



TESTING OF SOLID FUEL BURNING APPLIANCES

ACCREDITED TESTING FOR EUROPE AND THE US



**DANISH
TECHNOLOGICAL
INSTITUTE**



Laboratory for Solid Fuel Burning Appliances

Welcome to Denmark's leading laboratory in measuring and logging performance and emissions for solid fuel burning appliances. Since 1932 we have been testing wood stoves and since 1980 also biomass boilers.

Tests for the entire European and US market

Our laboratory is a one stop shop. We provide initial type testing for all applicable standards in Europe including US-EPA for wood stoves. We are accredited by DANAK, Notified body (NB no. 1235), acknowledged by DIN CERTCO and certified laboratory for Flamme Verte, US-EPA and Blue Angel (Blauer Engel).

Our laboratory has following test stands:

- Test stands for room heaters (EN standards, Norwegian particle testing after NS3058/59, DEFRA Smoke Exemption areas, US-EPA testing)
- Test stand for Norwegian firewall test (safety test)
- Test stands for biomass boilers up to 300 kW
- Mobile boiler test stand for field testing 300-1000 kW
- Onsite flue gas measurement

“ The practical knowledge and advice that we have gained at DTI has been essential for our development of stoves with proper design elements and combustion.

- Luke Smith, Head of Development, Hunter Stoves

Initial type testing, counseling or development

Our promise to you as a customer is that we dedicate our time to you in a testing situation whether your appliance is ready for certification or in an early development state. By choosing DTI as a development partner, you receive more than just test results but also explanations to possible challenges with the combustion and thereby, a deeper knowledge of your stove or boiler.

Experienced staff

Our staff consist of highly skilled test engineers with between 5-25 years of testing experience. They have had many technologies between their hands and are experts in their field.

Counselling on standards and legislation

Apart from testing, we also provide counselling for our customers regarding standards and legislation across Europe. We participate in standardization committees and advise Danish and Norwegian energy authorities. Consequently, our customers always receive up to date knowledge.



PARTICIPATE DURING TESTING & SHORT DELIVERY TIME

Customers are welcome to participate in the entire testing procedure either online or onsite. And we make sure to deliver your test results as quickly as possible so you can move forward with your marketing process.



COMBUSTION DEVELOPMENT

Our many years of experience gives us a thoroughly insight of the combustion process and DTI is therefore your ideal partner when it comes to development of new products.



LEGISLATION COUNSELLING

One of our services are counselling regarding legislation, initial type testing, Ecodesign, Energy label, standards and market controls.



SECONDARY FILTER TECHNOLOGIES

From different projects we have test experience with many secondary filter technologies such as ESPs, catalytic filters and other technologies to remove unwanted emissions in the flue gas.

Testing of room heaters, inset appliances and pellet stoves

Our laboratory meets the standards throughout Europe and also the US-EPA measurement needed for entering the US market. Furthermore, DTI is accredited to test after the Norwegian NS3058/59 standard, DEFRA smoke control area, certified Flamme Verte laboratory and latest also a certified Blue Angel (Blauer Engel) laboratory. If your product has been selected for a Flamme Verte Audit control or you want to be ahead of the competition with the Blue Angel certificate don't hesitate contacting us and we will guide you through the options.

Selection of services:

- Wood stoves according to EN13240
- Inset appliances according to EN13229
- Pellet stoves according to EN14785
- Masonry stoves according to EN15250
- Expected harmonized EN16510 for all above-mentioned products
- NS3058/59 PM testing
- UKCA or DEFRA SCA testing in full flow dilutional tunnel
- US-EPA PM measurements either as pre-testing or certified EPA testing.



