

A Translation Primer for Industrial Manufacturers

***Today, global business is big business.
Here's what you need to know to communicate
with your customers in their native languages.***

SH3, Inc. has specialized in translation services for industrial manufacturers since its founding in 1980. The company provides translation services for manufacturers in the U.S and Canada in more than 50 languages.



7101 College Boulevard
Suite 500
Overland Park, KS 66210 USA

T: 913.747.0410
F: 913.747.0417

www.sh3.com

A Translation Primer for Industrial Manufacturers



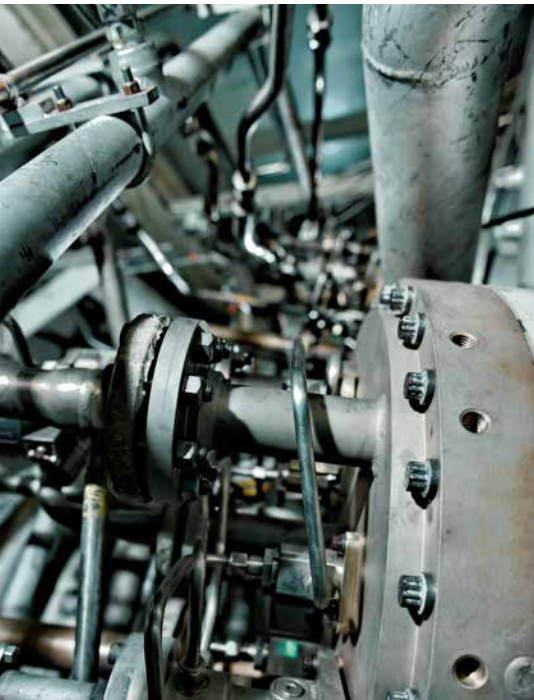
In the last 20 years, manufacturers of industrial machinery in the U.S. and Canada have rapidly expanded their sales to every corner of the globe. Today, global business is truly big business. The advantage of selling machinery around the world is obvious: the ability to access new and expanding markets and increase revenues. There are also fresh challenges that come with exporting machinery, not the least of which is providing product information in many different languages.

In years past, manufacturers may have felt that translating instructional information was optional, trusting that “everybody reads English.” Most companies now recognize that communicating in their customers’ languages is vital for product satisfaction and operator safety. Quality translations influence buyers and impact brand image. Plus, translated information is mandatory in many countries, including the 28 member countries of the European Union.

This White Paper is for you, the technical writing professionals and translation managers in the industrial sector who are responsible for obtaining translations. Here you’ll find a discussion of where to source quality translations along with details to help you develop an efficient and cost-effective translation process with trusted translation partners.



Throughout this White Paper, we'll refer to ASTM F 2575-06 *Standard Guide for Quality Assurance in Translation*¹. This excellent resource is available at www.astm.org for a small fee.



Sourcing translations to save you time and grief

As you begin purchasing translations of your customer-facing content, you may soon realize how important it is for translators to know and understand the basics of machinery. Accurate translation of operating instructions and safety information is crucial, yet challenging, for electrical and power generation equipment, packaging machinery, oil and gas processing equipment, construction machinery, agricultural equipment, mining equipment and other types of industrial machinery. The product information is complex and highly technical. You need translators who understand this subject matter.

In addition to industrial knowledge, you also want a translation provider that can be relied on to deliver translations on time and within budget. If you find yourself with too much to accomplish in too little time, you're not alone. Discussions on technical writing forums reveal that technical writers may spend no more than 10% of their time on actual writing². Localization managers have similar issues. With too much on your plate, the last thing you want to do is oversee a bunch of translators.

As a professional with many responsibilities, you need translation resources that can be trusted to operate with dependable customer service, little or no hands-on monitoring and financial stability for the long run. Working with the right translation partner can make your work life easier and free up time for your other responsibilities. It can also prevent the embarrassment of publishing poor-quality translation.

There are many possibilities for obtaining translations, some better than others. Where to start? In the next section we'll discuss how to find translators that will help you, not hurt you.

Google Translate is not a tool for translating technical information

If you just want the general idea of what's included in an e-mail from your Czech distributor, the Google "Translate" feature is very handy. It will give you the gist of what's being said. But if you're publishing a paper on, say, asphalt remediation, chances are you won't be happy with the results. One company found that the Google Translate function rendered "pipe bursting" as "pipe explosions" – a serious mistranslation.

Even Google advisors recommend against using this automatic translation tool for published content. Google technical specialist John Mueller says, "Instead of just taking the output of a program like Google Translate, I'd strongly recommend at least having it corrected before putting it online."³ The Google Translate tool is not sophisticated enough to interpret the subtle meanings of industrial language.

