
**Welding and allied processes —
Vocabulary —**

**Part 4:
Arc welding**

*Soudage et techniques connexes — Vocabulaire —
Partie 4: Soudage à l'arc*

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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, Subcommittee SC 7, *Representation and terms*, in collaboration with Commission VI, *Terminology of the International Institute of Welding (IIW)*.

This first edition of ISO/TR 25901—3, together with the other parts of ISO/TR 25901, cancels and replaces ISO 857—1:1998 and ISO/TR 25901:2007, of which it constitutes a revision.

ISO/TR 25901 consists of the following parts, under the general title *Welding and allied processes — Vocabulary*:

- *Part 1: General terms* [Technical Report]
- *Part 3: Welding processes* [Technical Report]
- *Part 4: Arc welding* [Technical Report]

The following parts are under preparation:

- *Part 2: Safety and health* [Technical Report]

Friction welding is to form the subject of a future part 5.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 7 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

Welding and allied processes — Vocabulary —

Part 4: Arc welding

1 Scope

This part of ISO/TR 25901 contains terms and definitions applicable to arc welding. It does not contain terms and definitions related to specific processes or particular aspects of welding and allied processes that are covered in other parts of this Technical Report (see Foreword) or in other ISO standards.

In the main body of this part of ISO/TR 25901, terms are arranged in a systematic order. [Annex A](#) provides an index in which all terms are listed alphabetically with reference to the appropriate subclause. In addition, it provides French translations, covering two of the three official ISO languages (English, French and Russian). German translations are also provided; these are published under the responsibility of the member body for Germany (DIN), and are given for information only.

NOTE 1 Only the terms given in the official languages (English, French and Russian) are to be considered as ISO terms and definitions.

NOTE 2 All these terms and definitions are also available on the ISO Online Browsing Platform (OBP): <https://www.iso.org/obp/ui/>

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1 Terms related to welding procedures

2.1.1

pulsed MAG welding

MAG welding using a pulsed current

Note 1 to entry: Acronym MAG stands for Metal Active Gas; the shielding gas used typically consists of a mixture containing 0,5 % or more of oxygen or carbon dioxide.

2.1.2

pulsed MIG welding

MIG welding using a pulsed current

Note 1 to entry: Acronym MIG stands for Metal Inert Gas; the shielding gas used typically consists of argon, helium or a mixture of both.

2.1.3

pulsed TIG welding

TIG welding using a pulsed current

Note 1 to entry: Acronym TIG stands for Tungsten Inert Gas; the shielding gas used typically consists of argon, helium or a mixture of both.

2.1.4

arc spot welding

arc welding in which the overlapping parts are joined by fusing through one part into the other and so producing a fusion weld at the faying surfaces

2.1.5

MIG spot welding

arc spot welding (2.1.4) by MIG process

Note 1 to entry: Acronym MIG stands for Metal Inert Gas; the shielding gas used typically consists of argon, helium or a mixture of both.

2.1.6

TIG spot welding

arc spot welding (2.1.4) by TIG welding

Note 1 to entry: Acronym TIG stands for Tungsten Inert Gas; the shielding gas used typically consists of argon, helium or a mixture of both.

2.1.7

microplasma arc welding

plasma arc welding at *welding currents* (2.2.8) generally below 10 A

2.1.8

narrow gap welding

arc welding in which the distance or angle between the faces of the parent materials is so small that particular welding equipment has to be used

Note 1 to entry: Generally employed to join high thickness workpieces in order to reduce the amount of filler material to use.

2.2 Terms related to welding execution

2.2.1

push technique

forehand welding

welding technique in which the electrode is pushed in the welding direction

Note 1 to entry: The *electrode angle* (2.2.10) is greater than 90°.

2.2.2

pull technique

backhand welding

welding technique in which the electrode is pulled in the welding direction

Note 1 to entry: The *electrode angle* (2.2.10) is less than or equal to 90°.

