

THE **S**ITUATION:

FOR THE ENVIRONMENTALLY CONSCIOUS PLANT PRODUCING LIQUID ALUMINIUM IN THE POT ROOMS, IT IS NECESSARY TO CONTROL HYDROGEN FLUORIDE (HF) EMISSIONS. THE EMISSION OF TOXIC FUMES IS ESPECIALLY PROBLEMATIC WHEN ANODE BUTTS ARE REMOVED FROM THE POTS AND PLACED ON ANODE TRAYS.

THE **P**ROBLEM:

COVERS WHOSE OPENINGS ADAPT TO THE VARYING DIMENSIONS OF THE SPENT ANODES AND THEIR RODS HAVE BEEN DESIGNED AND PLACED IN USE OVER THE ANODE TRAYS FOR SEVERAL YEARS. HOWEVER, PREVIOUS DESIGNS, WHILST EFFECTIVE, HAVE TOO SHORT A LIFE DUE TO WARPING, ETC. AROUND THE SEAL — HENCE THEIR MAINTENANCE AND REPAIR IS EXPENSIVE.

THE **S**OLUTION:

SEALING AROUND THE ANODE ROD IS A CRITICAL DESIGN PROBLEM WHICH HAS BEEN SOLVED BY STAS. A PATENT IS PENDING FOR THE APPLICATION WHICH HAS SHOWN TO HAVE A LIFESPAN OF MORE THAN A YEAR COMPARED WITH PREVIOUS CYCLES OF ONLY A FEW WEEKS.

THE **A**DVANTAGES:

- 1- REDUCES TOTAL HF EMISSIONS FROM POT ROOM AND COOLING AREA BY 35%.
- 2- SEALING DESIGN PATENTED FOR LONG LIFE.
- 3- MAINTENANCE COSTS OF COVERS ALMOST ELIMINATED.
- 4- CHEAP TO INSTALL.

