

1. The Customer:

The Customer is a world leader in the contract manufacturing of precision metal parts and sub-assemblies. With Global Headquarters in USA and Aluminum Plant in India, is specialized in manufacturing of weather proof castings with powder coating operations.

The product range varies from white goods to turbochargers, from industrial / commercial lighting to power tools; the customer serves in the Electrical / Home Appliances / Lighting / Industrial / Power Tools / Construction Machinery / Farm Equipment / Hydraulic Systems / Automotive sectors.

The customer's weatherproof product line is designed, tested, and UL approved to meet or exceed all applicable UL and NEC requirements for wet and damp locations. The customer offers a broad range of die cast metal weatherproof boxes and covers which are designed and manufactured with the quality, strength, and longevity that are required for outdoor electrical applications.

2. The Situation:

The customer's India facility for HPDC had been using Foseco make oil based die release agent since inception in 2003. After the transformation of Foseco business to Chemtrend and shifting the technology of oil based die release agent to water based die release agent customer tried with all water based release agents but could not find out a proper solutions.

They tried with all possibilities Chemtrend, Petrofer, Henkel (Acheson), Lubrikote and also with Sunrise. Out of all they could find Sunrise product some extent better for their process as compared to others with all sorts of variation in quality of the product. This continued for almost 6 years since 2003 when the plant started production.

3. The challenge:-

Metal Flow approached the customer in 2011 and after discussing with the customer it was felt that the customer was looking for an alternative to break the single hand business of Sunrise but the challenge was the pricing of the product as the customer wanted have the same spending on account of die release agent at the same time the challenge was that the product should have 100% compatibility to powder coating which was on top priority.

4. The Solution:-

Along with central R& D team and technical service team based at Barcelona, Spain the paint test procedure and the requirement test procedures of the product were understood and then a product was developed for the operation.

We conducted a trial of the new specially developed product Cast Flow ½ S for this customer in India and started on in 2012 with 20 Kgs and we hold a share of 80% of the total requirement of the consumption of water based die release agent today which is approximately 3000 Kgs per month.

5. The Result:-

Customer is extremely satisfied with the performance of the product; they do not have any casting rejection on account of grain like structures on surface, black marks, soldering, scoring marks. The consistency in quality of each lot supplied is an icing on the cake.

Casting produced with Cast Flow ½ S

Note the casting is not critical but aesthetic appearance after powder coating is very important