Your contact

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Read more:



Tests and certificates



UKCA, DEFRA SCA



US-EPA PARTICLE
EMISSION TEST



ART 15A-B-VG



BLAUER ENGEL, BIMSCHV,
DINPLUS, DIBT



ECODESIGN 2015/1185,
ENERGY LABEL 2015/1186,
CE-MARK



NS3058/59 AND NORWEGIAN
FIRE WALL SAFETY TESTING



CONTO TERMICO,
ARIA POLITU



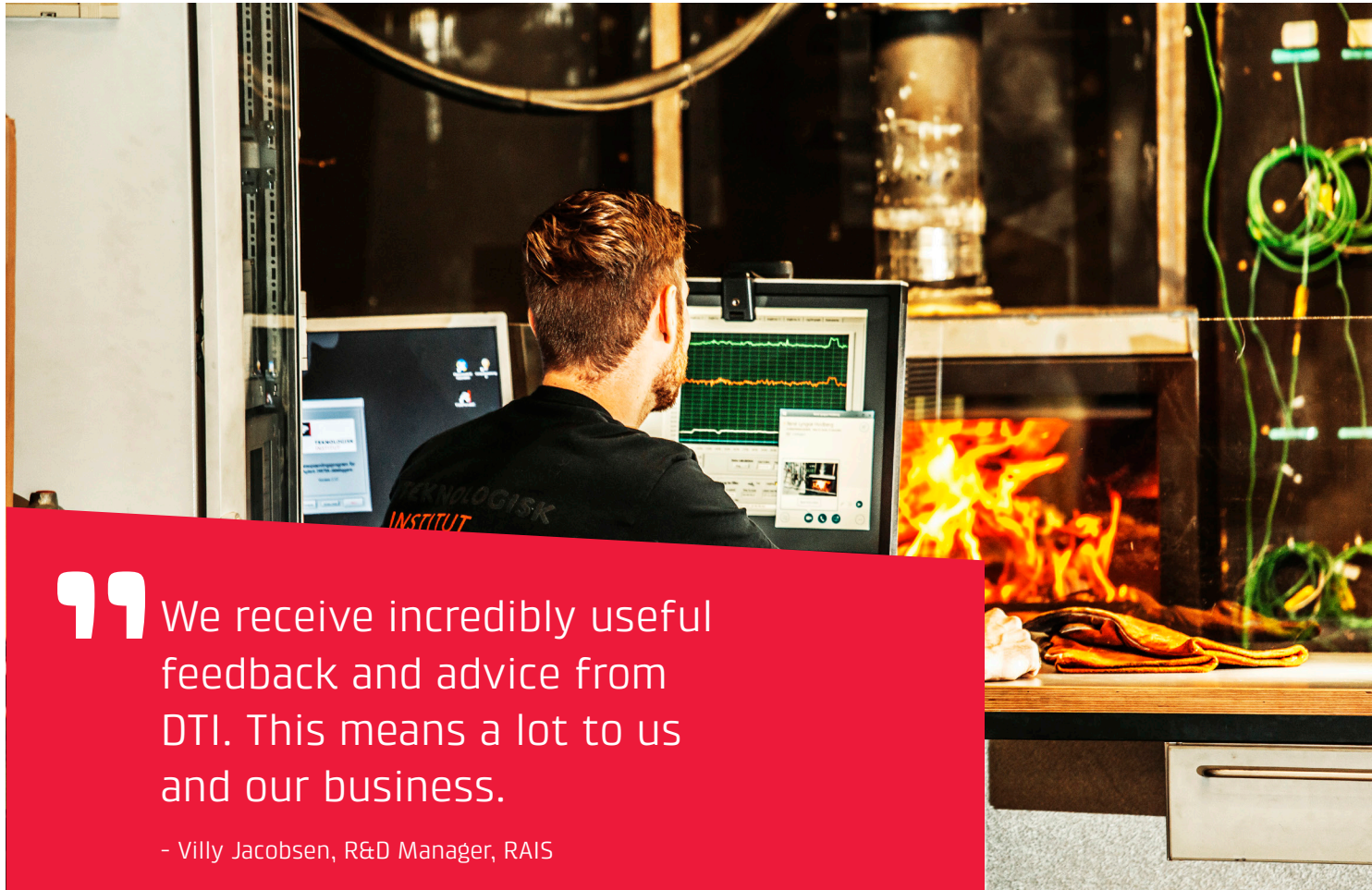
FLAMME VERTE,
CRITT BOIS



BEK. 199

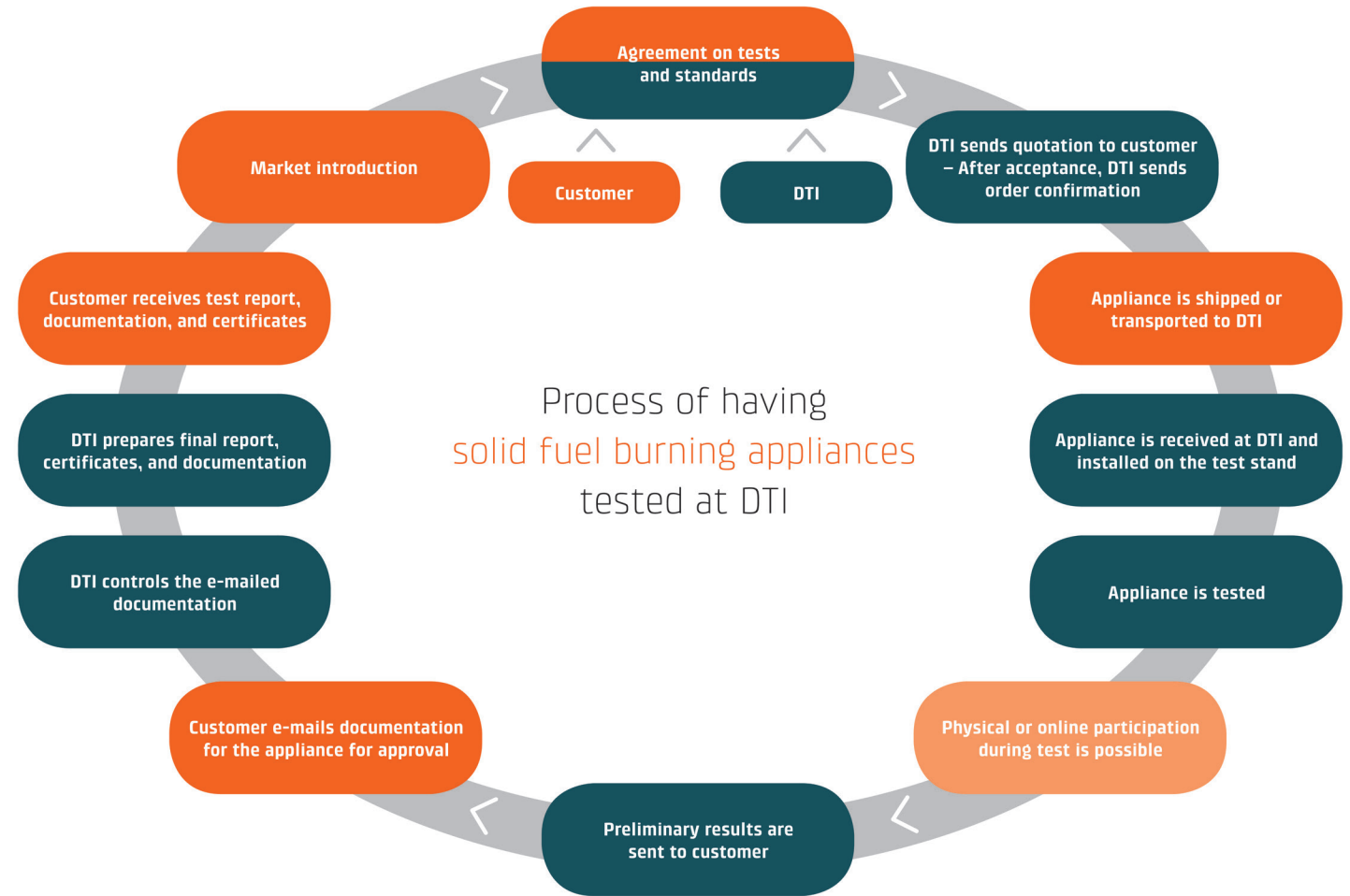


VKF



“ We receive incredibly useful feedback and advice from DTI. This means a lot to us and our business.

- Villy Jacobsen, R&D Manager, RAIS



Testing for the US market

