

GLASSWARE FOR LIFE SCIENCES

FOCUS ON VOLUMETRICWARE

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- ▶ DWK Life Sciences at a Glance
- ▶ DWK Brands
- ▶ Sustainability
- ▶ Volumetric Glassware





▶ **Leading global manufacturer** for

- » Laboratory Glassware
- » Life Science
- » Pharma Packaging Solutions

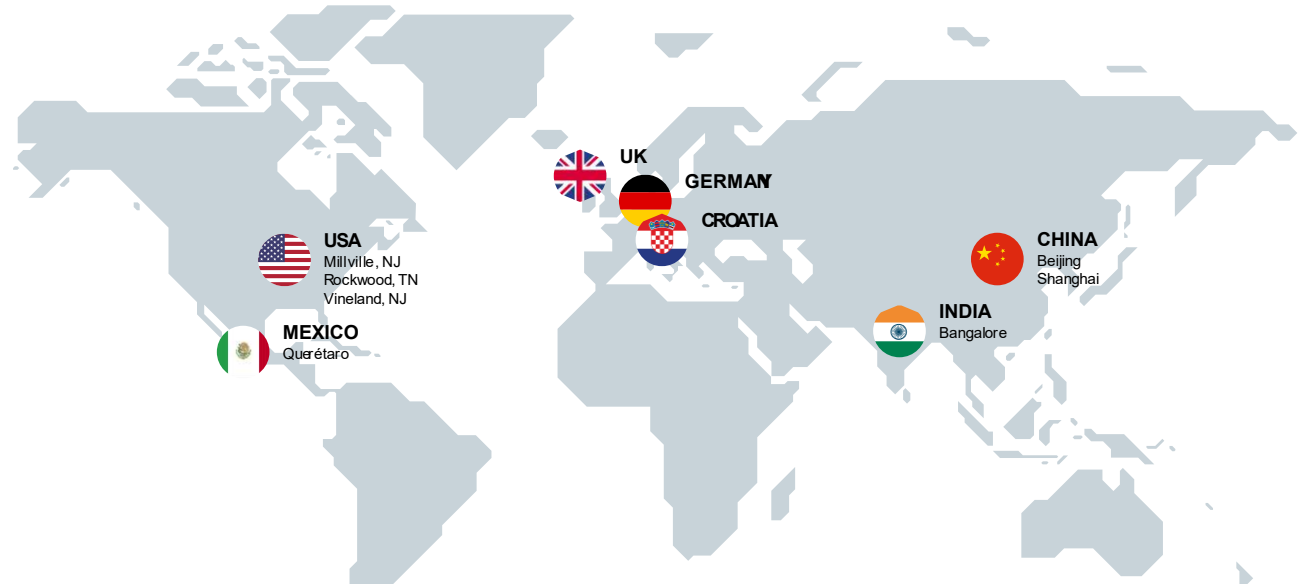
▶ **Supplier of leading laboratory plasticware**

▶ **Owner of the highly recognized brands DURAN®**, **WHEATON®** and **KIMBLE®**





- ▶ **13 manufacturing sites and distribution centers** in North America, Europe and Asia
- ▶ **~ 1,900 employees** worldwide
- ▶ **Over 35,000 products**





PASSION



PRECISION



CREATIVITY

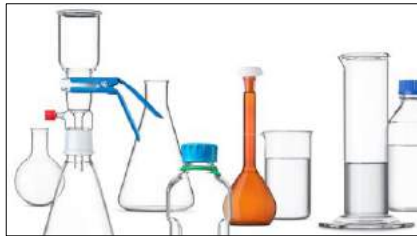


TRUST





OUR GLOBAL MAJOR BRANDS



- ▶ Leading premium brand for laboratory glassware
- ▶ Borosilicate 3.3 glass
- ▶ DIN / ISO standards



- ▶ Distinguished brand of premium glass and plastic container
- ▶ Solutions for scientific, industrial and packaging applications



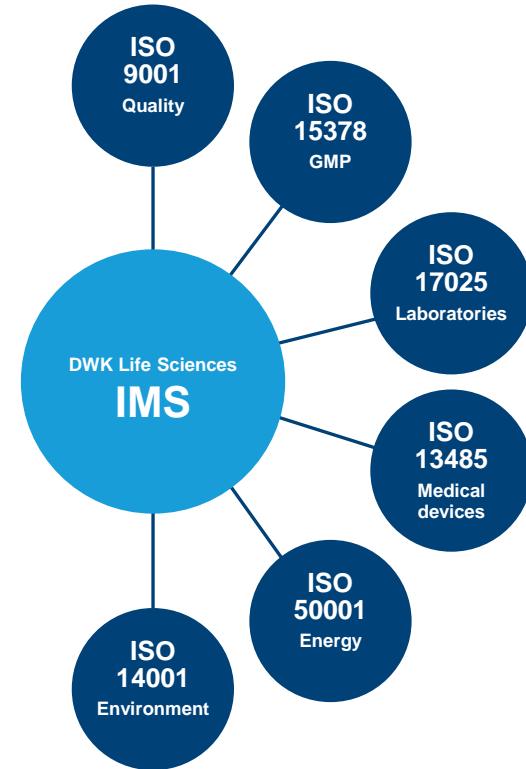
- ▶ Trusted brand for laboratory glassware
- ▶ Borosilicate 3.3 & soda lime glass
- ▶ ASTM standards

Application or material specific brands to enlarge our portfolio:





- ▶ Integrated Management System (IMS).
- ▶ Sites Worldwide are certified according to **ISO 9001**.
- ▶ **Audited regularly** by the certification body and by well-known pharmaceutical customers.