2.2.3

weaving

welding technique where the run is produced by oscillating the electrode transversely to the direction of welding

2.2.4

weaving width

transverse extent of *weaving* (2.2.3)

2.2.5

weaving amplitude

half of the *weaving width* (2.2.4)

2.2.6

weaving frequency

number of oscillatory movements per unit time

2.2.7

weave bead

run formed using *weaving* (2.2.3)

2.2.8**welding current**

current delivered by a welding power source during welding

2.2.9**work angle**

angle between the electrode axis and the surface of the parts, measured in a plane perpendicular to the weld

2.2.10**electrode angle****torch angle**

angle between the electrode axis and the longitudinal axis in the direction of welding

2.2.11**travel angle**

angle complementary to the *electrode angle* (2.2.10)

2.2.12**wire feed rate****wire feed speed**

length of wire consumed per unit time

2.2.13**contact electrode**

covered electrode (2.4.1) with a special covering that enables it to be kept in contact with the parent material during welding to facilitate control of *arc length* (2.3.12)

2.3 Terms related to welding process characteristics**2.3.1****metal transfer****droplet transfer**

transfer of molten metal across the arc from a consumable electrode to the weld pool

2.3.2**globular transfer**

metal transfer (2.3.1) in which droplets of diameter larger than that of the *wire electrode* (2.4.9) are transferred

2.3.3**spray transfer**

metal transfer (2.3.1) in which rapidly accelerated droplets of diameter smaller than that of the *wire electrode* (2.4.9) are transferred

2.3.4**dip transfer****short circuiting transfer**

metal transfer (2.3.1) in which a short circuiting current enhances the detachment of the molten wire tip during bridging by the electromagnetic pinch effect

2.3.5**particle transfer frequency****droplet transfer frequency**

frequency with which metal globules or droplets are transferred across the arc from the end of a consumable electrode

2.3.6**main arc**

in plasma arc welding, arc that supplies the welding heat

2.3.7

pilot arc

low current arc between the electrode and the constricting nozzle of the *plasma torch* (2.6.6) to ionize the gas and facilitate the start of the *main arc* (2.3.6)

2.3.8

transferred arc

arc established between the electrode of the *plasma torch* (2.6.6) and the workpiece

2.3.9

non-transferred arc

arc established between the electrode and the constricting nozzle of the *plasma torch* (2.6.6) or thermal spraying gun

Note 1 to entry: The workpiece does not form part of the electrical circuit.

2.3.10

arc voltage

electrical potential between the electrode and the workpiece

2.3.11

striking voltage

minimum voltage at which any specific arc may be initiated

2.3.12

arc length

distance from the tip of the welding electrode to the surface of the weld pool

Note 1 to entry: During welding with consumable electrode processes, the actual length may vary depending on the *metal transfer* (2.3.1) process as metal droplets form and transfer to the weld pool.

2.3.13

arc time

arcing time

time during which the arc is maintained

2.3.14

pulse time

pulse duration

duration of a single pulse

2.3.15

duty cycle

duty factor

ratio, for a given time interval, of the uninterrupted on-load duration to the total time

2.3.16

arc blow

magnetic arc blow

magnetic deflection of the arc from its intended direction

2.3.17

stand-off distance

distance between the gas nozzle and the workpiece

Note 1 to entry: Stand-off distance is illustrated in [Figure 1](#) as item 3.

2.3.18

stickout

distance between the gas nozzle and end of the *wire electrode* (2.4.9)

Note 1 to entry: Stickout is illustrated in [Figure 1](#) as item 4.

