

Key Performance Indicators for HTS Classification

Understanding Time per Classification
2013 Update



Executive Summary

(This White Paper updates our original report, published in November 2010. This new edition updates metrics based on current usage and technology.)

An important part of successfully managing any department is defining and understanding the Key Performance Indicators (KPI) needed to measure success. Understanding, measuring, and tracking the right KPIs can be the difference between:

- justifying additional resources vs. losing resources
- approval to invest in better solutions vs. being denied
- simply keeping up with the current workload vs. falling behind

Import Compliance is no different. You must identify the key factors that drive the department and be able to measure them.

For a Compliance Department, **efficiency and accuracy are paramount.** These factors control the department costs and the corporate import risk, and must be understood. This paper focuses on Time per Classification as one of the core elements to measure the efficiency of a Compliance Department. This single measure not only defines the current workload that can be undertaken, but also provides a solid foundation for understanding the impact of any change or process improvement.

Do you know
your Time per
Classification?

We will discuss an example where Time per Classification can be used to measure up to an **93% improvement in efficiency.** We will also discuss:

- what is Time per Classification
- what should be included when measuring Time per Classification
- using Time per Classification to quantify a process improvement
- using Time per Classification to understand costs

Established in 1997, Zisser Customs Law Group helps companies navigate the complex International Trade business and legal environment. The team is comprised of U.S. Customs attorneys, compliance experts and supply chain security specialists.

Key Performance Indicators

Every department and company has their own Key Performance Indicators (KPIs). A sales department might track annual sales, annual renewal rate, and number of new customers per quarter. For a product production line, the KPIs might include the number of products produced per hour and defect rate per 100,000 products.

For a Compliance Department, the KPIs for Harmonized Tariff Schedule (HTS) classification are **Time per Classification and Error Rate**. By monitoring and tracking Time per Classification, you can understand **efficiency** which drives the department costs. By monitoring and tracking Error Rate, you can understand **accuracy** which determines the risk to the company. This paper focuses on Time per Classification as one of the most important KPIs that should be monitored for any Compliance Department.

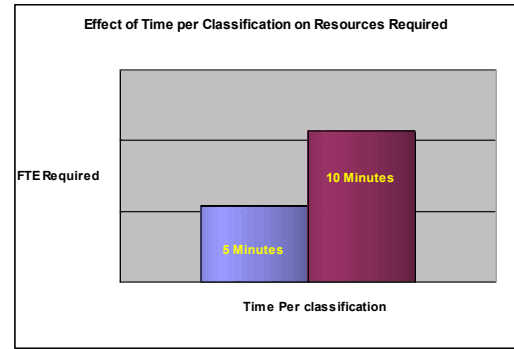
Average Time per Classification

Time per Classification is crucial to understanding how long it takes any Compliance Department to assign an HTS code to the products being imported by the company. This effects not only the resource costs for supporting current imports, but also defines what resources will be needed if the company significantly increases (or decreases) their imports. Without understanding how long it takes to complete each classification, justifying increased headcount or new systems to accommodate more imports becomes more difficult.

Most Compliance Departments report that **their Time per Classification averages between 5 and 10 minutes per classification**. Let's first understand what people typically mean with this estimate. At a minimum, this includes gathering the necessary data, finding the 10 digit HTS code using the HTS book and other resource materials, and documenting the results. For an HTS that is commonly used by a company, this may only take a very short amount of time. However, some classifications are much more complicated and include understanding complex facts, doing research using multiple resources, and seeking advice from outside resources or U.S. Customs and Border Protection. These classifications take much longer, which increases the overall Time per Classification.

Even understanding what goes into a Time per Classification estimate, the difference between a 5 minute and 10 minute average can significantly affect the costs of the department. In most manual environments there is no accurate way to truly measure the time spent on each classification. Most companies rely on overall measures and assumptions which lead to these wide ranges. Knowing your exact Time per Classification allows you to properly estimate your costs and properly plan for necessary resources.

For example, assume a typical full-time classifier spends 75% of their time actually doing classification, with the other 25% of their time allocated to meetings, e-mails, vacation, etc. This translates into 1,560 hours per year for classifying. If a company is importing 20,000 products per year and can classify at an average of 5 minutes per product, they need just over 1 Full Time Equivalent (FTE) to classify all their products. However, if the same company requires 10 minutes to classify their products, they need over 2 FTEs. **This**



doubles the company's resource costs for classification. While this might seem obvious based on the difference between 5 and 10 minutes, if the Time per Classification is not tracked, your classifications can't be quantified and you can't be sure where you fall within the range.

What about the Audit Trail and Maintenance?

