ALUMINOTYPING, A PROMISING METHOD FOR PRODUCING RESIST IMAGES ON ALUMINUM AND ITS ALLOYS

Description
A unique technology for imaging on anodized aluminum and its alloys was designed. Articles manufactured using the Aluminotyping technology are anodized plates of aluminum and its alloys with applied images of any information - textual, numerical, graphical, pictorial, etc., with maximal sizes of 500x600 mm.

Technical appraisal and economic benefits
The images produced on articles from aluminum are distinguished by:
- high resistance to atmospheric and climatic factors;
- thermal stability (information is preserved above the melting point of the aluminum substrate up to 700°C);
- abrasion resistance;
- high resolution (300 primes per 1 mm);
- resistance to various organic solvents and process media
- absence of the need to protect articles by lacquers and other films

Application areas
Aluminotyping products can be used in various areas: instrument making, machine-tool manufacture, household appliances, fabrication of hard goods in the form of nameplates, signage, nameboards, pointers, labels, etc., and in art photographs and placards.

Development stage
Full-scale production using the Aluminotyping technology was launched at the Vorozhtsov Institute of Organic Chemistry, RAS. For several years, the Institute has been a constant manufacturer of nameplates and signage of the Elsib, Sever, and Taira companies. The Institute have carried out orders of the International Christmas Art Festival in Novosibirsk, the Atomic Energy Ministry, the Government of Moscow, the Novosibirsk regional administration, and the Presidium of the SB RAS for manufacturing memorable and congratulatory placards with photographs, doorplates, and diplomas for foreign scientists and prizewinners.
The Aluminotyping technology was awarded a silver medal at the Eureka-95 International Exhibition (Brussels), a gold medal of the Siberian Fair, and a silver medal of the Archimedes-2000 International Industrial Property Salon (Moscow).

Patent situation
The technology is protected by Russian Federation patents.

Commercial offers
Fabrication of articles to orders and contracts.

Estimated Cost
Tables and nameplates - from 50 rubles/dm².
Photographs, profile, and combined images - from 100 rubles/dm².

Contacts
Cand. Sc. Dmitry G. Mazhukin, Scientific Secretary