2.3.19**electrode extension**

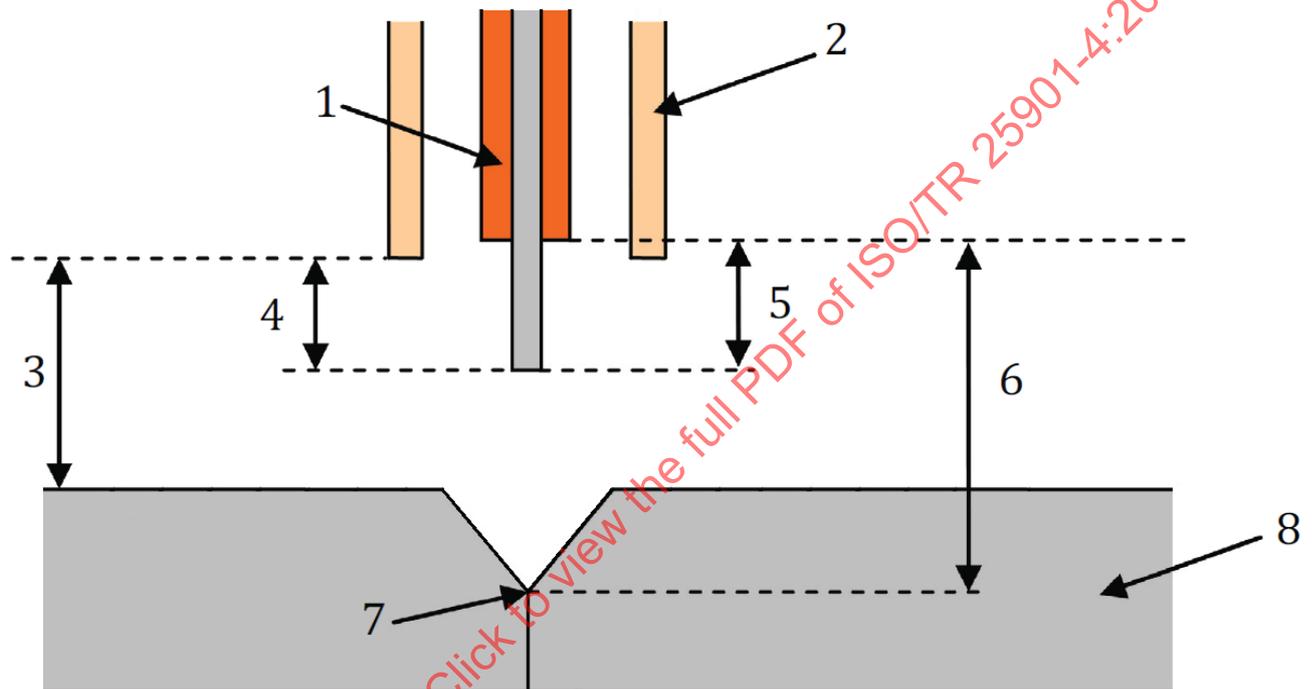
distance between the *contact tip* (2.6.2) or *collet* (2.6.1) and end of the *wire electrode* (2.4.9)

Note 1 to entry: Electrode extension is illustrated in [Figure 1](#) as item 5.

2.3.20**contact tip distance****contact tube distance**

distance between the *contact tip* (2.6.2) and the welding point

Note 1 to entry: Contact tip distance is illustrated in [Figure 1](#) as item 6.

**Key**

| | | | | | |
|---|--------------------|---|----------------------|---|---------------|
| 1 | contact tip | 4 | stickout | 7 | welding point |
| 2 | gas nozzle | 5 | electrode extension | 8 | workpiece |
| 3 | stand-off distance | 6 | contact tip distance | | |

Figure 1 — Distances

2.3.21**deposition coefficient**

for a given electrode, the mass of weld metal deposited under standard conditions per ampere-minute expressed in mass/(current × time)

2.3.22**deposition efficiency**

for a *covered electrode* (2.4.1), ratio of the mass of weld metal deposited under standard conditions to the total mass consumed, excluding the *stub end* (2.4.21)

2.3.23**effective electrode efficiency**

for a *covered electrode* (2.4.1), the ratio of the mass of weld metal deposited under standard conditions to the mass of core wire consumed

2.3.24

nominal electrode efficiency

for a *covered electrode* (2.4.1), the ratio of the mass of weld metal deposited under standard conditions to the mass of nominal diameter core wire consumed

2.3.25

overall weld metal recovery

for a *covered electrode* (2.4.1), the ratio of the mass of weld metal deposited under standard conditions to the total mass of the electrode tested, including covering and *stub end* (2.4.21)

