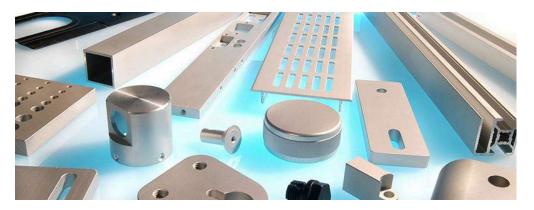


■ Surface Technology Online / ■ Topics / ■ Topic Area / Branch / BREF STM new edition with German participation



The German surface finishing industry is actively involved in the new edition of the BREF STM (Image: VOA)

BREF STM new edition with German participation

The German surface technology industry is also involved in the upcoming new edition of the BREF STM. The BREF STM defines future limit values for emissions to air and wastewater in the EU.

BREF STM - seven letters that have a decisive impact on the future of the surface treatment industry throughout Europe. The full document is called "Best Available Techniques Reference Surface Treatment of Metals and Plastics" and describes the current state of the art in Germany and ultimately at European level. The aim is to describe bindingly applied technologies, taking into account the cost-benefit ratio, with which a generally high level of protection for the environment can currently be achieved most effectively and which can also be verified by the responsible authorities. This means that all BREF documents are updated every ten years with a processing time of around four years, as the requirements continue to evolve, not least due to new findings in science and research.





The BREF process in the focus of plant-related environmental protection (Image: Malp - stock.adobe.com)

Preliminary work

In June 2021, both national expert groups ((E)NEG) - in Germany under the leadership of the Federal Environment Agency (UBA) and with the active participation of the German Association for Surface Treatment of Aluminum (VOA) - and the Technical Working Group at European level began their work. The latter is made up of representatives of the European member states, representatives of the industry concerned, the EU Commission and European associations such as the European Association for Surface Treatment on Aluminium (ESTAL) - of which the VOA is the largest member association - and is coordinated by the European Integrated Pollution Prevention and Control Bureau (EIPPC) in Seville. The kick-off event was followed by the formulation of the "Initial Positions", their evaluation by the EIPPC with feedback and discussion, as well as the creation of a comprehensive questionnaire for the numerous, differently positioned EU companies. The figures from the survey, which was completed in the third quarter of 2023, form the basis for the development of the BREF-STM, which consists of two parts: the fact sheet plus the Best Available Technique Conclusion (BAT Conclusion), which summarizes the relevant requirements.





Data on fresh water consumption is also collected (Image: 15079075 - Pixabay)

BREF STM defines future limit values

As a result of the EU's European Green Deal, the BREF process is moving more into the focus of plant-related environmental protection at EU level. In addition to emissions, topics such as decarbonization, circular economy and chemicals management are becoming increasingly important. The numerous authors revising the BREF STM are also particularly interested in the consumption values for energy, water and raw materials. In future, the data collected from VOA member companies will be used to derive emission values that will be binding throughout Europe. The BREF STM therefore defines the future limit values for emissions into the air and waste water for both the German and European surface finishing industry.

Commitment of the VOA

The VOA is involved in the ENEG, has sent a representative to the Technical Working Group and maintains contact with important political decision-makers, including at European level. The individual steps that the association accompanies in the complicated revision process entail an enormous amount of work often with very short deadlines - which requires a great deal of expertise and a professional approach. Over the past few months, it has been particularly important to collect realistic and comprehensible, highly detailed plant data from VOA member companies on the basis of the complex questionnaire and to incorporate this into the data pool. It became apparent that not only German companies, but also individual EU countries have different





The Federal Environment Agency coordinates the national expert groups for the BREF STM (Image: Federal Environment Agency/Martin Stallmann)

The challenge of reference figures

For example, the EIPPC office asked about the average wall thickness or part surface of the treated workpieces. As every finishing company processes a large number of workpieces over the course of the year, each of which can have different wall thicknesses and complex geometries at different points, the required reference figures can usually only be roughly estimated in the overall view. There are also other hurdles: For some data. companies simply do not have the technical equipment required to record it, such as the allocation of the exhaust air volume flow to individual process stages or the determination of water consumption per process stage. Data on the heavy metal load in wastewater in kg/h is also unusual in Germany and is not measured; the same applies to odor emissions. In addition, to calculate the removal efficiency required for each air pollutant, the pollutant concentrations would also have to be recorded in the raw gas. However, measurements are only taken in the clean gas, as this is where the limit values to be complied with apply.





The Federal Environment Agency in Berlin (Image: Federal Environment Agency/Martin Stallmann)

VOA project group "BREF STM" collects data

The VOA convinced numerous member companies to voluntarily take part in the complex process of data collection. In many individual discussions with each company, the aim was to maintain the necessary confidentiality and to uncover inconsistencies directly from the outset, clarify terms and avoid misinterpretations. As a basis for the discussions, the VOA project group "BREF STM", which was set up specifically to tackle this task, drew up a list of the information to be provided. This included, for example, data from the approval notice as well as data from the last three years on wastewater volumes, records of wastewater and exhaust air measurements, data on the use of various energy sources and fresh water requirements. The result is a real success story for the VOA and its member companies: Of the 13 VOA member companies that originally registered, the UBA has received eleven qualified completed questionnaires. Several companies also agreed to allow visits by experts commissioned by the EIPPC office so that they could assess the technical conditions on site.





EU Parliament in Brussels: The BREF process is moving more into the focus of plant-related environmental protection at EU level (Image: Florian Pircher - Pixabay)

Active collaboration on European and global standards

Based on the data collected from plants throughout Europe by the third quarter of 2023, the EIPPC office now needs to define well-founded data, taking into account the requirements of the "European Green Deal", which can be sensibly implemented by the plant operators and can also be carried out by the approval authorities without any problems. The first workshop on data evaluation by the office in Seville is planned for the beginning of 2024; the publication of the new BREF STM, which is scheduled for fall 2026, will probably be delayed by a few months according to the VOA's estimates.

Together with its member companies, the VOA is making an enormous contribution, as active participation in the "Seville Process" offers the opportunity to help set the European and global standard for efficient, environmentally friendly production. The aim is to incorporate the level of environmental protection already achieved by German plants into the process of deriving technology-based emission standards in Europe. This is done through active cooperation in data collection and technology descriptions in the "Seville Process" and should be an opportunity for many companies to promote the achievement of a level playing field in the environmental sector across the EU. (OM-1/24)

Background information on the revision of the BREF STM



What does the Federal Environment Agency say?

Further Informationen



Contact

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About the VOA

As a trade association, the Verband für die Oberflächenveredelung von Aluminium e. V. (VOA) forms the industry network of companies in the surface finishing of aluminum and other materials and promotes the economic, political and technical interests of its members at national and international level.

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