



# ATE<sup>®</sup> Advanced Test Equipment Rentals

ATE Corp redesigned their site on Kentico 11 and added a lot of new functionality in the process. They now enjoy an e-commerce solution that provides an incredibly flexible back-end interface for management of their data and content.

## Background

Advanced Test Equipment Rentals Corp. (ATE Corp) approached Wakefly seeking a partner to develop a redesign of their corporate website (www.atecorp.org) using Kentico as the Content Management System. ATE Corp provides testing solutions in multiple fields such as the aerospace, automotive, communications, defense, power, and more industries. They carry more than 5000 products currently, with a business that is

continuing to expand. ATE Corp's existing site was also in Kentico, but on an older unsupported version so they wanted to move to the latest version as part of this redesign project. Their webmaster designed the new look of the site but they required a Kentico development partner to handle the implementation and hosting.

The screenshot shows the ATE Corp website homepage. At the top, there is a navigation bar with links for HOME, PRODUCTS, REQUEST A QUOTE, CALIBRATION, CONTACT US, and BUY. The main header features the ATE logo and tagline "Advanced Test Equipment Rentals - The Knowledge. The Equipment. The Solution." along with contact information for worldwide shipping: 800-404-2832 and +800 0404 2832 International. A search bar is located on the right side of the header.

The hero section features a large image of a fighter jet with the text "EMC CONDUCTED IMMUNITY" and a description: "SIMULATE PHENOMENA THAT MAY OCCUR WITHIN A VEHICLE, SUCH AS THE CORROSION OF A BATTERY FROM THE ALTERNATOR." Below this, there is a list of services: ESD GUNS, CONDUCTED IMMUNITY TEST SYSTEMS, INDIRECT LIGHTNING TEST SYSTEMS, and TRANSIENT GENERATORS. A red button labeled "RENT YOUR SOLUTION" is positioned at the bottom of the hero section.

Below the hero section, there is a row of icons representing various industries and solutions: Communications, Electrical, EMC, Environmental Health & Safety, Environmental Simulation, General Purpose, NDT Inspection, and Power Supplies & Loads.

The "POPULAR INDUSTRIES & SOLUTIONS" section includes four featured categories: Defense (Military test standards such as MIL-STD.), Automotive (Measure a vehicle's electromagnetic compatibility.), FIST (Facility instruction, standards, and techniques.), and Cell Tower (Towers are foundations of our digital society.).

At the bottom, there is a "POPULAR STANDARDS" section with logos for IEC and MIL-STD.

## Goals

As part of this redesign, ATE Corp wanted to take the opportunity to add some new functionality to the site that would improve the user experience as well as streamline some of their internal processes. The three primary objectives were to:

### Provide ATE Corp customers with account management capabilities via integration with Microsoft Dynamics CRM:

ATE Corp's customers are represented as contacts in Microsoft Dynamics CRM. This is the primary data location for customer contact information and quote/order history. In Kentico, logged-in customers can view and edit this data from the My Account page.

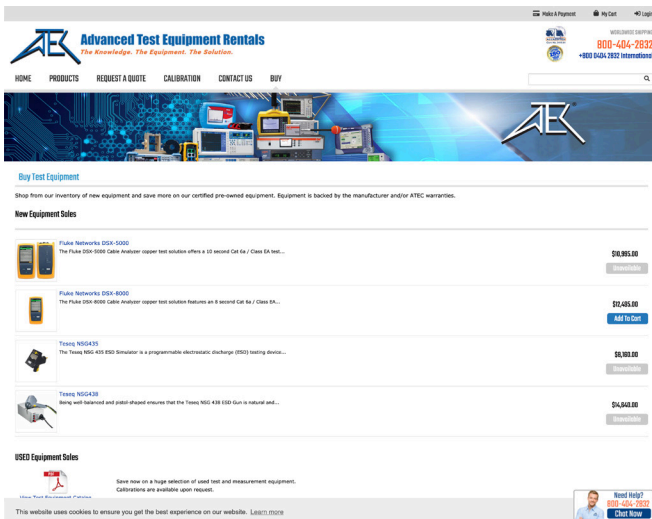
### Support both quote and purchase products in the e-commerce checkout process:

Most of ATE Corp's products are available for quote and a few products can be purchased. Both of these types of products should reside in the same shopping cart. When a customer checks out, the products in their cart are processed as follows:

- quote products are passed to Microsoft Dynamics CRM along with customer contact details
- purchase products are processed within a Kentico order along with the customer's billing and shipping details
- during checkout, payment is only processed when the cart contains at least one purchase product

### Create a customized solution for managing product categories, attributes, and specifications: The desired requirements were as follows:

- the product category hierarchy has three levels: category groups, categories, and subcategories
- subcategories can belong to multiple categories
- products can be associated with multiple subcategories
- product categories are content pages, and each level of the hierarchy has its own page template
- the names of product categories can change frequently, and being able to manage their URL aliases is important for SEO