2.3.26

electrode pick-up

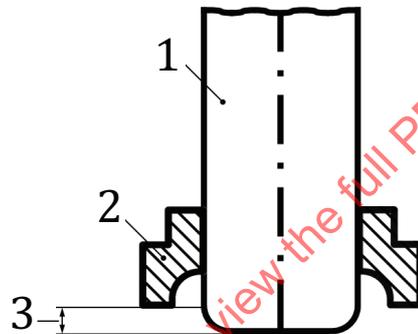
contamination of a *non-consumable electrode* (2.4.20) by metal or scale during welding

2.3.27

protrusion

in stud welding, distance between the tip of the stud and the face of the support device in their initial position

Note 1 to entry: Protrusion is illustrated in [Figure 2](#) as item 3.



Key

- | | | |
|--------|------------------|--------------|
| 1 stud | 2 support device | 3 protrusion |
|--------|------------------|--------------|

Figure 2 — Protrusion example

2.4 Terms related to welding consumables

2.4.1

**covered electrode
stick electrode**

consumable electrode in the form of a rod consisting of a metallic core to which a covering has been applied

2.4.2

acid electrode

covered electrode (2.4.1) in which the covering contains a high proportion of acid material

2.4.3

basic electrode

covered electrode (2.4.1) in which the covering contains a high proportion of calcium carbonate and fluoride

2.4.4**cellulosic electrode**

covered electrode (2.4.1) in which the covering contains a high proportion of cellulose

2.4.5**hydrogen controlled electrode**

covered electrode (2.4.1) that, when used correctly, produces less than a specific amount of diffusible hydrogen in the deposit

2.4.6**rutile electrode**

covered electrode (2.4.1) in which the covering contains a high proportion of titanium dioxide

2.4.7**iron powder electrode**

covered electrode (2.4.1) in which the covering contains a high proportion of iron powder giving a *deposition efficiency* (2.3.22) of at least 100 %

2.4.8**high efficiency electrode**

iron powder electrode (2.4.7) giving a *deposition efficiency* (2.3.22) greater than 125 %

2.4.9**wire electrode**

consumable electrode in the form of a wire

2.4.10**solid wire electrode**

wire electrode (2.4.9) that is solid

2.4.11**tubular cored electrode**

wire electrode (2.4.9) in a tubular form

2.4.12**flux cored electrode**

tubular cored electrode (2.4.11) containing flux

2.4.13**metal cored electrode**

tubular cored electrode (2.4.11) containing metal powder

2.4.14**strip electrode**

consumable electrode in the form of a strip

2.4.15**solid strip electrode**

strip electrode (2.4.14) that is solid

2.4.16**cored strip electrode**

strip electrode (2.4.14) that is cored

2.4.17**solid wire**

filler wire that is solid, not being a part of the welding circuit

2.4.18**tubular cored rod**

filler rod in a tubular form, not being a part of the welding circuit

2.4.19

tubular cored wire

filler wire in a tubular form, not being a part of the welding circuit

2.4.20

non-consumable electrode

electrode that is not consumed during welding

2.4.21

stub end

stub

discarded unusable part of an electrode or filler rod after welding

2.5 Terms related to characteristics of welding power source

2.5.1

static characteristic

relationship between the voltage and the current at the output terminals of a welding power source when connected to a conventional load

2.5.2

dynamic characteristic

relationship between the main parameters of a welding power source after a sudden change of one parameter

2.5.3

drooping characteristic

external *static characteristic* (2.5.1) of a welding power source which, in its normal welding range, is such that the negative slope is greater than or equal to 7 V/100 A

2.5.4

flat characteristic

constant voltage characteristic

external *static characteristic* (2.5.1) of a welding power source which, in its normal welding range, is such that, as the current increases, the voltage either decreases by less than 7 V/100 A or increases by less than 10 V/100 A

2.5.5

no-load voltage

open-circuit voltage

voltage, exclusive of any arc striking or arc stabilizing voltage, between the output terminals of a welding power source when the external welding circuit is open

2.6 Terms related to welding equipment

2.6.1

collet

device for retaining a *non-consumable electrode* (2.4.20) in an arc welding torch