DTI is approved and certified to perform US-EPA testing for the US market as only one out of three laboratories in Europe.

We offer following tests for the US market

- Pre-testing to clarify US-EPA readiness
- Entire testing for US-EPA

Save time and travel expenses – perform testing in Denmark

If you are looking for an American adventure we can help you in the process of getting there. The American standards are very unlike the known European standards, why it can be extra challenging to pass the EPA requirements. If needed, we offer pre-testing in our lab to see where the appliance is according to the requirements. When the appliance is ready we also perform the final EPA testing. Therefore, choosing DTI as your certified EPA-laboratory will save you both time and travel expenses.



“ During initial testing we gained valuable feedback on how to proceed and what small changes to make on our stove for the US market.

- Christoff Anneken, Spartherm



” It is very positive that we can be present in the lab during testing. That way, we can set operating parameters correctly before testing.

- Mikael Jeppson, constructor, Värmebaronen, Sweden



Your contact

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Read more:



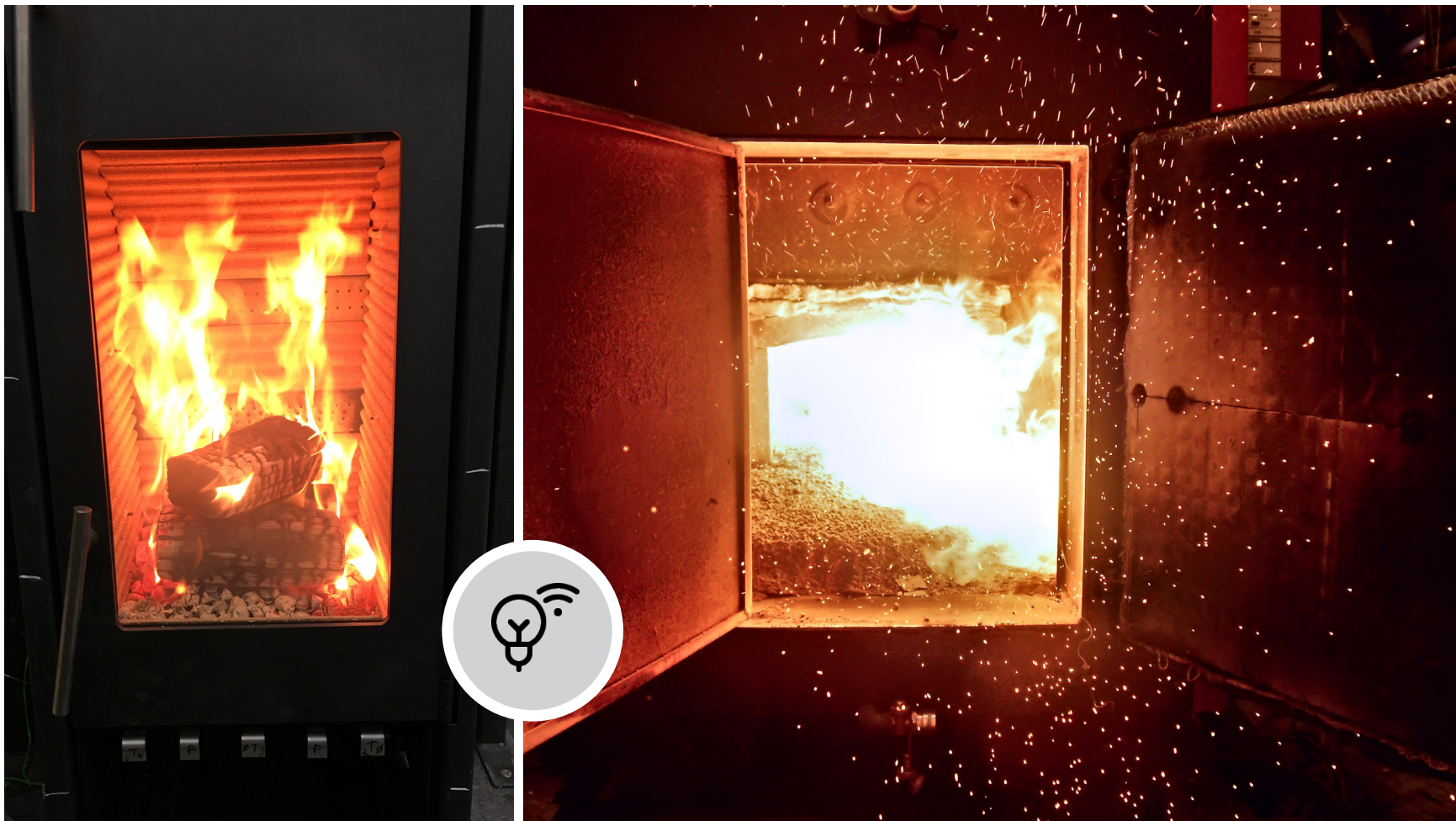
Testing of biomass boilers and pellet burners