Why dealers might not be the best choice

Many companies ask their foreign dealers or distributors to translate their documents. This is another choice which deserves a little more introspection. Certainly your dealers know a great deal about your products, and they may have good conversational skills in English. But translation requires a different skill set.

ASTM's *Standard Guide for Quality Assurance in Translation* states, "Proficiency in two languages is important but does not necessarily guarantee translation competence."¹ The ASTM standard lists more than 20 different criteria for translator qualification. Qualified translators must have strong writing and grammatical skills, education, experience, technology tools, talent and subject matter knowledge – in addition to bilingual fluency. Although dealers and overseas agents possess many valuable skills, translation is not usually among them.

Besides the expertise needed to produce a translation, there is also the matter of time. Translating a 50-page manual can take several weeks of concentrated effort for full-time professionals. Dealers are selling and servicing your products, and may find it difficult to meet your deadline. Translation is a craft best left to those who practice it daily.

What translation agencies offer

When you hire a professional translation agency, you are the customer and they will try hard to please you. They will provide a deadline and work diligently to meet it. You'll get not only the expertise of one professional translator, but a team of specialists with quality assurance all through their process. The translation will be created by a team comprised of two linguists (initial translator, followed by an editor) and a project manager who schedules and checks details. Formatting will be done by publishing specialists working in your program of choice, with additional proofreading following.

As with translation, layout work with foreign languages should be done by experienced professionals. Capitalization, hyphenation and punctuation rules vary from language to language. Characters with unique diacritical marks are common in Latin-based languages. Non-Latin languages like Arabic, Russian and Chinese involve different alphabets or character sets, and some read from right to left. Translation agencies have specialists who can provide this formatting, working with your electronic files in nearly any type of publishing program.



How do you find a technical translation agency that understands industrial terms?

If you want to sleep at night without worrying about what your foreign documents say, be careful when hiring translators. Some companies choose to go with the lowest bid, believing that all translation is the same. Don't be fooled into thinking that translation is a commodity where any translator will do. There's a wide range of quality in translation services. A report by the American Translators Association discusses this issue in a free booklet titled *Translation: Buying a Non-Commodity*, "And just as color and price are not the only factors in buying a car, you'll want to consider other criteria" when purchasing translation⁴.

As you begin searching for a translation firm, look for a track record of working for industrial manufacturers. A study by Common Sense Advisory, a market research firm, showed that manufacturers list subject matter expertise as one of the top criteria they look for when buying translation services⁵. Be selective; a small percentage of translators specialize in this subject matter. A thorough understanding of engineering and machinery forms the basis for accurate industrial translations.

Here are some suggestions for choosing an industrial-focused translation agency:

- Make certain that their translators use translation memory to save you money and improve consistency (described later in this White Paper).
- Be sure that their translation process follows ASTM F 2575-06 *Standard Guide for Quality Assurance in Translation*.¹
- Ask about their experience translating technical documents like operating and service information, safety labels and schematic drawings.
- Request a reference list of manufacturing clients that have been customers for five years or more.
- Check their references to determine if they are known for meeting deadlines and staying within the estimated cost.
- Confirm that the translation agency carries errors and omissions insurance which covers personal injury in countries outside of the U.S.
- Make sure they work with the types of electronic files that you regularly include in your documents.
- Find out if the company shares insider knowledge about translation processes and pricing structures that can help you reduce translation costs.
- Confirm that their staff includes professionals with many years of experience who can take your project and run with it. Constant turnover in the agency's staff will mean extra work for you.





- Make sure the agency belongs to professional organizations like the American Translators Association (ATA) or the Globalization and Localization Association (GALA) to keep current on the latest developments in the translation industry.
- Check financial stability and years in business.
- Search translator forums to determine if they have a good reputation within the language service business.

Details to help you build a successful translation program

Once you've decided on a translation agency that you want to work with, a little knowledge can be valuable. Following are some elements that can have an impact on translation cost, quality and turnaround time:

The number of words to translate affects the cost of the translation.

Translation is priced by the word. The more words to translate, the higher the cost. Be succinct when writing the source text, then edit it to reduce wordiness prior to translation. You can also create modules to be translated once and stored for re-use, such as warranty information or service details.

Electronic files are important. The translator will need the electronic files of your document in order to use translation memory software. There are many different types of electronic files; they are not equally compatible with foreign languages. Some file types offer better support for non-Latin languages and interface smoothly with translation memory programs. Newer versions of FrameMaker, InDesign and XML files are top choices because of their robust support of foreign languages and compatibility with translation memory programs. Quark and PageMaker files are more difficult for translators to work with, and will result in more costly translations. Word is fine for small documents, but not for longer documents with more complex layouts and multiple images where file size becomes a factor.

