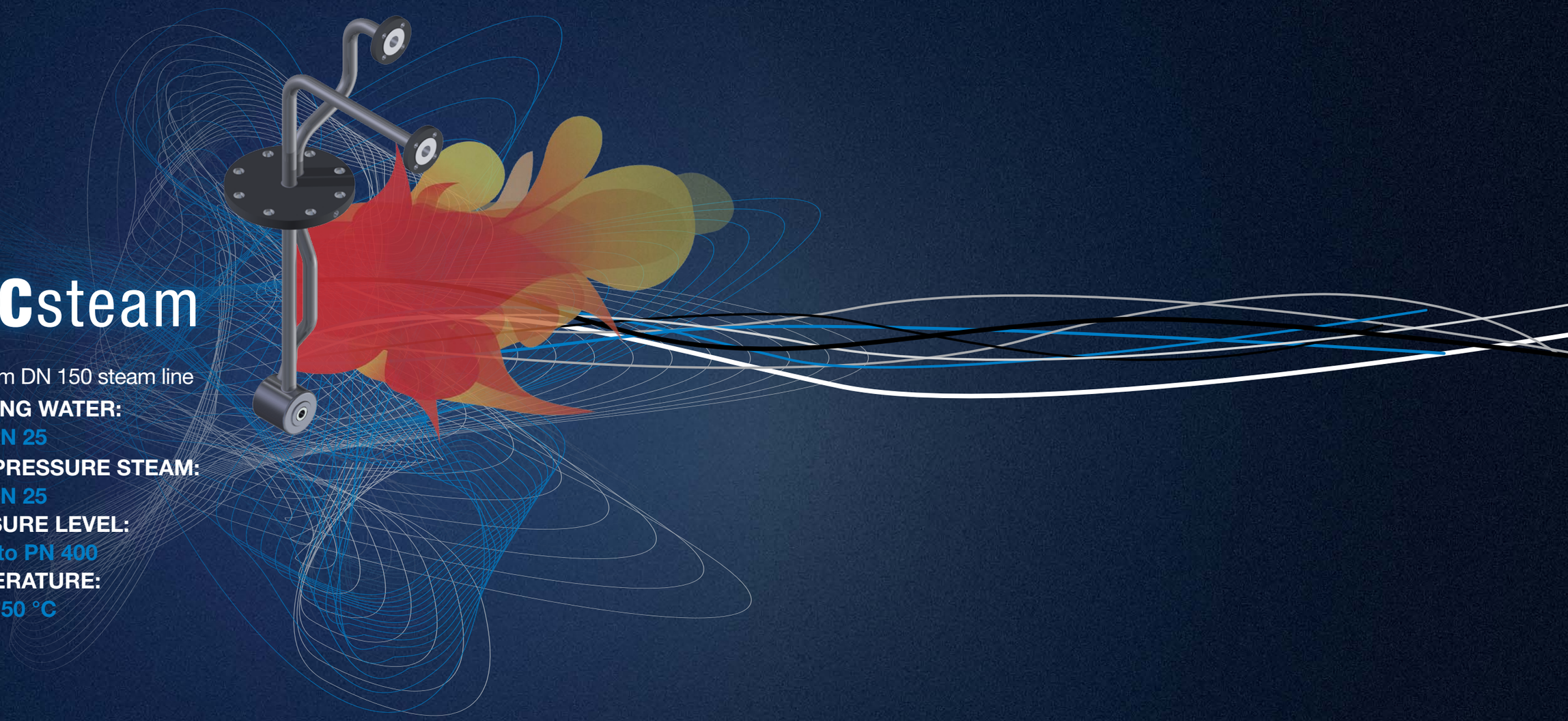
High Performance Valves

Engineering competence
in well-defined structures.



_TECsteam

Use from DN 150 steam line

COOLING WATER:
from DN 25

HIGH PRESSURE STEAM:
from DN 25

PRESSURE LEVEL:
PN 25 to PN 400

TEMPERATURE:
up to 750 °C

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_TECsteam

Steam booster nozzle

REFERENCES

Vattenfall, ThyssenKrupp Uhde, NEM, Steag, E.ON, ABB

DESCRIPTION

The patented TECsteam steam booster nozzle is used for cooling steam close to the saturated steam temperature or hot gases.
The temperature is controlled by the injection of water into the steam or hot gas stream whereby the water is thermally atomised using high pressure steam. The high pressure steam is removed from and returned uncontrolled to the high pressure steam system. The temperature-dependent cooling water is supplied via a control valve. Extremely short evaporation sections of less than 3 m can be realised with this valve.

APPLICATIONS

TECsteam can either be directly installed in a pipeline if no additional pressure reduction is required or in a valve outlet case for combined pressure and temperature reduction.

Steam temperature regulation

- power plants
- waste incineration plants
- chemical plants
- use up to approx. 5 °C above saturated steam possible
- very short evaporation sections

CHARACTERISTICS

The atomisation of the feed water takes place in 2 stages. The first atomisation takes place in the laval nozzle; the second is performed when leaving the steam booster nozzle. Very short evaporation sections are thus achieved.

Characteristics:

- very precise regulation of injection water amounts
- inside mixing steam booster nozzle
- no high pressure steam quantity regulation necessary
- fine atomisation of the cooling water
- no protection tube in the pipeline necessary

“RELIABLE REGULATION FOR CRITICAL STEAM COOLING!”

DESIGNS

Actuation:

- 2 case sizes
- individual design according to the task and application
- delivery of the steam booster nozzle optionally with appropriate shut-off and control valves