

General areas of application for thermometers

Customers activity group code:

Products for the chemical industry and related industries

- Big chemical industry laboratories
- Petrochemistry laboratories
- Refineries
- Pharmaceutical industry
- Rayon producers
- Paint and varnish producers
- Medical industry
- Cosmetic industry
- various producers of:
acids, caustic solutions, distillates, alcohol etc.

Original equipment manufacturers (OEM) in narrow sense

- Shipbuilding
- Engine manufacturers
- Producers of viscosimeters and calorimeters
- Producers of climate and refrigeration equipment
- Producers of thermostats
- Producers of electrotype devices
- Producers of material testing chambers
- Producers of lab and bacteria culture cabinets
- Producers of incubator and sterilisation devices
- Producers of accumulators

Original equipment manufacturers (OEM) in broad sense

- Producers of laboratory glass devices
- Producers of photo lab equipment
- Machine building for production, food, consumer and primary industries

Energy production, energy distribution

- Power stations
- Central heating supplies
- Municipal public works
- Heating engineering
- Air conditioning
- Mining

Storehouses and depots

- Wood processing plants and paper mills
- Food
- Computers and electronic components

Research and education

- Agriculture
- Oceanography
- Climate
- Food
- Schools
- Universities
- Scientific institutes

Food and luxury foodstuff

- Dairies
- Breweries
- Distilleries
- Beer cellars
- Refrigeration houses
- Hot houses

Official authorities

- Weather bureaus
- Meteorological institutes
- Customs inspections

Technical wholesalers and distributors

- Lab glass
- Meteorology
- Medicine
- Electrotype equipment
- Climate and refrigeration equipment
- Shipyards

Other areas

- Contractors for chemical and petrochemical plants, for energy, heating and air conditioning
- Chimney sweepers
- Wastegases unions
- Agriculture: silos, pits, hayricks
- Air-conditioned rooms
- Tobacco industry
- Workshops
- Canned goods industry
- Museums

Special fields of application for thermometers by product ranges

Product type

Application

Engine thermometers (Catalogue 1)

V-shape acc. DIN 16 181 to DIN 16 193
Maximum engine thermometers with steel markers
Engine thermometers with fixed contact pattern

Shipyards, diesel engines, material testing
(to measure room temperature in engine rooms,
on decks of ships, in aging cellars for beer brewing,
in refrigeration and hot houses)

V-shape tank and dipping thermometers

For temperature measurement, sampling and
analyzing of liquids from crankcases of large engines,
large gasoline tanks, oil and others

V-shape earth thermometers

Temperature measurement in silos, pits, hayricks

V-shape thermometers with pockets SS 316
(other materials acc. to the measuring medium)

Chemical plants, in containers and pipes,
for high pressure and high velocity of flow

Large scale thermometers

Sugar factories, compressed gas applications

V-shape glass thermometers, due to their practical shape and strong, sturdy construction are suitable for all tough applications. They are resistant against humidity, ammonia or saltwater containing atmospheres and many other aggressive media.

General purpose thermometers (Catalogue 2)

Chemical thermometers,
stem form or enclosed scale,
mercury filling or red wetting filling

Chemical labs, distributors to schools, universities
and scientific institutes

Stem thermometers are equipped with graduation and lettering, which is resistant to acid and alkali since it forms an integral part with the glass and is therefore, indelible. The solid construction protects against breakage.

Precision laboratory thermometers (Catalogue 3)

Precision laboratory thermometers, high-precision thermometers, ice-point precision thermometers, boiling-point thermometers, highest-precision thermometers, precision calorimeters, thermometers ISO, stem form for cryoscopy, precision adjusting thermometers acc. to Beckmann, precision gallium quartz glass thermometers up to 1.050° C with a protection case made of highly heatresistant metal (absolute stability under sudden temperature changes)

Laboratories, chemistries, refineries, food production,
pharmaceutical applications, research institutes,
electrotype developments, lubrication etc.

All instruments are "molecular constant" artificially aged. They are manufactured according to the standards of the national authority PTB (Physikalisch-Technische Bundesanstalt) and according to international standards.

Precision thermometer sets (Catalogue 4)

acc. Anschütz, Landsberg, Kahlbaum, Allihn, Dr. Ing. Otte,
universal set, main standard set

Laboratories for highest precision measurements

Thermometer sets contain a set of measuring instruments, divided in thermometers of the same type with different measuring ranges. The design as well as the accuracy meet the highest requirements.

Special fields of application for thermometers by product ranges

Product type

Application

Thermometers for meteorology (Catalogue 5)

Station psychrometers, psychrometer thermometers acc. to August (DIN 58 660), aspiration psychrometers acc. to Assmann (DIN 58 661), Kata psychrometers acc. to Hill

Soil thermometers acc. DIN 58 664 and DIN 58 665

Maximum-minimum thermometers acc. to Six

Complete weather box thermometer sets, sling psychrometers, isolation thermometers

Instruments for oceanography, precision deep sea reversing thermometers, serial water dippers

Meteorological weather bureaus and other official authorities, climate measurements (air temperature and humidity etc.)

