1990 Clean Air Act Amendments (CAAA) have the potential to significantly impact foundry operations by requiring detailed emission assessments and emission control strategies. Foundries face a two-step permitting strategy depending on whether they are assessing the regulatory requirements of state/local hazardous air pollutant programs (which are typically health- or risk-based) or the 1990 Clean Air Act Amendments (primarily technology-based). In either case, it is imperative for the foundry to develop a detailed and accurate emission profile. Once emissions are identified and quantified, the foundry can compare emission levels and appropriate emission thresholds to acceptable ambient concentrations and determine what, if any, emission reductions may be required. If a reduction in the emissions of hazardous air pollutants is required, the foundry may be able to accomplish this through changing its process or product usage. While this may be a viable and effective solution in some instances, it is unlikely that these changes will provide a comprehensive, industry-wide solution. In this case, the foundry may have to install pollution control equipment. There are several pollution control technologies that have potential application to the foundry industry including incineration, carbon adsorption, scrubbers and condensers.

G.R. Allen, J.J. Archibald, T. Keenan. Cited: Ninety-Fifth Annual Meeting American Foundrymen's Society, Conference Proceedings, 5-9 May 1991, American Foundrymen's Society, Inc., 1991 [in English]. PHOTOCOPY ORDER NUMBER: 199301-51-0039.

The Treatment of Waste Water From the Metal Working Industry.

The latest revision of the German water management law provides a strong impetus for innovation in the metal industry with the objective of meeting the severe restrictions on contaminants, conservation of water, recycling of materials and avoidance of waste. The technology requires longer use times for process baths, containment of bath contents, reuse of rinses, recycling or return of process fluids from the rinse baths and recovery of metals and ecology-endangering chemicals. Appropriate approaches are discussed.

K. Marquardt and R. Nagel, Original Title: Behandlung von Abwasser aus der Metallverarbeitenden Industrie]. Cited: *Chemie Ingenieur Technik*, 64(1), Jan 1992, 1-5 [in German]. PHOTOCOPY ORDER NUMBER: 199212-71-0307.

Cobalt in Hardmetals: Health and Safety. Hard metals, and the cobalt used in their production, have benefited industry considerably, but the

mixture of materials in hard metal dust can cause health problems. Problems and relevant legislation are discussed. The real answer, it is contended, is to ensure cleanliness.

B. Clark. Cited: *Metal Powder Report*, 47(4), 1992, 18-21 [in English]. PHOTOCOPY ORDER NUMBER: 199212-62-1485.

Practices of Waste Water Disposal in the British Metal Finishing Industry. Pollution limits in the UK are under the control of HM Inspectorate of Pollution and apply to industrial and complex organics, toxic metals, surface, ground, river and coastal waters. Compared to German regulations, those of the UK are more restrictive. While no license is required for installing potentially polluting equipment, the operator is responsible for protecting the environment from liquid and gaseous polluting emissions.

R. Kubitz, Original Title: [Die Abwasserpraxis in der Britischen Oberflächentechnik]. Cited: *Galvanotechnik*, 83(3), 1992, 946-949 [in German]. PHOTOCOPY ORDER NUMBER: 199212-58-1599.

Acme Steel Fined for Melt Air. Acme Steel, Riverdale, Illinois, USA, agreed to pay a \$17,500 fine and to correct alleged air pollution violations. Most of the violations were remedied before the Illinois Environmental Protection Agency filed its complaint in October 1992 with the state's attorney general, but the settlement calls for Acme to retain an engineering consultant to review its operations and make recommendations for improving the melt shop. The company already has taken several other steps, including a test of the stack on its basic oxygen furnace, which was found in compliance, installation of a color TV monitor to watch for visible emissions and enclosing the dust-collection room.

Cited: *American Metal Market*, 100(242), Dec 1992, 3 [in English]. PHOTOCOPY ORDER NUMBER: 199301-S4-0003.

PMN Required for Some Fillers. The Toxic Substances Control Act (TSCA) requires manufacturers and importers to file a Premanufacturing Notice (PMN) with the US EPA before producing or importing a substance which is not on the TSCA inventory. It is illegal to use a chemical substance that is known to have been manufactured in violation of the PMN provisions of TSCA. The industry has generally believed that treated fillers have been exempt from the PMN requirements. Recent industry meetings with EPA, however, now make it clear that this exemption applies only if: the treatment does not react with the filler, whether or not the treatment reacts with the resin matrix; the treated filler is merely a mixture of filler and treatment; or the treatment does not react with the filler, but the treated filler does not subsequently react with the resin matrix.

J. Schweitzer. Cited: *CI on Composites*, Oct-Nov 1992, 4-5 [in English]. PHOTOCOPY ORDER NUMBER: 199301-P4-0006.

Clean Water Act May Take Center Stage. In the US, overhauling the Clean Water Act may become a congressional priority because of its potential to do double service on President Bill Clinton's agenda. Because drainage and sewer projects probably would be part of a new Clean Water Act, industry and environmental lobbyists alike believe Clinton may want to push such a bill to meet his dual campaign aims of pollution cleanup and economic revival through public spending. While it is not known what provisions a renewed Clean Water Act would include, possible limits on toxic industrial discharges, mandated pollution-prevention plans and ground-water monitoring could spell new responsibilities for processors. Industry representatives say they are heartened by a heightened focus on