Technical drawings – General principles of presentation

Part 50: Basic conventions for representing areas on cuts and sections (ISO 128-50 : 2001)

DIN ISO 128-50

ICS 01.100.01

Technische Zeichnungen – Allgemeine Grundlagen der Darstellung – Teil 50: Grundregeln für Flächen in Schnitten und Schnittansichten (ISO 128-50 : 2001)

This standard supersedes DIN 201, May 1990 edition, and DIN ISO 4069, August 1984 edition, and, together with DIN ISO 128-40 and DIN ISO 128-44, May 2002 editions, supersedes DIN 6-2, December 1986 edition.

This standard incorporates International Standard

ISO 128-50 Technical drawings – General principles of presentation – Part 50: Basic conventions for representing areas on cuts and sections.

The English version of DIN ISO 128-50:2002-05 has been corrected as follows:

The informative **National Annex NB** has been incorporated.

National foreword

This standard has been prepared by ISO/TC 10 'Technical product documentation', SC 1 'Basic conventions'.

The responsible German body involved in its preparation was the *Normenausschuss Technische Grundlagen* (Fundamentals in Technology Standards Committee), Technical Committee *Technisches Zeichnen*.

The DIN Standards corresponding to the International Standards referred to in clause 2 of the ISO Standard are as follows:

ISO Standard	DIN Standard
ISO 128-20	DIN ISO 128-20
ISO 128-24	DIN ISO 128-24
ISO 5456-2	DIN ISO 5456-2
ISO 6428	DIN ISO 6428
ISO 10209-1	DIN 199-1
ISO 10209-2	DIN ISO 10209-2

Amendments

DIN 201, May 1990 edition, and DIN ISO 4069, August 1984 edition, have been superseded by the specifications of DIN ISO 128-50, and DIN 6-2, December 1986 edition, has been superseded by the specifications of DIN ISO 128-40, DIN ISO 128-44, and DIN ISO 128-50.

Previous editions

DIN 36: 1922-10; DIN 6: 1922x-11, 1956-10, 1968-03; DIN 6-2: 1986-12; DIN 201: 1990-05; DIN ISO 4069: 1984-08.

Continued on page 2 to 5

ISO Standard comprises 6 pages.

National Annex NA

Standards referred to

(and not included in **Normative references** and **Bibliography**)

DIN 199-1	Terminology associated with drawings and item lists – Drawings
DIN ISO 128-20	Technical drawings – General principles of presentation – Part 20: Basic conventions for lines (ISO 128-20 : 1996)
DIN ISO 128-24	Technical drawings – General principles of presentation – Part 24: Lines on mechanical engineering drawings (ISO 128-24 : 1999)
DIN ISO 5456-2	Technical drawings – Projection methods – Part 2: Orthographic representations (ISO 5456-2 : 1996)
DIN ISO 6428	Technical drawings – Requirements for microcopying (ISO 6428 : 1982)

National Annex NB
(Informative)
Hatching of areas on cuts and sections and for the purpose of identifying materials