Precision measurements in silos, pits and ground

Wood processing plants, rayon factories, paper mills, spinning mills, weaving mills, food industry

Measurement of humidity acc. to the psychrometric principle: air-conditioned rooms, museums, computer and electronics stocks, tobacco production

Energie independent direct reading, salt determination, microbiological tests, highly precise analysis to determine trace elements, depth determination of rivers, fountains and oceans (up to 8,000 meters)

Fuel thermometers (Catalogue 6)

ASTM, IP, BS, S.T.P.T.C, DIN, ANSI, AFNOR, ISO

Joint thermometers acc. standard NS 14/23

Mineral and fuel-testing in petrochemical plants and refineries as well as in ships, determination of: congealing point, cloud point, setting point, flash point, distillation point, anilin point, softening point, crystallisation point, oxydation point, viscosity and distillation range etc.

Destillators, retorts, bulbs, steam and distillation applications, physical and chemical labs, ships (today, big vessels have a laboratory on board, to analyse the characteristics setting point, viscosity, flash-point etc. of the oil in the crankcase of the engine; this, not only the running time determines the oil changing periods)

All instruments are "molecular constant" artificially aged. They are manufactured according to the standards of the national authority PTB (Physikalisch-Technische Bundesanstalt) and according to international standards.

Contact thermometers (Catalogue 7)

Adjustable by a turning magnet

Controlling, regulating and warning of temperatures: for climate cabinets, distillation devices, medical equipment, sterilisation devices, agriculture farms, wine growing farms, fireprotection systems, workshops, electrolyte baths

With fixed contact

Fixed system with highest contact point accuracy: for incubators, material testing chambers, chambers for the culture of bacteria etc.

Special fields of application for thermometers by product ranges

Product type

Application

Special thermometers (Catalogue 8)

Tailor-made products acc. to customer's specifications

Special temperature ranges, mounting and design

Precision Hydrometers (Catalogue 9)

acc. ASTM, ISO, IP, BS, DIN, Baumé, Brix

For density measurement of fuel, alcohol, sugar solutions, anti-freeze, liquid gas (DIN 12804), acids, caustic solutions: in customs inspections, breweries, dairies, chemical plants, accumulator production etc.

Schneider hydrometer instruments stand for quality, safety and long life.

They are manufactured with highest precision and meet the international norms and standards.

Bimetallic dial thermometers (Catalogue 10)

Axial and radial types

Heating installations, heating technology, combustion and industrial plants, engine, machine and ship-building turbines, ovens, ventilation and air-ducts, fluegas measurement (chimney sweeping), refrigeration, breweries, galvanizing, photo developing fluids

Insertible types

Deep-frying pans, food stuffs, concrete, silos, haystacks, ricks, nurseries, hot-houses, measurement of snow, air, water, bitumen and all other plastic materials, pocket thermometers

Corrosion- and acid-proof, stainless steel

Extreme conditions and aggressive atmospheres in: industry, refineries, chemical plants, laboratories, breweries, galvanizing plants, emission control, power plants, plants for liquid gas production, engine production, ships, mining

With magnet

Surface measurements of radiators, hot plates, pipes, oiltank welding, insulation, rail laying

with 90° turnable rotating case

For applications where flexible types are necessary because a definite reading angle can not be guaranteed

Due to their simple construction, bimetallic dial thermometers are favourable priced temperature measuring instruments. They are suitable for a high variety of applications with moderate accuracy requirements.

Special fields of application for thermometers by product ranges

Product type

Application

Mercury dial thermometers (Catalogue 10)

With rigid protection,
axial and radial types

Engine, machine, ship and turbine building, combustion and industrial plants, heating, climate, ventilation and air condition control, industrial plants, refineries, chemical plants, breweries, galvanizing plants, emission control, liquid gas plants, combustion furnaces, smoke chambers, power plants

With flexible capillary,
axial and radial types

Applications where the temperature indication has to be in distance from the measuring point: engine, machine, ship and turbine building, combustion and industrial plants, breweries, heating, climate, ventilation and air condition control, emission control, smoke chambers, liquid gas plants, industrial and chemical plants, refineries, galvanizing plants

Corrosion and acidproof, stainless steel,
axial and radial types

Application with extreme conditions and aggressive atmosphere (same industries as above)

With 90° turnable rotating case

For applications where flexible types are necessary because a definite reading angle can not be guaranteed

With liquid-filled casing

For applications with extreme working conditions (vibrations, radiation heat): diesel engines, ships etc.

Contact thermometers,
drag contact, magnet contact, inductive contact

For applications controlling, regulating and checking temperatures: engine, machine, ship and turbine building, combustion and industrial plants, breweries, heating, climate, ventilation and air condition control, emission control, smoke chambers, liquid gas plants, industrial and chemical plants, refineries, galvanizing plants

Mercury dial thermometers are quick-responding.

They are accurate and reliable instruments and can be supplied with extension capillaries, if required.

Electronic digital thermometers (Catalogue 11)

LCD or LED display

Storage and comparison of measuring datas, control of electric devices, transmitting of temperature datas over distances

Digital thermometers should always be tested for accuracy by an officially checked and verified glass thermometer.

Electronic temperature sensors (Catalogue 12)

Thermocouples,
resistance thermometers

Power plants, nuclear power plants, ceramic and glass industry, metallurgical plants, blast furnaces, ship building, refineries, chemical plants, engine building, galvanizing, combustion plants, gas liquifying plants

Thermocouples can be manufactured for ranges from -250° C to +1800°C, resistance thermometers from -220° C to +850° C. Both meet the special national regulations and standards.