2.6.2

contact tip

contact tube

replaceable component fixed at the front end of the torch, which transfers the *welding current* (2.2.8) to, and guides, the *wire electrode* (2.4.9)

2.6.3

welding gun

gun

torch with a handle substantially perpendicular to the torch body

2.6.4**electrode holder**

device for clamping, guiding and connecting a *covered electrode* (2.4.1) to the welding circuit while electrically insulating the welder or the welding operator

2.6.5**welding head**

part of a welding machine or robot in which a welding torch is incorporated

2.6.6**plasma torch**

arc welding torch using a *non-consumable electrode* (2.4.20) and having a gas nozzle producing a constricted plasma arc

2.6.7**welding rectifier**

arc welding power source (2.6.12) consisting of a static converter for supplying direct current for welding from an AC supply

2.6.8**welding converter**

arc welding power source (2.6.12) consisting of an electric motor and a d.c. *welding generator* (2.6.10)

2.6.9**arc welding transformer**

transformer designed to provide electrical energy for arc welding

2.6.10**welding generator**

generator designed to provide electrical energy to one or more welding arcs

2.6.11**engine driven welding power source**

arc welding power source (2.6.12) consisting of an engine and a d.c. *welding generator* (2.6.10)

2.6.12**arc welding power source**

equipment for supplying current and voltage and having the required characteristics suitable for arc welding and allied processes

2.6.13**drooping characteristic welding power source**

arc welding power source (2.6.12) with a *drooping characteristic* (2.5.3)

2.6.14**constant-voltage welding power source**

arc welding power source (2.6.12) with a *flat characteristic* (2.5.4)

2.6.15**quiver**

portable receptacle for keeping *covered electrodes* (2.4.1) dry

Annex A (informative)

Alphabetical index of English terms with French and German translations

| English term | Subclause | French translation | German translation |
|--|--|---|--|
| A | | | |
| acid electrode | 2.4.2 | électrode acide | sauerumhüllte Stabelektrode |
| arc blow | 2.3.16 | soufflage magnétique de l'arc | Blaswirkung |
| arc length | 2.3.12 | longueur de l'arc | Lichtbogenlänge |
| arc spot welding | 2.1.4 | soudage à l'arc par points | Lichtbogenpunktschweißen |
| arc time | 2.3.13 | temps d'arc | Lichtbogenbrennzeit |
| arc voltage | 2.3.10 | tension à l'arc | Lichtbogenspannung |
| arc welding power source | 2.6.12 | source de courant de soudage à l'arc | Lichtbogen-Schweißstromquelle |
| arc welding transformer | 2.6.9 | transformateur de soudage à l'arc | Schweißtransformator |
| arc time | See: arc time (2.3.13) | | |
| B | | | |
| backhand welding | See: pull technique (2.2.2) | | |
| basic electrode | 2.4.3 | électrode basique | basischumhüllte Stabelektrode |
| C | | | |
| cellulosic electrode | 2.4.4 | électrode cellulosique | zelluloseumhüllte Stabelektrode |
| collet | 2.6.1 | pince porte-électrode | Elektrodenklemmhülse |
| constant voltage characteristic | See: flat characteristic (2.5.4) | | |
| constant-voltage welding power source | 2.6.14 | source de courant de soudage à caractéristique plate; source de courant de soudage à tension constant | Konstantspannungs-Schweißstromquelle |
| contact electrode | 2.2.13 | électrode-contact | Kontaktelektrode |
| contact tip | 2.6.2 | tube-contact | Stromkontaktrohr |
| contact tip distance | 2.3.20 | distance tube-contact/point de soudage | Kontaktrohrabstand |
| contact tube | See: contact tip (2.6.2) | | |
| contact tube distance | See: contact tip distance (2.3.20) | | |
| cored strip electrode | 2.4.16 | électrode en feuillard fourrée | Füllbandelektrode |
| covered electrode | 2.4.1 | électrode enrobée | umhüllte Stabelektrode |
| D | | | |
| deposition coefficient | 2.3.21 | coefficient de depot | Abschmelzkoeffizient |
| deposition efficiency | 2.3.22 | rendement global effectif | Abschmelzfaktor |
| dip transfer | 2.3.4 | transfert par courts-circuits | Werkstoffübergang im Kurzschluss |
| drooping characteristic | 2.5.3 | caractéristique tombante | fallende Kennlinie |
| drooping characteristic welding power source | 2.6.13 | source de courant de soudage à caractéristique tombante | Schweißstromquelle mit fallender Kennlinie |

