International Standard 5830

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Resistance spot welding — Male electrode caps

Soudage par points par résistance — Embouts amovibles mâles d'électrode

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5830 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes.*

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Resistance spot welding — Male electrode caps

1 Scope and field of application

This International Standard specifies the dimensions and tolerances for male electrode caps for resistance spot welding when a female taper (see ISO 1089) is used to fix the electrode adaptor (see ISO 5829).

It only applies to electrode caps for which the electrode force F_{max}, given for the diameter d_1, does not exceed 4,0 kN.

2 References

ISO 1089, *Electrode taper fits for spot welding equipment — Dimensions.*

ISO 1302, *Technical drawings — Method of indicating surface texture on drawings.*

ISO 5182, *Materials for resistance welding electrodes and ancillary equipment.*

ISO 5829, *Resistance spot welding electrode adaptors, female taper 1 : 10.*

3 Dimensions

The dimensions shall be those given in the figures and the table.

4 Designation

Electrode caps covered by this International Standard shall be designated by noting in order :

a) the reference to this International Standard;

b) the external diameter, d_1;

c) the length, l_1.

Example :

Designation for a male electrode cap for spot welding type L, external diameter d_1 = 16 mm and length l_1 = 25 mm.

Male electrode cap ISO 5830 - L 16 × 25

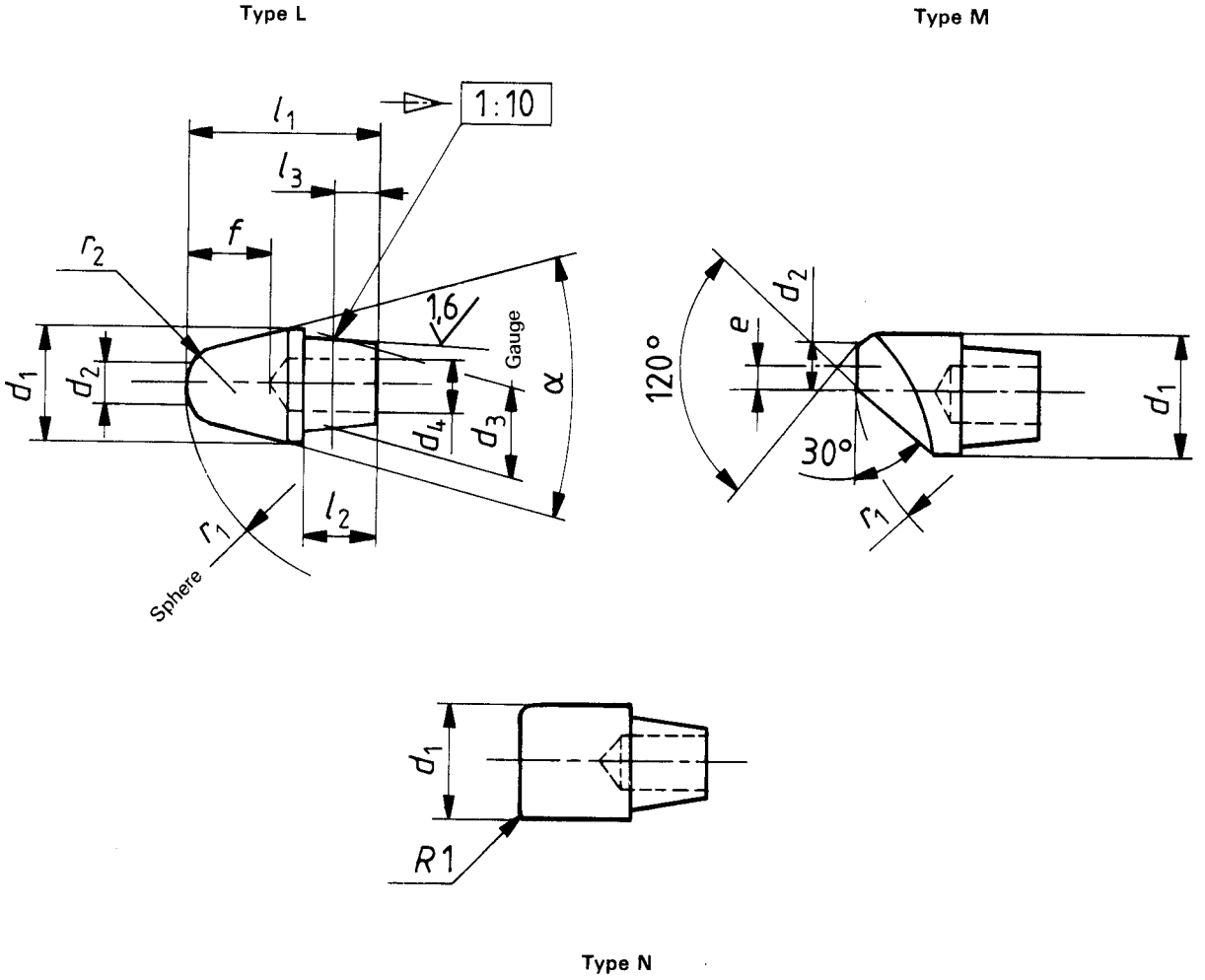
5 Material

The material shall conform to code A 2/2 of ISO 5182.

6 Marking

The packing shall be marked with the designation laid down in clause 4, but excluding the identity block, for example :

ISO 5830 - L 16 × 25



NOTE — For types M and N, all the other dimensions are the same as for type L.

Figure — Male electrode cap

Table — Dimensions

Linear dimensions in millimetres

d_1 h11	d_2	d_3[1]	d_4	l_1	l_2 $^{+0,5}_{0}$	l_3	e	f	r_1	r_2	α	Electrode force F_{max} kN
16	6	11,8	8	25	10	6	4	10	40	6	30°	4,00

1) d_3 is a gauge dimension at the taper reference line.