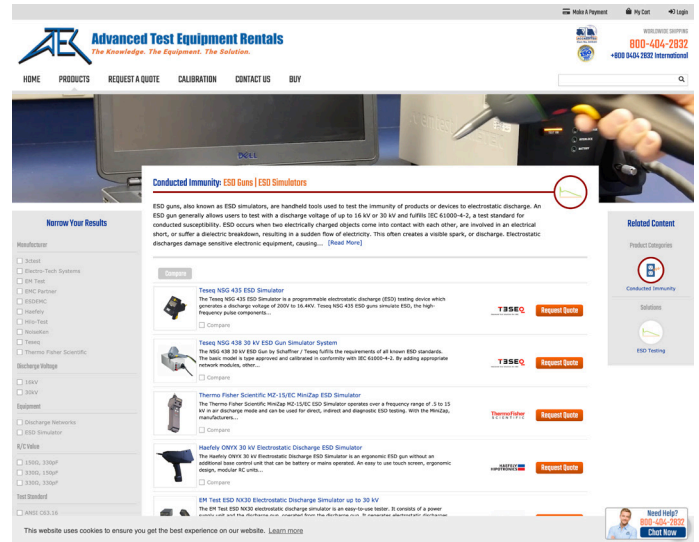


## Challenges

The site required a great deal of customization beyond Kentico's out-of-the-box functionality.

### Customer Synchronization with Microsoft Dynamics CRM:

One of the challenges that Wakefly faced when trying to achieve this functionality was figuring out how to account for all of the places where customer data could be updated on the site to make sure that updates were pushed to the CRM in all cases. They must map and synchronize customers between Kentico and Dynamics CRM. Data must be read and written to the CRM.



### Quote and Purchase Products:

ATE offers some products that are available for purchase online and others that are only available for a quote, but both types need to live in a shared shopping cart.

### Product Category Hierarchy:

A couple of requirements required Wakefly to leverage features beyond Kentico Categories. Kentico Categories have exactly one parent, however, in ATE Corp's case, a subcategory can have multiple parent categories. Also, Kentico Categories are a non-customizable class, so it is necessary to store their custom fields outside of this object.

# Solution

Kentico functionality was leveraged in multiple instances to help overcome these challenges.

## Customer Synchronization with Microsoft Dynamics CRM:

A recurring scheduled task maps Kentico customers with CRM contacts based on email address. It retrieves all active contacts from the CRM and then it matches these with Kentico customers based on email address. If a match is found, the matching CRM contact ID is saved on the Kentico customer in a custom field. This CRM contact ID is used for all customer-specific CRM API requests.

When customers log into Kentico, a global event handler synchronizes data stored on both the Kentico customer and the CRM contact. The CRM is considered the data authority, so all defined fields are written to the Kentico customer at this time.

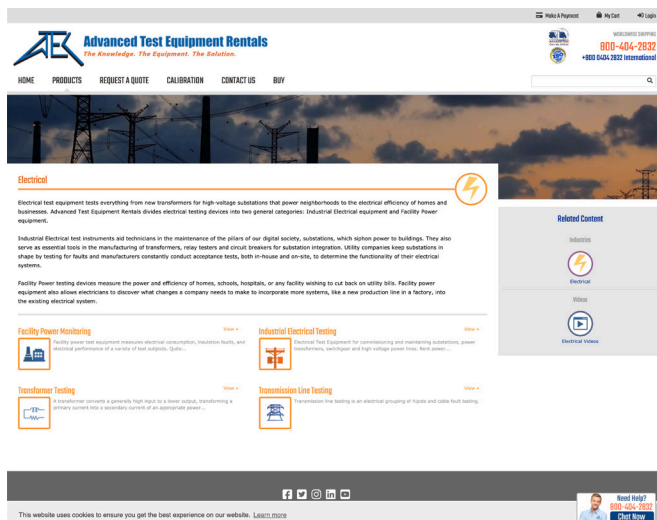
To ensure Kentico customer data updates are pushed back to the CRM from all editing contexts on the site (including the My Account page), a global event handler updates the CRM contact whenever the Kentico customer is updated.

## Quote and Purchase Products:

Two separate product page types were created for each quote and purchase products. When either of these pages is inserted/edited, a global event handler automatically assigns its associated Kentico product either the department “Quote Products” or “Purchase Products”. This department field is used to effectively distinguish product type.

Customers are selectively shown checkout step pages depending on whether they have quote and/or purchase products in their cart. The page wizard step action web part controls which checkout steps are processed based.