| English term | Subclause | French translation | German translation |
|------------------------------------|--|---|--|
| droplet transfer | See: metal transfer (2.3.1) | | |
| droplet transfer frequency | See: particle transfer frequency (2.3.5) | | |
| duty cycle | 2.3.15 | facteur de marche | Einschaltdauer |
| duty factor | See: duty cycle (2.3.15) | | |
| dynamic characteristic | 2.5.2 | caractéristique dynamique | dynamische Kennlinie |
| E | | | |
| effective electrode efficiency | 2.3.23 | rendement effectif d'une électrode | effektive Ausbringung |
| electrode angle | 2.2.10 | angle d'inclinaison de l'électrode; angle d'inclinaison de la torche | Elektrodenanstellwinkel; Schweißbrennerstellwinkel |
| electrode extension | 2.3.19 | longueur de fil libre | freies Drahtelektrodenende |
| electrode holder | 2.6.4 | porte-électrode | Stabelektrodenhalter |
| electrode pick-up | 2.3.26 | encrassement de l'électrode | Anlegierung an der Elektrode |
| engine driven welding power source | 2.6.11 | groupe électrogène de soudage | Schweißumformer mit Antrieb durch Verbrennungsmotor; Schweißaggregat |
| F | | | |
| flat characteristic | 2.5.4 | caractéristique plate; caractéristique constante | flach fallende Stromquellenkennlinie |
| flux cored electrode | 2.4.12 | fil fourré de flux | pulvergefüllte Drahtelektrode |
| forehand welding | See: push technique (2.2.1) | | |
| G | | | |
| globular transfer | 2.3.2 | transfert globulaire | großtropfiger Werkstoffübergang |
| gun | See: welding gun (2.6.3) | | |
| H | | | |
| high efficiency electrode | 2.4.8 | électrode à haut rendement | Hochleistungselektrode |
| hydrogen controlled electrode | 2.4.5 | électrode à hydrogène contrôlé | wasserstoffkontrollierte Stabelektrode |
| I | | | |
| iron powder electrode | 2.4.7 | électrode à la poudre de fer | Eisenpulver-Stabelektrode |
| M | | | |
| magnetic arc blow | See: arc blow (2.3.16) | | |
| main arc | 2.3.6 | arc principal | Hauptlichtbogen |
| metal cored electrode | 2.4.13 | fil fourré de métal | metallgefüllte Drahtelektrode |
| metal transfer | 2.3.1 | transfert de métal | Werkstoffübergang |
| microplasma arc welding | 2.1.7 | soudage microplasma | Mikroplasmenschweißen |
| MIG spot welding | 2.1.5 | soudage MIG par points | Metall-Inertgaspunktschweißen |
| N | | | |
| narrow gap welding | 2.1.8 | soudage sur chanfrein étroit; soudage narrow gap | Engspaltschweißen |
| no-load voltage | 2.5.5 | tension à vide | Leerlaufspannung |
| nominal electrode efficiency | 2.3.24 | rendement nominal d'une électrode | Nennausbringung |
| non-consumable electrode | 2.4.20 | électrode non consommable | nicht abschmelzende Elektrode |
| non-transferred arc | 2.3.9 | arc non transféré | nicht übertragener Lichtbogen |