Simple layouts work best. The way that you construct your document makes a difference in cost. All text should be "live" in the electronic file. Avoid scanned pages of text or embedded callouts (text that was placed on art in a secondary program, such as CAD). Scanned or embedded text will add formatting time and cost. Ragged right text and wider columns are best; this avoids hyphenation and ugly spaces between lengthy words in Germanic languages. Clean, simple layouts with one or two columns at most will require less text manipulation following translation. For more details on page layout, download our free White Paper, "Reducing Translation Cost While Maintaining Quality" at www.sh3.com. Or talk with your translation agency about this topic.



Alterations and revisions add up. It's always better to wait until your source text is final to start on the translation. Minimum charges are standard practice in the translation business. Alterations and revisions that occur late in the game will result in minimum charges, and can greatly increase the cost of a translation.

Words expand when translated into some languages, and contract in others. Many European languages use more words, or longer words, to convey the same content as English. Other languages, like Asian languages, contract to express the same thought. For example, *Gas Gathering* is *Recolección de gas* in Spanish and 集气 in Simplified Chinese. To minimize this effect, avoid text that is boxed in with borders or colored backgrounds: the translation will run over in European languages; in Asian languages it won't fill the space and may look odd. Try not to use small fonts (size 8 or smaller) in source documents, as the font size will be much smaller and hard to read in European languages.

Haste makes waste. When you rush a translation project, quality suffers and costs rise. Impossibly-fast turnaround times do not allow for sufficient research on the subject matter, or thorough editing and proofing. If you're new to translation, it's a good idea to ask for some typical turnaround times to use as a yardstick for translation projects, and work those into your planning. A general rule of thumb is it will take nearly as much time to translate the document as it did to create it. Give your translator the time required to do it right and you will be much happier with the results.

The more background information, the better the translation. Providing reference materials will help your translator do a better job. Send along copies of existing translations, glossaries, style sheets or lists of industry terms. Be sure to answer questions promptly when they arise and have a technical expert available for more detailed questions. The more information you share, the better the outcome.

Some content is harder to translate than other. Clear and easily-understood information with consistent term usage and unambiguous meanings will ensure a quality translation. Nataly Kelly, writing in a Huffington Post article, comments, "A large percentage of translation 'errors' are actually due to source text that is poorly written or unclear."⁶ Creative writing presents additional challenges. Advertising and marketing pieces often include double meanings and implied clichés; this type of creative writing is difficult to translate. Reproducing the same cleverness in other cultures requires reflection and extensive editing and is often called "transcreation." Expect to pay more for this type of translation.

Metric units are important. The rest of the world is on the metric system. Be sure to include metric units in all of your international documents. Follow SI (International System of Units) standard abbreviations for metric units. ISO 80000-1:2009 includes those abbreviations and other information on metric units. Download it for a small fee at www.iso.org.

In-country reviewers should add value. Some clients like to have an in-country contact review a translation before it's published. This can help refine the translation with on-the-ground input for industry terms. But in some cases, the chosen reviewer's input may not be that helpful. Many "corrections" are stylistic in nature, which adds cost and muddies the water. To avoid unnecessary and costly stylistic changes, be sure that reviewers are given explicit instructions. The reviewers' role is to correct any inadvertent errors, not to re-write the translation in favor of their own writing style or to change the content in any way. It's also important to confirm that the person chosen to do the review has sufficient time to devote to the task. With many other responsibilities, the reviewer may not be able to return the translation quickly, and this can delay your translation.

A single point of contact makes things easier. If one person in your company becomes the main contact for obtaining translations, the translation agency staff will come to understand your specifications much sooner. The translation coordinator will learn what to expect for turnaround time and cost and can advise other company employees when planning for global sales. A single point of contact also helps avoid overlapping requests coming from many areas of the company, which can add confusion and result in unnecessary expense.

Translation memory can save you money

Translation memory is a software program that translators use to recycle translated sentences. By storing and retrieving translations, translators can do their work faster. You'll want to learn about translation memory, because its use can have a direct impact on the turnaround time, consistency and cost of your translations. Here are the basics:

Translation memory is not computer translation. Instead, it is a tool that human translators use to assist them with translation by locating and placing sentences that have already been translated.

Translation memory is based on phrases or sentences, not individual words. Human understanding is contextual; therefore a word-for-word translation does not make much sense.

The concept behind translation memory derives from repetition. Many technical documents, such as operation and service manuals, contain text that is repeated throughout a series of similar documents. Years ago, translators realized they were translating the same sentences over and over. That led to the development of the first translation memory software. With the help of this software, translators store a source sentence with its corresponding translation in an electronic database in each language pair (i.e., English-German, Russian-English, etc.). When new phrases are presented for translation, the program



compares previously-translated phrases and retrieves the translation of matching phrases.