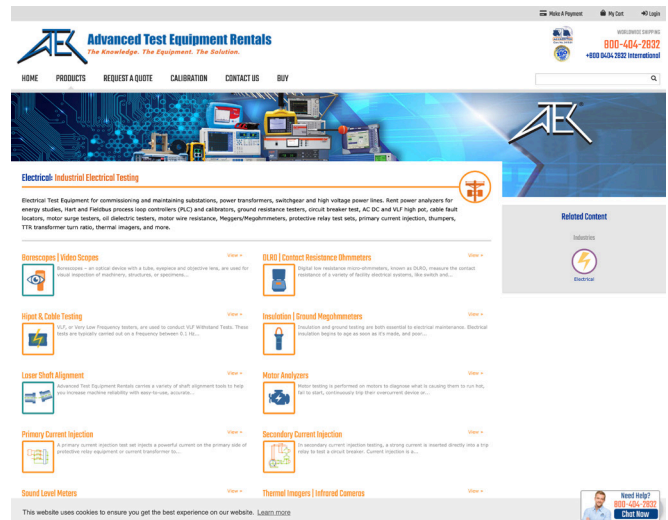
A custom web part was created to pass quote products to Microsoft Dynamics CRM.



## Product Category Hierarchy:

Wakefly used a combination of categories and pages to achieve the project's goals.

Three top-level categories were created for the three levels of the product category hierarchy, and the individual product category hierarchy members were inserted as categories within the appropriate top-level category (e.g., the category group “EMC” has the category path Category Groups/EMC). This separated structure allows the freedom to define the parent-child relationships outside of the category tree.



Page Types and Page Templates were created for each of the three levels of the product category hierarchy. These objects define the data and presentation for each of these levels, respectively.

In the content tree, three top-level folders were created for the three levels of the product category hierarchy. Individual product category hierarchy pages are added to their appropriate top-level folder.

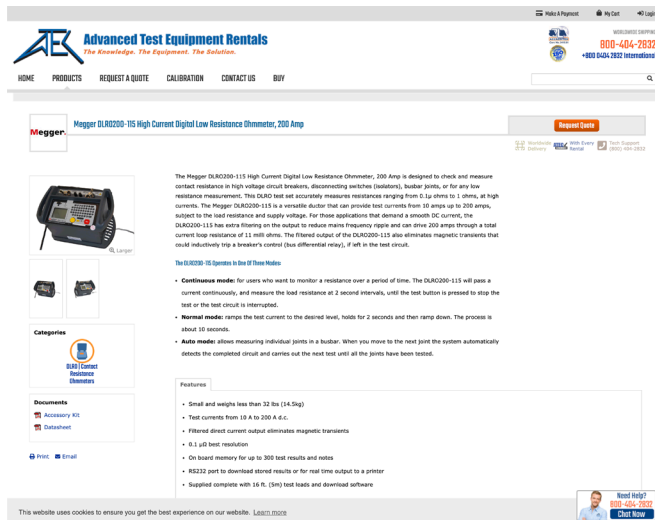
Parent-child relationships between product categories are managed on the page's categories assignment (e.g., the product subcategory page at node alias path /Subcategories/Oscilloscopes is assigned categories at category paths /Categories/Component Testing and /Categories/Signal Analysis).

A custom module class called “Category Extension Data” was created as a one-to-one binding between these categories and pages. In addition to associating a category with a page, it stores additional category display data.

## Results

ATE Corp's redesigned site has seen a 22.23% increase in organic traffic since it launched on July 19 when compared to the same time period last year. Additionally, the new functionality on the site has had a positive impact on their business. For example:

- Adding E-commerce functionality to the site allowed them to now sell used equipment via the web, opening up a new revenue stream.
- Previously, they had a very rigid hierarchical structure to their catalog. This new site boasts an extremely flexible structure due to the custom Kentico development work that was completed.
- The integration with Microsoft Dynamics allows for functionality that they never had before. They can now perform the following activities through the website:
  - pull in user data
  - view order history
  - view Invoicing
  - allow for reordering



## Key Criteria for Choosing Kentico

In this instance, ATE Corp was already an existing Kentico customer and wanted to have their new site remain on the same CMS. However, Kentico offered a lot of features that were key to the success of Wakefly's ability to deliver the functionality that the client desired. The following Kentico features are used:

- E-Commerce
  - specialized checkout processes for both quote and purchase products
  - custom payment gateway created for PayTrace
- Custom Modules
  - manage product attributes for filtering on product listing pages
  - manage product specifications for product comparison
  - extend Kentico Categories with additional data and page mappings
- Email Marketing
- visitors can sign up for an email marketing campaign

## Wakefly

Wakefly is one of the oldest and most experienced Kentico Solution Partners. Wakefly has been a Kentico Gold partner since the inception of the partner program in 2008. Our vast portfolio of highly technical and marketing-focused websites allowed us to achieve Kentico's highest honor, Quality Expert.

Whether you are in the market for a new website or just need help to make updates to an existing Kentico site, we can act as an extension of your team to help you achieve your goals. Wakefly's entire project team has experience working with Kentico, including certified developers and EMS certified marketers, so you can feel confident entrusting us with your site.

Wakefly creates digital experiences that matter. We craft unified, online marketing strategies to help you to reach more prospects and customers. Our methodical, data-driven approach ensures that we engineer the digital solution that's right for you.