| English term | Subclause | French translation | German translation |
|-----------------------------|--------------------------------|---------------------------------------|--|
| O | | | |
| open-circuit voltage | See: no-load voltage (2.5.5) | | |
| overall weld metal recovery | 2.3.25 | rendement global | Gesamtausbringung |
| P | | | |
| particle transfer frequency | 2.3.5 | fréquence de transfert du métal | Tropfenübergangsfrequenz |
| pilot arc | 2.3.7 | arc pilote | Pilotlichtbogen; Hilfslichtbogen; Zündlichtbogen |
| plasma torch | 2.6.6 | torche plasma | Plasmaschweissbrenner |
| protrusion | 2.3.27 | Dépassement | Überstand |
| pull technique | 2.2.2 | soudage en tirant; soudage à droite | schleppendes Schweißen |
| pulse duration | See: pulse time (2.3.14) | | |
| pulse time | 2.3.14 | durée de l'impulsion | Impulszeit |
| pulsed MAG welding | 2.1.1 | soudage MAG pulsé | Metall-Aktivgasschweißen mit Impulslichtbogen |
| pulsed MIG welding | 2.1.2 | soudage MIG pulsé | Metall-Inertgasschweißen mit Impulslichtbogen |
| pulsed TIG welding | 2.1.3 | soudage TIG pulsé | Wolfram-Inertgasschweißen mit Impulslichtbogen |
| push technique | 2.2.1 | soudage en poussant; soudage à gauche | stechendes Schweißen |
| Q | | | |
| quiver | 2.6.15 | carquois | Köcher |
| R | | | |
| rutile electrode | 2.4.6 | électrode au rutile | rutilumhüllte Stabelektrode |
| S | | | |
| short circuiting transfer | See: dip transfer (2.3.4) | | |
| solid strip electrode | 2.4.15 | électrode en feuillard pleine | Massivbandelektrode |
| solid wire | 2.4.17 | fil plein | Massivdraht |
| solid wire electrode | 2.4.10 | fil-électrode plein | Massivdrahtelektrode |
| spray transfer | 2.3.3 | transfert par pulvérisation | feintropfiger Werkstoffübergang |
| stand-off distance | 2.3.17 | distance buse/pièce | Gasdüsenabstand |
| static characteristic | 2.5.1 | caractéristique statique | statische Kennlinie |
| stick electrode | See: covered electrode (2.4.1) | | |
| Stickout | 2.3.18 | longueur terminale du fil; stickout | freie Drahtelektrodenlänge |
| striking voltage | 2.3.11 | tension d'amorçage | Zündspannung |
| strip electrode | 2.4.14 | électrode en feuillard; feuillard | Bandelektrode |
| Stub | See: stub end (2.4.21) | | |
| stub end | 2.4.21 | chute d'électrode | Elektrodenrest |
| T | | | |
| TIG spot welding | 2.1.6 | soudage TIG par points | Wolfram-Inertgas-punktschweißen |
| torch angle | See: electrode angle (2.2.10) | | |
| transferred arc | 2.3.8 | arc transféré | übertragener Lichtbogen |