Translation memory *matches* are reduced in price. A *match* is a phrase that was translated previously (into the same language), thus allowing the translation of that phrase to be recycled. Most translation agencies discount matching phrases considerably. As the database of stored translations grows, your overall translation cost is reduced.

With translation memory, sentences either match or they don't. The more you re-purpose your English content *exactly*, the greater will be your savings from translation memory leveraging. But, if you tweak sentences that have been translated previously, you will lose the associated cost reduction. Even simple revisions like changing "read the *information*" to "read the *instructions*" will no longer be a match and require translator intervention. Managing your frequently-used content and resisting the urge to tweak the wording will result in lower translation costs from greater re-use.

Translation memory reduces the need for glossaries. One-to-one word lists or glossaries are rigid and not always that helpful because some terms have different translations depending on how they are used. For example, the word "screen" can be translated any number of ways. Used within the context of a sentence, it becomes much more specific. With translation memory, translators can search for specific terms within previously-translated phrases, and choose the corresponding translation if it's appropriate. This is especially useful when preferred terms have been received from clients or their reviewers and stored in the translation memory database.

With translation memory, quality work is even more important. Translation memory software is simply a storage-and-retrieval tool; it has no impact on quality. Since translations will be used over and over again, it's even more essential that the initial translation be accurate. Think "quality in, quality out." Be particularly careful about passing a database around among multiple vendors. You could end up with a mishmash of good and not-so-good translation.

Translation memory will only accept a "neutral" file with "live" text. A desktop-published file cannot be imported directly into the translation memory program. Some manipulation is usually called for and this often results in a "file prep" fee. If the electronic file contains scanned text, or text embedded in graphic images like CAD art, the text must be entered into the file.

Who owns the database? If you want to archive the database which is created by the translation memory program internally, you should clarify that right up front. Requesting an updated database file every six months or so is probably sufficient. Be aware that you won't be able to manipulate the



database unless you purchase the translation memory software (expensive and not recommended for non-professionals). But should you decide to work with a new translator, you'll want to provide the translation memory database files assuming you were happy with the previous translator's work.

Build a collaborative partnership for long-term success

Choosing the right translation agency and understanding the ins and outs of the process are a great start. But the best results come from working with one translation agency over a period of time. A report by Common Sense Advisory advises translation buyers to, "Foster a long-term relationship, so that quality improves as the LSP [language service provider] becomes more familiar with your terminology, content, and specific needs."⁷

Regular contact with your translation supplier will build a solid relationship and improve understanding. Details will be ironed out and become automatic. The result will be a smooth, comfortable process. Translators will become more and more knowledgeable about your products and your company and take real pride in being part of your international team. As things progress, you'll notice you're spending less time managing translations, and more time on your other responsibilities.

Consider your translation vendor an important part of your publishing team. Be sure to consult with them when you are considering a change in your publishing process. Technology changes can cause problems downstream and disrupt the translation process. It's to your advantage to include them in a discussion about new technology you're thinking of investing in, such as content management systems or translation management systems.

Certainly you'll want to address any issues with your translation vendor, and it's possible there may be some hiccups when you first start working with them. Be sure to discuss those concerns openly. At the same time, communicate any compliments you receive from overseas offices. Translators appreciate thanks for their hard work, and that makes for a better working relationship.

It's worth investing time into a relationship of trust, sharing your challenges and listening to theirs. True partners work together for each other's benefit and everybody wins.



1. ASTM F 2575-06 *Standard Guide for Quality Assurance in Translation*, www.astm.org
2. LinkedIn Technical Writer Forum, "How long do you spend actually writing?," December 2013
3. John Mueller, Google webmaster help, youtube.com
4. *Translation: Buying a Non-Commodity*, www.atanet.org
5. *How Manufacturing Companies Buy Translation*, Common Sense Advisory, October 2012
6. Nataly Kelly, "Ten Common Myths About Translation Quality," Huffington Post 7/18/13
7. Nataly Kelly and Donald DePalma, *Eliminating Roadblocks to Translation Quality*, Common Sense Advisory, April 2009

Reprints

The information contained in this white paper is copyrighted by SH3. If you wish to reprint, please contact us directly for permission.

SH3, Inc. has specialized in translation services for industrial manufacturers since its founding in 1980. The company provides translation services for manufacturers in the U.S and Canada in more than 50 languages.



7101 College Boulevard
Suite 500
Overland Park, KS 66210 USA

T: 913.747.0410
F: 913.747.0417

www.sh3.com