The Laboratory for Solid Fuel Burning Appliances offers accredited testing according to EN 303-5, accredited analysis of fuel, assistance in adjusting/preparing the boiler before testing and assistance in finalizing the needed documentation. The tests are as follows:

- Type test of biomass boiler up to 500 kW in accordance with EN 303-5:2012
- Type test of pellet burners up to 70 kW in accordance with EN 15270:2008
- Field test of biomass boilers from 200 – 1000 kW (with mobile laboratory) in accordance with EN 303-5:2012

Follow the test

It is possible to follow the test in our lab or online. During pre-testing, settings can be re-adjusted for the dust measurement.



Take a short cut to innovation

We offer counselling and assistance in developing your wood stove, fire-box or biomass boiler. If you're in an innovation process but would like to take a shortcut to an improved or new product – we are able to counsel you through this process.

Innovation on the basis of research

Our counselling is based upon the latest available research. Through our research work, we have extensive knowledge on the combustion process and the possibilities for improving the performance of wood stoves or biomass boilers.

An innovation process begins at any level of your innovation process. We are able to review and perform counselling based on a physical model or drawings. It is also possible to perform test firings and have your product evaluated and innovations considered on the basis of a test output.

Danish Technological Institute - research & technology

Danish Technological Institute is a leading research and technology Institute. We currently employ 1050 specialists and we help in excess of 10.500 clients a year – representing 68 different countries.

We pride ourselves of being a multi-disciplinary Institute, which also means that we often look at your challenge in an innovative manner – tapping into different specialties in order to find the best-suited solution for you.

We are experts in production, materials, life science, business, energy, agro technology, meat research and more. We have 70 different laboratories.



Her Majesty Queen Margrethe II of Denmark
is patroness of the Danish Technological Institute.



155 EUR million net turnover



44 EUR million R&D activities



1,050+ specialists



380 R&D projects



10,500+ customers



70 technology infrastructures



68 countries



42,000 technological solutions

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FIND US

Teknologiparken, Kongsvang Allé 29
DK - 8000 Aarhus C

NEWSLETTERS

Newsletter on wood stoves:



Newsletter on biomass boilers:



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