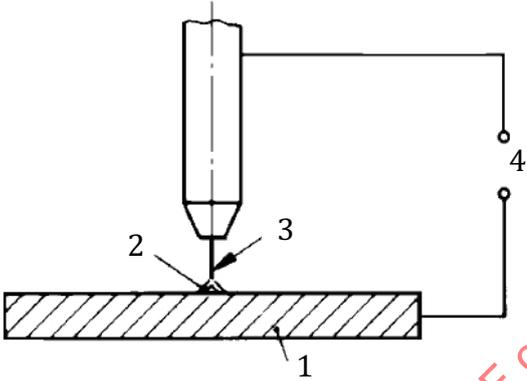
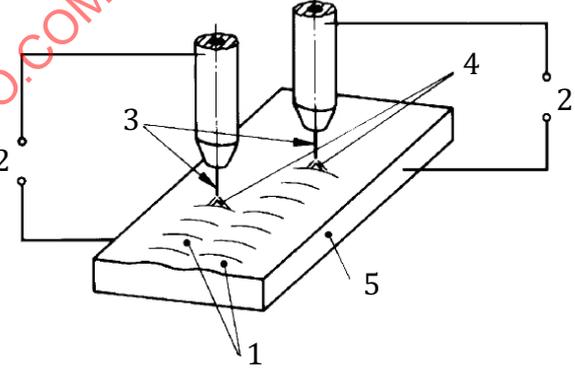
| English term | Subclause | French translation | German translation |
|-------------------------|--|----------------------------------|---|
| travel angle | 2.2.11 | angle de traîne | (no German term) (pas de terme allemand) (kein deutscher Begriff) |
| tubular cored electrode | 2.4.11 | fil fourré; fil-électrode fourré | Fülldrahtelektrode |
| tubular cored rod | 2.4.18 | baguette tubulaire fourrée | Füllstab; Rohrstab |
| tubular cored wire | 2.4.19 | fil tubulaire fourré | Fülldraht |
| W | | | |
| weave bead | 2.2.7 | passe large | Pendelraupe |
| weaving | 2.2.3 | balayage | Pendeln; pendelndes Schweißen |
| weaving amplitude | 2.2.5 | amplitude de balayage | Pendelausschlag |
| weaving frequency | 2.2.6 | fréquence de balayage | Pendelfrequenz |
| weaving width | 2.2.4 | largeur de balayage | Pendelbreite |
| welding converter | 2.6.8 | convertisseur de soudage | Schweißumformer (mit Antrieb durch Elektromotor) |
| welding current | 2.2.8 | intensité de soudage | Schweißstrom |
| welding generator | 2.6.10 | générateur de soudage | Schweißgenerator |
| welding gun | 2.6.3 | pistolet | Schweißbrenner; Schweißpistole |
| welding head | 2.6.5 | tête de soudage | Schweißkopf |
| welding rectifier | 2.6.7 | redresseur de soudage | Schweißgleichrichter |
| wire electrode | 2.4.9 | fil-électrode | Drahtelektrode |
| wire feed rate | 2.2.12 | vitesse de dévidage du fil | Drahtvorschubgeschwindigkeit |
| wire feed speed | See: wire feed rate (2.2.12) | | |
| work angle | 2.2.9 | angle d'inclinaison | Schweißbrennerneigungswinkel |

Annex B (informative)

Alphabetical index of arc welding related terms defined in ISO 857-1:1998 that were not included in this part of ISO/ TR 25901

The terms from ISO 857-1:1998 that are not included in the body of this first edition of this part of ISO/TR 25901 are either listed below when they have become obsolete or redundant, or are covered in another part of this Technical Report.

| Term | Definition | Origin | Subclause |
|---|---|----------------|-----------|
| E | | | |
| energy input per unit length | E_1 electrical energy consumed during deposition of a unit length of weld metal and calculated from the following formula $E_1 = IU / v$ where U is the welding voltage; I is the welding current; v is the welding speed. | ISO 857-1:1998 | 5.2.21 |
| M | | | |
| multiple-electrode welding | See: ISO 857-1:1998, Table 3 (Number of arc carrying electrodes: more than three) | ISO 857-1:1998 | 8.4 |
| P | | | |
| parallel welding | See: ISO 857-1:1998, Table 4 (Arrangement of the filler metals or of the non-consumable electrodes: side by side, at right angles to the direction of welding) | ISO 857-1:1998 | 9.1 |
| | | | |
| Key 1 weld 4 arc 2 power source 5 workpiece 3 electrode | | | |

| Term | Definition | Origin | Subclause |
|--|--|----------------|-----------|
| S | | | |
| serially arranged welding | See: ISO 857-1:1998, Table 4 (Arrangement of the filler metals or of the non-consumable electrodes: More than two, arranged one behind the other in the direction of welding) | ISO 857-1:1998 | 9.4 |
| single-electrode welding | See: ISO 857-1:1998, Table 3 (Number of arc carrying electrodes: one) | ISO 857-1:1998 | 8.1 |
|  | | | |
| <p>Key</p> <p>1 workpiece 2 arc 3 electrode 4 power source</p> | | | |
| staggered welding | See: ISO 857-1:1998, Table 4 (Arrangement of the filler metals or of the non-consumable electrodes: Side by side, staggered in the direction of welding) | ISO 857-1:1998 | 9.2 |
|  | | | |
| <p>Key</p> <p>1 weld 2 power source 3 electrode 4 arc 5 workpiece</p> | | | |
| T | | | |