

# INDEPENDENT SERVICES FOR STEAM TURBINE ACCEPTANCE TESTS

Allianz Center for Technology (AZT)

AUGUST 2018

**After commissioning a steam turbine, thermal acceptance tests are conducted to prove that the steam turbine fulfills the contractually agreed performance. This often covers heat rate and maximum power output for various load points.**



Steam turbine before installation



Measuring devices in a power plant.

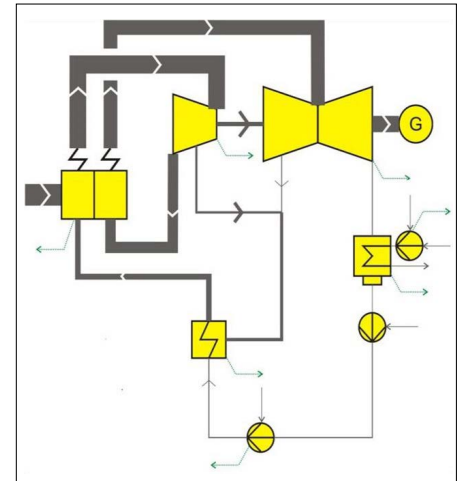
## PLANNING, SUPERVISION AND ANALYSIS OF STEAM TURBINE ACCEPTANCE TESTS

Insufficient performance may lead to contractual penalties. In contrary bonus payments may be agreed if performance exceeds design parameters. AZT serves as an independent

third party, supporting or carrying out the following scope: test planning, development of the test procedure, supervision of the test and analysis of the results.

### THE MAIN CHALLENGES DURING AN ACCEPTANCE TEST ARE:

- Common understanding of contractual agreements
- Common understanding of load points and necessary correction factors
- Selection and installation of adequate measurement equipment
- Consideration of measurement uncertainties
- Preparation of acceptance test procedures
- Confirmation of the correct installation of measuring equipment (e.g. calibration and local circumstances) and validity checks of the measuring results
- Conducting and/or witnessing of the test under consideration to the respective code requirements, e.g. DIN 1943
- Validity check of the test results
- Evaluation of the test results
- Final report of the acceptance test



Efficiency losses (green arrows) in a steam power process

## ADDITIONAL SERVICE:

If the test results show insufficient performance, we offer a detailed review of the operational data to identify the cause of the reduced power.

### YOUR BENEFITS

- ✓ Independent technical consultancy and evaluation for steam turbine acceptance tests
- ✓ Identification of possible causes of insufficient performance

### DIRECT CONTACT

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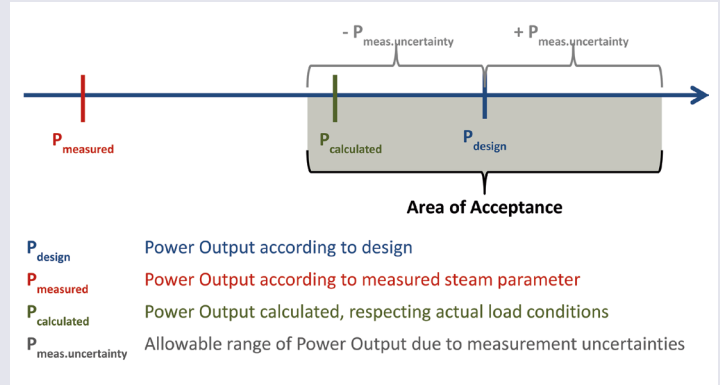


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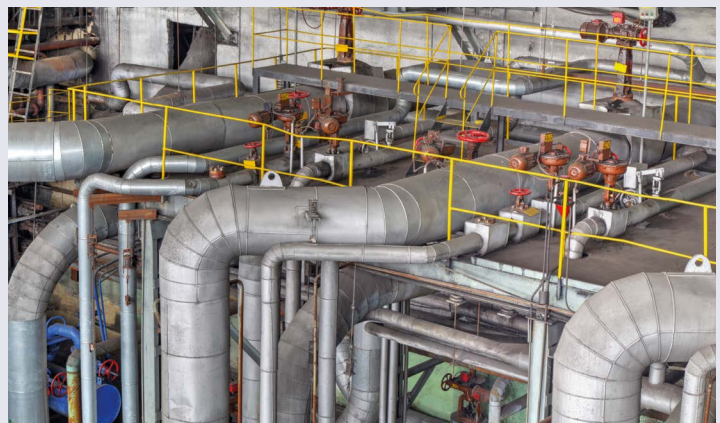
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Definition of power output



Documentation of measured parameters



Piping system with measuring equipment