

Compliance check of large fans – the INTAS methodology

Christian Holm Christiansen, Senior Specialist Danish Technological Institute Gregersensvej, DK-2630 Taastrup, Denmark cnc@teknologisk.dk

The INTAS project

The need for the INTAS project [1], acronym for *Industrial and Tertiary Product Testing and Application of Standards*, funded by the EU's Horizon 2020 programme, arises from the difficulty that European Market Surveillances Authorities (MSAs) have faced in establishing and verifying compliance with Ecodesign requirements for large industrial products, specifically fans and transformers. In case of fans, Regulation (EU) No. 327/2011 [2] apply for fans with electric input power of just 125 W up to 500 kW. INTAS is focusing on fans larger than 10 kW.

The INTAS project aims to identify and address these MSA issues and providing technical and cooperative support, as well as capacity building activities, to MSAs in charge of enforcing Ecodesign regulations.

Specifically, the objectives are:

- to support European Member State MSAs to deliver Ecodesign compliance for transformers and large fans;
- to support industry to fully understand their obligations under the Ecodesign Directive and to deliver compliance in a manner that will be broadly accepted by MSAs;
- to foster a common European approach to the delivery and verification of compliance for these products.

The project started in 2016 and will conclude in February 2019. It involves 16 European partners, among which 11 are national MSAs or cooperating organisations and the remainder are technical partners.

Throughout the entire project, INTAS has fostered market surveillance collaboration between MSAs and raised awareness and information exchange of the product energy performance and market surveillance among key stakeholders.

The INTAS methodology

In INTAS various challenges for MSAs were identified. Some of the most prevailing are:

- Large products are engineered to order via B2B procurement processes and are typically not advertised in catalogues. Therefore, MSAs do not know when the large industrial products are placed on the market and cannot identify them;
- MSAs lack technical capacity to evaluate the technical documentation of complex industrial products. Such technical documentation includes specific product information (14 point long list for fans), name plate information and documentation of compliance with the minimum requirements. The latter require specific technical capacity to check test reports, test rigs, standards and calculations;

• The availability of laboratories and economical resources for testing are limited.

To consider these challenges and support MSAs the following methodologies and recommendation are developed:

- 1. Step-by-step guide of compliance verification
- 2. Evaluation of costs, benefits and new methods of compliance verification
- 3. Policy recommendations for future regulation on industrial products

The step-by-step guide includes a graphical flow chart to guide MSAs through methodologies of:

- 1. General information to stakeholders
- 2. Product screening and sample selection
- 3. Documentation inspection
- 4. Testing

As fans are extended products majority of large fans will also include electric motors with Ecodesign requirements according to Regulation (EC) No 640/2009 [3] and the amendment of Regulation (EU) No 4/2014 [4]. Therefore, the step-by-step guide also touches the electric motors as well as the specifications on the use of tolerances in verification procedures as of (EU) No 2016/2282 [5].

References

- [1] www.intas-testing.eu
- [2] COMMISSION REGULATION (EU) No 327/2011 of 30 March 2011 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
- [3] COMMISSION REGULATION (EC) of 22 July No 640 of implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motors.
- [4] COMMISSION REGULATION (EU) No 4/2014 of 6 January amending Regulation (EC) No 640/2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motors.
- [5] COMMISSION REGULATION (EU) 2016/2282 of 30 November 2016 amending Regulations (EC) No 1275/2008, (EC) No 107/2009, (EC) No 278/2009, (EC) No 640/2009, (EC) No 641/2009, (EC) No 642/2009, (EC) No 643/2009, (EU) No 1015/2010, (EU) No 1016/2010, (EU) No 327/2011, (EU) No 206/2012, (EU) No 547/2012, (EU) No 932/2012, (EU) No 617/2013, (EU) No 666/2013, (EU) No 813/2013, (EU) No 814/2013, (EU) No 66/2014, (EU) No 548/2014, (EU) No 1253/2014, (EU) 2015/1095, (EU) 2015/1185, (EU) 2015/1188, (EU) 2015/1189 and (EU) 2016/2281 with regard to the use of tolerances in verification procedures.