

A Classic Computer Cameo

Siemens products and technologies seem to pop up in the strangest of places

Matthew Jaster, Senior Editor

In the classic film *Willy Wonka & the Chocolate Factory* (1971), a supercomputer is asked to determine the location of the main character's elusive golden tickets. The scene plays out like this:

"We're about to witness the greatest miracle of the machine age," says the overconfident computer engineer. "This machine will tell us the precise location of the three remaining golden tickets."

After entering the required data, the engineer patiently waits for the computer system to spit out the data. He then proceeds to read the results to his impatient supervisors.

"It says, 'I won't tell that would be cheating.'"

The scene — to this day — remains one of the funniest in the film as the make-believe world scrambled for a competitive advantage to find a way inside Willy Wonka's factory.

But did you know that the sarcastic computer system in the film is based on a real computer manufactured by Siemens in the 1960s?

According to the Siemens website, the company presented the world with the first mass-produced transistorized computer (The 2002 System) in 1957. The first unit was delivered two years later, to the Technical University in Aachen.

This was particularly noteworthy since the world market in data processing was almost entirely controlled by IBM in the United States during this time. The mass production of the Siemens 2002 System led to widespread use of data processing for a vast range of applications in Europe.

By 1965, Siemens five systems — the 4004/15, 25, 35, 45 and 55 — offered a series of increasingly powerful models. Upward compatibility from one system to the next was guaranteed. There was even two-way programming compatibility between the 4004/35, 4004/45 and 4004/55. All of which yielded a great deal of flexibility in customer use — an important competitive advantage.

Fast forward to 2020 and Siemens Digital Software Solutions offers a slew of technologies and design parameters for all the components found in the pages of this magazine — computer solutions for a new era of gear and motor design. Thankfully, these software solutions don't talk back like the one featured in the film:

"I'm now telling the computer that if it will tell me the correct answer, I will gladly share with it the grand prize."

He smiles, punches in some additional data and waits for another response.

"He says, 'What would a computer do with a lifetime supply of chocolate?'"



The Siemens 4004 was used in the film *Willy Wonka and the Chocolate Factory* (1971). Courtesy of Siemens.

"I'm now telling the computer *exactly* what he can do with a lifetime supply of chocolate ..." (www.sw.siemens.com) **PTE**