Aims to reduce energy consumption by a further 10% by 2030.

- ▶ Committed to **highest standards for ethical behavior, safety and protection of our natural environment.**
- ▶ Conduct activities in compliance with all applicable laws, regulations and the UN defined **17 sustainable goals**.
- ▶ Strive to conserve natural resources and avoid any environmental impacts.
 - ▶ **ISO 50001** (Energy management)
 - ▶ **ISO 14001** (Environmental management)
- ▶ All melting tanks are operated with electricity (no gas).
- ▶ Registered with
 - ▶ **EcoVadis** (Sustainability rating system)
 - ▶ **Green Dot** (Dual recycling system)



- ▶ Global Product Manager Volumetricware
- ▶ at DWK Life Sciences since April 2023
- ▶ PhD Molecular Biology & Biophysics, ETH Zürich
- ▶ Experienced Biochemist, Bioprocess Automation expert
- ▶ Strong Communication & Teamwork
- ▶ Love Travelling, Cooking (Indian), Volunteering



VOLUMETRIC GLASSWARE



DWK offers many types of volumetric products which are all standardized according to national and international standards

Volumetric Flasks



- ▶ Calibrated to contain a precise volume at a certain temperature
- ▶ 1mL up to 10L and calibrated to Class A & B tolerances
- ▶ Boro 3.3, amber and clear

Cylinders



- ▶ Calibrated to contain or deliver a precise volume, Measuring or mixing
- ▶ 5mL – 2L in variety of calibration tolerances
- ▶ Boro 3.3, clear

Pipettes

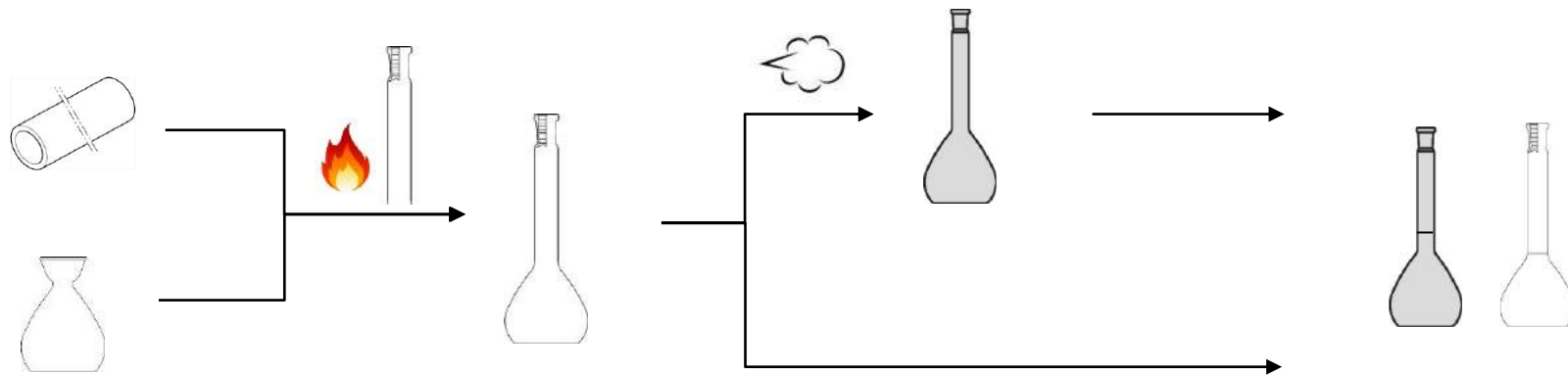


- ▶ 0.1mL up to 100mL in different types of scale (color & directions)
- ▶ Soda-lime, clear

Burettes



- ▶ 1mL up to 100mL
- ▶ Boro 3.3, amber and clear



Moulding / tubing

- ▶ Small sizes manufactured from tubing (1-100mL)
- ▶ Bigger sizes manufactured from bulb blank

Attachment of neck

- ▶ Attachment of neck with ground joint

Ambering

- ▶ Flask is spray coated with silver stain

Calibration

- ▶ Flask is calibrated to contain a precise volume at a certain temperature; Class A & B
- ▶ Assembled with PE stopper



- Core Laboratory product and can be offered with a range of certification and calibration information.
- Different markets have slightly differing requirements from dimensional, materials and tolerances.



