

## **WELDING TERMINOLOGY IN 18 LANGUAGES**

P.O. Boyd

*International Institute of Welding, London, United Kingdom*

### ORIGINS OF THE WORK

Before describing the compilation of this terminology, it is necessary to sketch in the background against which the work has been carried out.

The Multilingual Collection of Terms for Welding and Allied Processes is one of the achievements of the International Institute of Welding which was founded in 1948 with an initial membership of welding institutes or other appropriate non-commercial organisations, such as university departments, from 13 countries. Membership increased fairly rapidly and, by 1957, there were 25 member countries while, during the next 10 years or so, membership increased to nearly the present level of 37 member countries. However, the Collection of Terms is confined to European languages and, in particular, the Chinese and Japanese delegations have not found it possible to include their languages in the Collection.

On the foundation of the IIW, the decision was taken to work through permanent Commissions devoted to different aspects of welding technology and on which each country could be represented by a delegate assisted by experts. There were initially 12 Commissions, one of which (Commission VI) was entitled "Terminology" and given the task of preparing a Multilingual Collection of Terms to make possible accurate translations in a highly specialised area of technology and thus facilitate the exchange of information.

### SCOPE

The intention was and is to restrict the Collection of Terms to those specifically related to welding and to exclude terms drawn from other disciplines such as engineering and metallurgy, even though those inevitably figure very prominently in welding literature.

This decision has meant that the scheme of the Collection comprises one general section, covering welding procedures and the characteristics and inspection of welds, and, so far, 8 other sections devoted to the various welding and allied processes, together with the welding of

plastic where a special terminology has evolved which is not applicable to the welding of metals.

The first section, devoted to gas welding, was published in 1953 and took the form of a slim volume of 78 pages covering some 350 concepts in 10 languages. It is the first section to have been revised and the new edition has just been published. The advance of the technology in the space of 30 years can be gauged from the fact that the new edition covers some 700 concepts and, with 15 languages included, fills a volume of 293 pages in the same format as the previous edition.

#### METHODS OF WORK

An important aspect of the preparation of the Multilingual Collection of Terms is the method of compilation. A list of concepts to be included in each section is prepared by Commission VI. At meetings, it established, with the help of discussions and drawings, the exact correspondence between the terms for these concepts in three basic languages, English, French and German. The term in the three languages is then put on a fiche and the fiches circulated to all members of the Commission who then insert the corresponding term in their own language.

On this basis, a methodical list of concepts, divided into chapters, is drawn, up in a logical order, each concept being expressed in all the languages included and having its own number which is, of course, the same for all languages. This list constitutes the first part of each published section of the Collection of Terms.

The second part is composed of an alphabetical index for each language where each term is followed by the number of the concept in the methodical index. The user of the terminology looks up the term for which he seeks a translation in the alphabetical index for the language in question and then turns back to the methodical index where he finds the term, together with its equivalents in all the languages included in the section.

The terms included are all in current use. If, within a single linguistic group, one country uses terms peculiar to it, they are mentioned, preceded by the appropriate symbol.

Whenever, in one language, there are several synonymous terms for a single concept, the standardised term, if any, is placed first, followed by the others in the order of the frequency of their use. Terms defined in ISO, either in a recommendation or in a draft recommendation, are marked with a cross.

Up to the present, the Commission has considered that the establishment of agreed definitions for each term and the translation of those into all the languages included would delay the work to an unacceptable degree and vastly increase the size and cost of each section. This has meant that many terms have had to be illustrated by line drawings to provide additional clarification, these drawings being grouped in a separate part of each volume and identified by the number of the corresponding concept in the methodical index. However, now that a relatively complete multilingual terminology of welding exists, it is planned that, as revisions are undertaken, definitions should be

included though these may not necessarily be given in every language contained in each section.

The question may well be asked how the delegates on Commission VI are competent to draw up complete lists of the terms which must be included in each section and how they are able, with certainty, to establish concordance between the corresponding terms, at least in the three basic languages.

Naturally, the delegates on Commission VI are not omniscient but they benefit from the structure of the IIW which has specialist Commissions dealing with, amongst other things, the different welding processes as well as the inspection of welds and the welding of plastics. Each section is drawn up in consultation with the appropriate Commission which may either itself prepare a list of terms which should be included in the relevant section or which, alternatively, checks and comments upon the trilingual fiches prepared by Commission VI. In addition, it is the responsibility of the individual members of Commission VI to discuss the concepts under consideration with appropriate experts in their own country so as to ensure that they fully understand the exact significance of each term and can explain it to their colleagues on the Commission to ensure exact concordance between the different languages.

#### FINANCE

It will be readily understood that in any programme of the kind undertaken by Commission VI the problems are not only technical; they are also financial. In respect of the Multilingual Collection of Terms, the financial problems are of two kinds. The first concerns the work of Commission VI itself; as a plenary Commission, it meets for at least 7 or possibly 10 days a year, while additional meetings are held of Sub-Commissions responsible for the preparatory work, where the burden falls primarily on delegates representative of the English, French and German languages. All this work is carried out entirely at the charge of the respective national delegations and the employers of the delegates: the latter bear the costs of the time spent by the delegates in the work of the Commission and either they or the national delegations underwrite the travelling and subsistence expenses involved in attendance at the meetings of the Commission and of its Sub-Commissions.

The second element of costs concerns the publication of the sections and here the IIW, as an organisation, has had to face very difficult problems. In the early days, the Swiss delegation, which is in principle trilingual, very generously undertook the publication of the Collection on behalf of the IIW and published and marketed the first six sections. This was partly made possible by the fact that, up to about 1965, UNESCO was willing, under the terms of fairly strict contracts, to subsidise the publication of Multilingual Terminologies. Accordingly, the IIW was in receipt of subventions which could be used to offset the cost of publication and thus ensure that the sections were marketed at a price below the cost of publication.

When these subventions ceased, it became impossible for the Swiss delegation to finance the printing and publication of succeeding sections. Since then, the IIW has adopted a system by which the cost of

printing is covered by a levy contributed by the countries whose languages are included in each section of the Collection. The amount of the levy is proportionate to the country's annual subscription to the IIW; in return for the levy, each country receives at a reduced price a number of copies of the section in question, this number being, in turn, proportionate to the amount of money contributed. The prices are so fixed that a substantial number of copies remains after the contributing member countries have received their quotas, these surplus copies being put on sale in countries other than the contributing countries.

For a variety of reasons, this system of financing publication has not been entirely satisfactory and the cost of publishing recent sections of the Collection of Terms has in fact been heavily subsidised by the central funds of the IIW. Unfortunately, the IIW is not a body with the capital necessary to act as an international publisher and it is certain that other means will have to be found to finance the publication of the revisions of the existing sections of the Multilingual Collection of Terms.

In very recent years, some subventions have again been forthcoming from UNESCO, but it would be surprising if these were sufficient to provide a solution to the problem, particularly if definitions are to be included which will inevitably increase the costs.

For this reason, the IIW is beginning to examine the possibility of publication in the form of, for example, trilingual video tapes which could be sold to data bases while national delegations using other languages could prepare their own lists which they could exchange between each other and use in conjunction with the various computer networks.

With the present high costs of printing and the limited market for works of reference, consequent upon the introduction of documentation networks, it seems impossible that traditional methods of producing and marketing specialised dictionaries such as the Multilingual Collection of Terms for Welding and Allied Processes can be maintained. It is therefore incumbent upon the IIW to find other solutions which will ensure that the work of Commission VI "Terminology" can be continued and made available to the limited public which needs to consult welding literature in foreign languages.