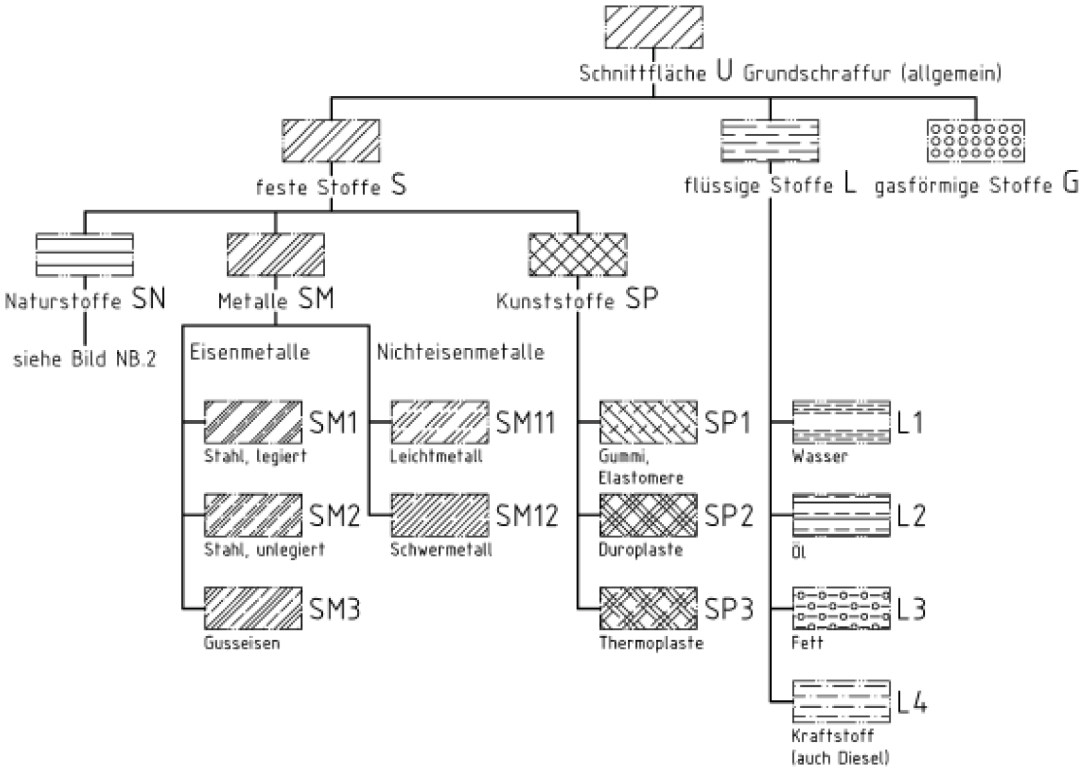

Figure NB.1 – Hatching of areas on cuts and sections and for the purpose of identifying solids, liquids and gaseous materials

Key to Figure NB.1

Schnittfläche U
Grundschraffur (allgemein)
Area U Basic hatching (general)

feste Stoffe
Solids
Naturstoffe
Natural materials
Siehe Bild NB.2
See Figure NB.2
Eisenmetalle
Ferrous metals
Stahl, legiert
Alloyed steel
Stahl, unlegiert
Non-alloyed steel
Gusseisen
Cast iron

flüssige Stoffe
Fluids
Metalle
Metals

Nichteisenmetalle
Non-ferrous metals
Leichtmetall
Light metal
Schwermetall
Heavy metal

gasförmige Stoffe
Gaseous substances
Kunststoffe
Plastics

Gummi, Elastomere
Rubber, elastomers
Duroplaste
Thermoset
Thermoplaste
Thermoplastics

Wasser
Water
Öl
Oil
Fett
Grease
Kraftstoff (auch Diesel)
Fuel (incl. diesel)

Key to Figure NB.2

Siehe Bild NB.1
See Fig. NB 1

mineralisch
mineral

gewachsener Boden
Natural soil

geschütteter Boden
Fill

Fels
Rock

Kies
Gravel

Sand
Sand

Schluff
Silt

Ton
Clay

Torf, Humus
Peat, humus

Mudde
Limnic mud

Kohle
Coal

Sandstein
Sandstone

pflanzlich
vegetable

Vollholz, quer zur Faser
Solid timber across grain

Vollholz in Faserrichtung
Solid timber parallel to grain

Holzwerkstoff
Wood-based panels

Bitumen
Bitumen

Teer
Tar

sonstige Naturstoffe
Other natural materials

Mauerwerk, Ziegel
Brick masonry

Mauerwerk mit erhöhter Festigkeit
High-strength masonry

Mauerwerk, Leichtziegel
Lightweight masonry

Mauerwerk, Bimsbaustoffe
Pumice masonry

Gipsplatte
Gypsum plasterboard

Beton, bewehrt
Reinforced concrete

Beton, unbewehrt
Unreinforced concrete

Leichtbeton
Lightweight concrete

Bimsbeton
Punice concrete

Beton, wasserundurchlässig
Waterproof concrete

Glas
Glass

Faser
Fibre

Keramik
Ceramic

Porzellan
Porcelain

Dämmstoff
Insulating material

Füllstoff
Filler material

Schamotte
Fireclay

Isolierstoff
Insulating (isolating) material

Dichtstoff
Sealant