When measuring Time per Classification, it is important to consider all of the steps necessary for HTS accuracy. Quite often when reviewing Time per Classification the focus is just on getting to the 10 digit HTS code, and does not consider the additional time needed to properly document the results so each classification is Audit Ready. At a minimum, the audit trail should include **Who did the classification, When they did it, and How they did it.** In addition, a **good audit trail also includes all of the legal resources necessary to support the classification** including binding rulings used, Informed Compliance Publications (ICPs), referenced, industry references reviewed, etc. This information must be stored in a format where it can be retrieved and reviewed as necessary for up to five years.

Companies must also monitor and maintain each classification for possible changes in laws, rulings, and facts. This monitoring and maintenance is critical for ongoing classification accuracy. Annual changes to the HTS, binding ruling revocations, or simply changes to your product features and designs can significantly affect HTS classification.

FTE Required for 20,000 Classification

Minutes per Classification	Classification Only	Classification + Audit Trail + Maintenance
5	1.07	2.14
10	2.14	4.27

Creating a proper audit trail and maintaining your classifications using a manual process is time consuming. **These elements can double the time spent actually classifying, which in turn doubles the resources required.** Even though they may happen well after the initial classification was completed, these functions

should be included in a Time per Classification calculation to properly account for all time spent classifying a product.

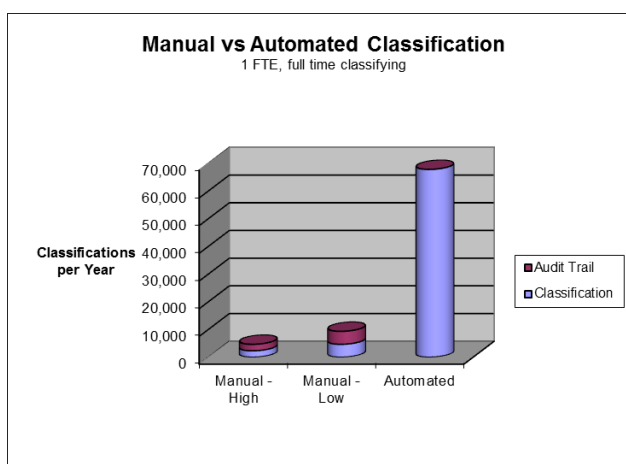
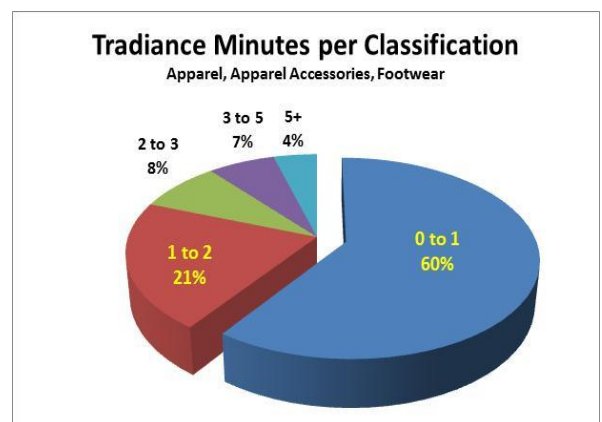
Using Time per Classification

In addition to understanding current and future workload, this KPI also helps you understand the benefits from any process improvements. For example, automating the classification and audit trail can significantly reduce the resources required for classification. Using Time per Classification, you can quantify the results of the improvements.

As an example of how automation can reduce Time per Classification, we reviewed the most recent 30,000 apparel, apparel accessory, and footwear classifications performed in Trãdiance, the first Audit-Ready Automated Classification system. The time was measured starting with the data gathering phase, and included the actual classification, documenting the results, and creation of the audit trail.

For a manual system, apparel and footwear are some of the more complicated products to classify and tends to be at the high end of the 5 to 10 minute estimate. However, **automated apparel, accessory, and footwear classification with Trãdiance averaged only 1.38 minutes per classification.** Well over half the classifications were completed in 1 minute or less, and over 80% were completed in less than 2 minutes.

Now that it can be measured, think about the increased productivity gained from reducing the Time per Classification, and the effect this has on a Compliance Department. Reducing the Time per Classification from 10 minutes to 1.38 minutes represents an **86% decrease in resources per classification.** This allows a Compliance Department to classify over 7 times as many products with the same number of resources in the same time period, or frees up 86% of someone's time for other compliance related work.



The difference is even greater once you include the maintenance provided by Trãdiance, and the audit trail that is automatically generated. This has the potential to reduce the time for classifying, creating an audit trail, and maintaining the classification from as much as 20 minutes per classification to the same 1.38 minutes it took to originally classify the item. **This frees up over 93% of the resources for other company priorities.** This could also allow the same resource to classify and defend over 14 times as many products as they could with a manual classification process. It is important to measure this significant time savings.

