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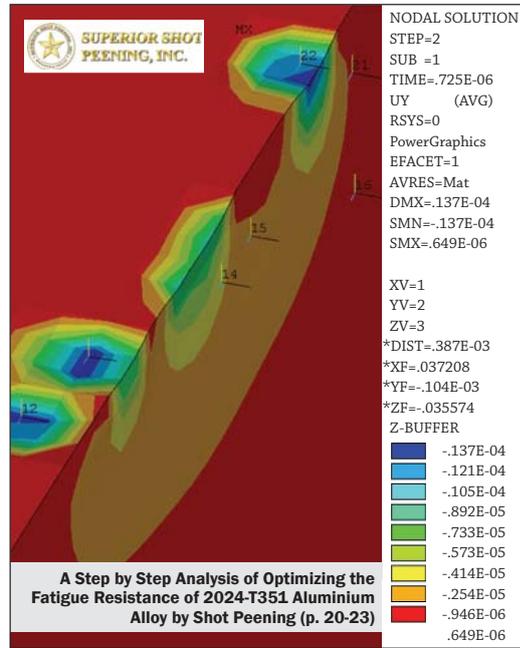
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Interview with Volker Ulrich, Technical Adviser
and Hans-Heiner Sochurek, Export Manager of
Fischer GmbH

Extended Plastic Blast Media
Production Programme



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Extended Plastic Blast Media Production Programme

Fischer GmbH, a company located in Dillenburg, Germany, is one of the leading manufacturers of plastic blast media. MFN appreciated the chance to get involved in a discussion with the management.

(?) MFN: Fischer GmbH has extended its production programme of Plastic Blast Media by the Type V (Acrylic). What have been the reasons for that?

(!) V. U.: We have been planning this extension for quite some time already but we had set other priorities. However, as the number of applications for Type V has increased considerably we accelerated these activities.

(!) H. H. S.: From various markets we supplied our Type II (UREA) and Type III (Melamine) as we have received more and more inquiries for Type V. Therefore we have taken a closer look at this product.

(?) MFN: Has Fischer GmbH, as manufacturer of Type II and Type III been faced with unexpected problems?

(!) V. U.: The a.m. priorities included a modernization and upgrading of our production lines. At that time the focus was still more on the PBM of Type II and Type III. After that was done we tested the suitability of our production line for manufacturing of Type V.

(!) H. H. S.: Right from the beginning we have focused on manufacturing this Type V in MIL-quality and on getting

the MIL-P-85891 certificate by the U. S. Air Force.

(?) MFN: To what extent has the product quality been increased by the new production line?

(!) V. U.: First of all the efficiency has been increased – which means we get substantially more quality product per unit of time. On top of that we have reduced the contamination of the PBM by ferromagnetic and by non-ferrous metal particles to literally 0%.

Also the content of dust has been reduced to a value much below the allowed percentage by the MIL.

(?) MFN: Has the Fischer PBM Type V meanwhile been tested and certified according to the MIL-P-85891A?

(!) H. H. S.: Thanks to our experiences with Type II and Type III we had no problems at all meeting all the criteria set by the MIL. In most criteria we are much better than allowed by that standard.

(?) MFN: Did you not consider procuring the Type V from established manufacturers and selling it under the JET-plast brand name?



Volker Ulrich, Technical Adviser of Fischer GmbH

(!) H. H. S.: Indeed we have considered this, particularly because the supply of crude material seemed first to be rather difficult. We thus have purchased PBM of Type V from manufacturers of various countries and we have tested and compared these materials. Unfortunately the results have not been to our satisfaction. All the tested material had to be reprocessed and upgraded to meet our standards of quality.

(?) MFN: Did Fischer GmbH meanwhile solve the problem of getting adequate supply of crude material?

(!) V. U.: Yes, completely, without going in to much detail.

(?) MFN: Which are for Fischer GmbH the major new applications for the PBM of Type V?

(!) V. U.: Basically, Acrylic is a comparable soft thermoplastic material which can be processed into PBM Type V for blasting of extremely thin and/or soft sheet metal and of composite material. Furthermore there is a tendency to use less chemical materials for paint stripping and cleaning of various surfaces and parts.

