

REFRACTOMETER APPLICATIONS

PHARMACEUTICAL INDUSTRY

Typical applications: <ul style="list-style-type: none"> Characterisation tests in research and development Identity test, purity control and concentration determination of raw materials, semi-finished products and end products 	Analysed substances: Pharmaceuticals, infusion solutions, dialysis preparations, blood sera etc.	Special requirements: Precision, compliance with standards	Standards: Pharmacopoeia (USP, BP, JP, Ph. Eur.), GLP, FDA, NIST	Recommended devices: DR7200-P DR7400-P
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CHEMICAL INDUSTRY

Typical applications: <ul style="list-style-type: none"> Characterisation tests in research and development Identity test, purity control and concentration determination of raw materials, semi-finished products and end products Tracking of chemical processes during production 	Analysed substances: Organic solvents, aliphatic or aromatic hydrocarbons, alcohols, salt solutions, acids, bases, stains, industrial oils, paints and varnishes, resins, glue components, tensides, extinguishing agents, polymer products, silicones, raw plastic materials etc.	Special requirements: Exact temperature control within a wide temperature range, wide measurement range, variety of scales, variability of measurement methods, option of interval measurements	Standards: AOAC, OIML, ASTM, DIN, CID	Recommended devices: DR7200-P DR7400-P DR201-95 DR301-95 PR SERIES
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PETROCHEMICAL, AUTOMOTIVE AND AVIATION INDUSTRY, METAL PROCESSING AND BUILDING TECHNOLOGY

Typical applications: <ul style="list-style-type: none"> Identity test and concentration determination Outgoing goods inspection Stability test 	Analysed substances: Lubricating oils, fuels, gear oils, wax, lubricants, cooling lubricants, de-icing agents and anti-freeze agents, battery acid, AdBlue, tensides, cleaners, windshield wiper concentrate etc.	Special requirements: Easy handling, availability of the Brix scale, temperature compensation option	Standards: AOAC, OIML, ASTM, DIN, CID	Recommended devices: DR7100-P DR7300-P DR301-95 HR SERIES PR SERIES
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FOOD INDUSTRY

Typical applications: <ul style="list-style-type: none"> Quality and purity control of raw materials and end products Determination of the sugar concentration 	Analysed substances: Sugar, jams, honey, syrup, seasoning sauces, mustard and mayonnaise, convenience products, dairy products, baby food, egg products, oils, starch hydrolysis products etc.	Special requirements: Fast measurement and easy handling, easy cleaning, routine analysis with high sample throughput	Standards: AOAC, OIML, ASTM, GLP, ICUMSA	Recommended devices: DR7100-P DR7300-P AR4 AR2008 HR SERIES PR SERIES
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SUGAR INDUSTRY

Typical applications: <ul style="list-style-type: none"> Determination of the sugar concentration in semi-finished products and end products Determination of the solids content in solutions Determination of the purity in combination with a polarimeter 	Analysed substances: Sugar cane, beet pulp, molasses, refined sugar, syrup, invert sugar etc.	Special requirements: Availability of the international sugar scale, maintenance-free	Standards: ICUMSA, GLP	Recommended devices: DR7100-P PR SERIES
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MANUFACTURERS OF AROMAS, FRAGRANCES AND ESSENTIAL OILS

Typical applications: <ul style="list-style-type: none"> Quality control of raw materials and auxiliary materials Monitoring of the production of semi-finished products and end products 	Analysed substances: Essential oils (such as orange, lemon, lavender and pepper-mint oil), glyceric acid, Aromas and perfumes for the food, cosmetic and tobacco industry etc.	Special requirements: Low sample volumes with a high aggressiveness, high accuracy	Standards: Pharmacopoeia (USP, BP, JP, Ph. Eur.), AOAC, OIML, GLP	Recommended devices: DR7200-P DR7400-P DR6100-TF DR6300-TF
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BEVERAGE INDUSTRY

Typical applications: <ul style="list-style-type: none"> ■ Routine analysis with high sample throughput ■ Quality and purity control of raw materials and end products ■ Determination of the sugar concentration in juices and alcohol-free beverages ■ Determination of the alcohol or extract content in beer, spices, wine or spirits ■ Quality control of dairy products ■ Sewage water check 	Analysed substances: Fruit and vegetable juices, dietary beverages, beer, spices, wine, spirits, distillates, liquors, sugar concentrates, dairy products, aromas and colouring etc.	Special requirements: Fast measurement and easy handling, easy cleaning.	Standards: AOAC, OIML, ICUMSA, IAMFES, GLP	Recommended devices: DR7300-P DR6200-TF PR SERIES
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HOSPITALS AND PHARMACIES

Typical applications: <ul style="list-style-type: none"> ■ Incoming and outgoing goods inspection ■ Checking medicines for pharmacopeias ■ Analysis of body secretions 	Analysed substances: Medicines, infusion solutions, blood sera, dialysis preparations, urine etc.	Special requirements: Easy handling, availability of the Brix scale, temperature compensation option	Standards: Pharmacopoeia (USP, BP, JP, Ph. Eur.), GLP	Recommended devices: AR4 DR301-95 DR7200-P DR7400-P
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TESTING LABORATORIES, INSTITUTES, TEACHING FACILITIES

Typical applications: <ul style="list-style-type: none"> ■ Testing of foodstuff and pharmaceutical products ■ Testing of the compliance with national and international standards ■ Training 	Analysed substances: Food and beverage samples, samples from research and development, acids, bases, solvents	Special requirements: High variability of the measurement techniques, simple convenient data management	Standards: Pharmacopoeia (USP, BP, JP, Ph. Eur.), AOAC, OIML, ASTM, ISO, DIN, GLP	Recommended devices: AR4 AR2008 DR7200-P DR7400-P
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