



WORLDWIDE INDUSTRIAL SERVICES SINCE 1900



Colourful solutions for safety: Temperature Indicating Paints



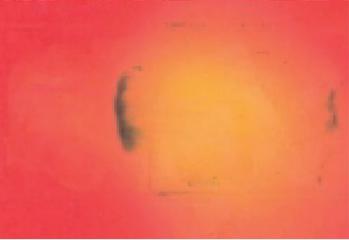
Plant safety-control of process vessels & piping

thenex® stands for utmost safety and quality. It is of vital importance for the safety of refinery and petrochemical process vessels and transfer lines to avoid excessive heat. Overheating usually occurs due to damage on the inside of the equipment (e.g. by failure of the refractory lining), which cannot be controlled.

Depending on the application and the temperature limits admissible, thenex® recommends a relatively simple but effective solution:

Temperature Indicating Paints

thenex® provides products that are temperature sensitive and change in colour when a certain temperature is obtained. The change in colour is clearly visible and a damaged area is easily locatable. The optical difference can be detected at any time: And therefore TI-paints are perfect early warning indicators of overheating.



Multicolour change

There are two types of TI-coatings: Irreversible and reversible. The irreversible sensitive colour paints are signal coatings with a temperature range from 145 °C to 600 °C. The intensity and speed of the colour change depends on the duration and degree of the temperature load. Once the colour has changed, this will remain permanent, even after cooling down.



Paint and primer of high quality & stability

For outdoor application, a zinc rich primer is used on blasted steel up to 600 °C. The primer guarantees good adhesion and corrosion resistance.





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We supply technical experience & customer-orientated services!

Wide temperature range & many colours

Reversible sensitive colour paints are available in many colours and in various temperature ranges. The colour of the paint becomes transparent and at a specific temperature the colour of the primer underneath becomes visible. When the temperature drops, the original colour returns.

Heat resistant coatings & primers

thenex® offers as well a variety of heat resistant coatings which are used in the petro-chemical and chemical industries for reactor vessels and pipelines, and in the automotive and technical industry. These coatings are based on silicon resins and are heat resistant up to 600 °C. Even in the case of big temperature fluctuations these coatings will give optimal protection.

Thermocolour system

From top coats to top primers: good corrosion and weather resistance, chemical resistance against oils, greases and petrol, good mechanical resistance; particularly high heat resistance. Application fields are chemical plants, e.g. blast furnaces, cracking plants, exhaust gas chimneys.

Some examples of temperature indicating paints by thenex®:

Transition temperature	Original colour	Colour after transition
60 °C	Black	Transparent
150 °C	Pink	Blue
155 °C	Light brown	Green
245 °C	Oxydyellow	Red-brown
250 °C	Green	Red-brown
255 °C	Blue	Grey
390 °C	Light violet	Grey
450 °C	Black-brown	Pink-red
500 °C	Grey	RAL 1015
525 °C	Dark grey	Broken white
560 °C	RAL 1015	Light blue