Median Time per Classification

An alternate way to measure Time per Classification is using *median* Time per Classification instead of *average* Time per Classification. The median is the “middle” number, where 50% of the classifications take longer than the median, and 50% take less. Using a median helps to remove statistical outliers and is less sensitive to extreme times than the average. Since the median requires a Time per Classification for each individual product classified, with a manual system this is very hard, or even impossible, to measure. With an automated system it can be calculated.

In reviewing the same 30,000 classifications performed in Trādiance, we can see **automated apparel, accessory and footwear classifications took a median time of a mere 45 seconds**. This means **half of all classifications took less than 45 seconds** to complete, including generating a complete audit trail. It would not be possible to match this level of efficiency in a manual environment, where it might take half of that time to even find the proper page in the tariff to begin the classification process.

Translating Time per Classification into Costs

Once Time per Classification is understood, it can be combined with resource costs and number of classifications per year to understand the classification costs for the company using the formula:

$$\frac{\# \text{ classifications/year} \times \text{average Time per Classification} \times \text{annual salary}}{2,080 \text{ work hours/year} \times 60 \text{ minutes/hour} \times \text{productivity}} = \text{cost}$$

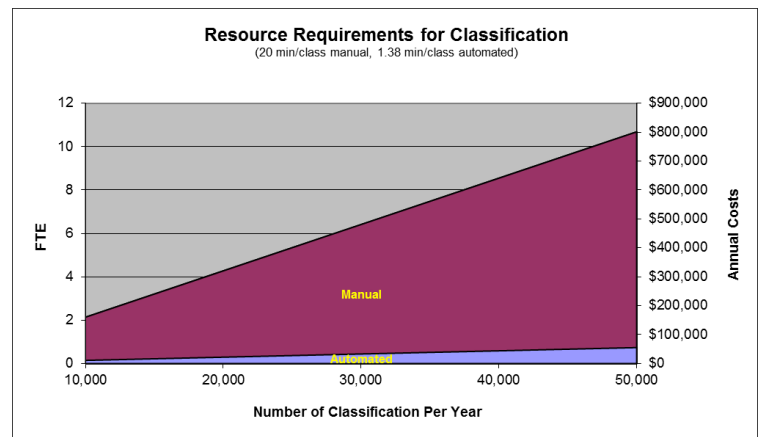
By varying these numbers, you can also do what-if analysis to understand how corporate changes affect classification costs.

For example, assume the fully-burdened annual salary for the classifier discussed above is \$75,000, and they work for a fashion company that imports 20,000 products per year. In a manual environment, with a Time per Classification of 20 minutes, the company spends \$320,513 per year on classification, audit trail, and maintenance:

$$\frac{20,000 \times 20 \times \$75,000}{2,080 \times 60 \times 0.75} = \$320,513$$

If the same company plans to increase its imports to 30,000 products, they will need to increase their classification budget to at least \$480,769.

What are the same company's costs if they shift to an automated environment? With Time per Classification, this can be calculated. The Trãdiance automated environment for apparel has an average Time per Classification of 1.38 minutes for classification, audit trail and maintenance. This means the resource costs would be reduced to \$22,115 for the current 20,000 products, and would increase to only \$33,174 for 30,000 products. This is an **annual resource cost savings of \$298,397 and \$447,597**, respectively.



While the examples shown are based on apparel and footwear classification, the same principals apply to all types of products. Since the Time per Classification for other types of products tend to be at the lower end of the 5 to 10 minute range (10 to 20 minutes including audit trail and maintenance), as a rough estimate we find you can typically use half the times and costs discussed for apparel for other types of products.

When you measure Time per Classification, it is possible to understand your current costs as well as how process change, such as automation, may reduce your costs and resource requirements. With this quantitative information, it is much easier to talk with company management to justify resource or system needs.

Final Thoughts

Understanding the KPIs for your department is important. Being able to measure them is critical. While this paper focuses on Time per Classification, we encourage you to understand your unique department and business goals to determine what KPIs are important to you, your department, and your business. Whatever you decide, make sure the KPIs you select are measurable so you can understand your current working environment, and the impact of business changes on your department.

To understand how Trādiance can help you become more efficient and measurably lower your Time per Classification, please contact us at tradiance@zissergroup.com or visit us on the web at www.tradiance.net.

About Trādiance

Headquartered in San Diego, California, Trādiance provides the first audit-ready automation tools for Import Regulatory Compliance.

Trādiance, a web-based automation expert system, merges Zisser Group's legal and industry expertise with advanced software for reliable, accurate trade compliance. Trādiance delivers an accurate 10 digit HTS Code with minimal effort and risk, backed by a complete audit trail.

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