(!) H. H. S.: The number of applications seems to be increasing continuously. One reason for that is the ever increasing use of composite materials (CFK, GFK, AFK, PPS etc. The research laboratories, particularly in the aircraft

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Volker Ulrich, Technical Adviser of Fischer GmbH in Dillenburg, Germany



Hans-Heiner Sochurek, Export Manager of Fischer GmbH

industry are striving to reduce the weight of aircraft but still to maintain or even increase the mechanical stability. A modern aircraft like the Airbus A380 or the Eurofighter Typhoon consists already of more than 25 % composite material. This tendency will for sure continue for quite some time.

(?) MFN: Who is the typical customer for PBM of Type V?

(!) V. U.: All repair and overhaul departments who specialize in surface treatment, especially in cleaning and paint stripping of thin and/or soft sheet metal and composite materials. These are f. e. companies operating fleets of helicopters like the police, the Red Cross, exploration companies, providers for drilling platforms, defense forces etc. A helicopter is technically rather differently built as compared to an aircraft with wings. The material of the body is f. e. much thinner (aprox. 0.6mm) and thus a rather "soft" blast medium is required. Modern helicopters, built to a large extend with composite material need also to be cleaned or stripped with PBM of Type V because the outer layers of the composite hull consist of so called wire mesh which should not be damaged during repair or cleaning.

(!) H. H. S.: Helicopters of exploration companies, defense forces etc. are frequently operated under extremely different conditions such as in stormy weather, salt-laden air, even during

sandstorms etc. That means the meantime between repair or overhaul is rather short.

(?) MFN: Even if you don't want to go into details - what is so difficult in getting sufficient supply of crude material for PBM of Type V?

(!) V. U.: There are many products made of Acrylic. The Acrylic material could either be extruded, cast or die-cast. For the production of PBM, however, only scrap of cast material such as polymethylmethacrylat can be used. It should by no means be mixed or contaminated by other acrylic products because that would deteriorate the quality drastically.

(!) H. H. S.: We had this problem mainly with imported scrap material.

(?) MFN: Will Fischer GmbH also manufacture the Type III (Melamine) in future?

(!) H. H. S.: There are not many inquiries for that type of PBM. On request, however, we can also supply Type III in MIL-quality.

For the time being we keep a certain quantity on stock for those customers who buy Type III regularly. If the demand should increase we could react immediately.

(?) MFN: Are there similar problems to get scrap material for Type III as you experienced with Type V?

(!) V. U.: As explained before, the problems with scrap for Acrylic material are solved; we don't have such problems with Melamine.

(?) MFN: How did the financial crisis affect Fischer GmbH and how do you see the future development?

(!) H. H. S.: The so called crisis affected Fischer GmbH only in such a way that we had a very moderate reduction in incoming orders and turnover.

Some of our customers, mainly in the rubber, foam-rubber and in the synthetic material industry ordered less than before. On the other hand we

have a good number of new customers, mostly in the aircraft industry, who more than compensated for that reduction. As Fischer GmbH is a young, dynamic and very reliable company with top-quality PBM we have a quite optimistic expectation.

(?) MFN: Mr. Sochurek, you have emphasized that the aircraft industry will in future be the fastest growing market for PBM of Type II, Type III and Type V. You are the Export-Manager of the Fischer GmbH. What are your personal experiences or advantages in respect of the aircraft industry?

(!) H. H. S.: I started my professional career in the aircraft industry. At that time I designed and developed electrical systems for various types of aircrafts (VFW 614, VAK 191, modification of the FIAT G91).

Therefore I still feel to be somehow connected to the aircraft industry. In further assignments I specialized in the export of high level technical products and I have worked for several years overseas (Japan).

(?) MFN: Mr. Ulrich, you are technical advisor of Fischer GmbH with emphasis on the application of PBM in the aircraft industry and to the defense forces. What particular experiences do you have in these fields?

(!) V. U.: For many years of my professional career I was assigned to various jobs connected to the German Air Force. I specialized during my last years of assignment in surface protection of flying systems.

During this assignment I have gathered much practical experience in selection and application of blasting systems and blasting media. That's exactly the know-how I need as a technical advisor.

MFN would like to thank Mr. Ulrich and Mr. Sochurek for this interview.

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