Glass Coatings

- ▶ Clear & Amber glass
- ▶ Safety and protecting customer samples
- ▶ Trapezoidal vs pear shape (ISO 1042)

Physical / Packaging

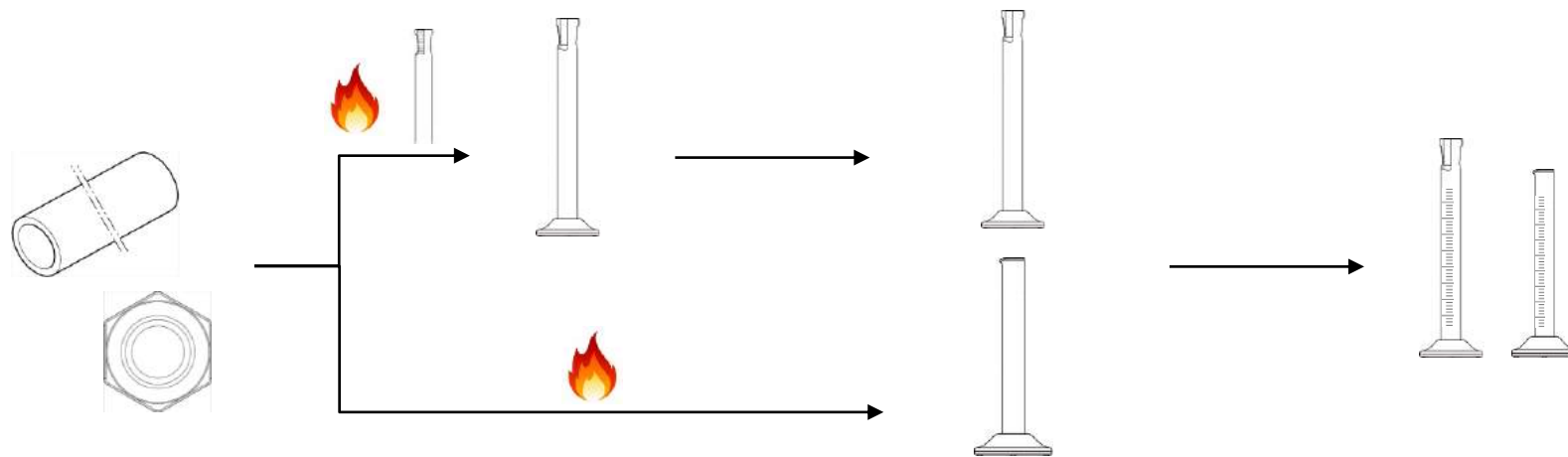
- ▶ Pack quantities are different
- ▶ Type of stopper
- ▶ Color of print on item

Calibration

- ▶ ISO and ASTM
- ▶ Class A, B
- ▶ Color of graduations / paint
- ▶ Calibration method (water)

Traceability / Certs

- ▶ Full certification available
- ▶ Batch
- ▶ Lot
- ▶ Laser etched



Press / Tubing

- ▶ Bases press molded (hexagonal, round, with/without embossing)

Attachment of neck

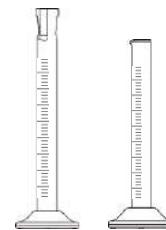
- ▶ Attachment of neck with ground joint

Calibration

- ▶ Cylinder calibration to contain a precise volume at a certain temperature, class A & B



- Measuring and Mixing cylinders are a precise measuring product for Liquids and generally used in business markets
- Different markets have slightly differing requirements from dimensional, materials and tolerances



Product Range

- ▶ Clear glass
- ▶ KimCote® safety coating (under KIMBLE US brand)

Physical / Packaging

- ▶ Pack quantities
- ▶ Type of stopper

Calibration

- ▶ ISO and ASTM
- ▶ Class A, B
- ▶ ISO 17025
- ▶ Calibration method (water)

Traceability / Certs

- ▶ Full certification available
- ▶ Batch



- Pipettes and Burettes are used for a precise liquid measurement



Product Range

- ▶ Clear glass
- ▶ Broad range of pipettes (types, capacities, print,...)
- ▶ Soda-lime, Boro 3.3

Physical / Packaging

- ▶ Various pack quantities

Calibration

- ▶ ISO and ASTM (USP)
- ▶ Class A, AS, B
- ▶ ISO 17025
- ▶ Color of graduations / paint

Traceability / Certs

- ▶ Full certification available
- ▶ Batch



- ▶ Offers broad range of volumetric products

- ▶ Vol. Flasks
- ▶ Measuring Cylinders
- ▶ Pipettes & Burettes



- ▶ All products fulfill the market requirements national & international standards



- ▶ Full certification available





OUR POINT OF VIEW **BEGINS WITH YOU.**

▶ **Comprehensive product portfolio** for your life science, pharma and diagnostic packaging as well as industrial applications

▶ **Working in partnership with you** to realize customer-specific products and service solutions

▶ Excellent **global coverage** and **local customer support**

▶ Unparalleled glass **manufacturing expertise** of more than 100 years

▶ Uncompromising focus on **quality and innovation**





THANK YOU



Excellence in your hands