## **EDWARD CONARD**



## **Macro Roundup Artcile**

**Headline: What Progress Has There Been In Industrial Robots?** 

Article Link: https://www.construction-physics.com/p/what-progress-has-there-been-in-industrial

Author(s)	Brian Potter
Publication	Construction Physics
Publication Date	January 10, 2024

**Tweet:** Since the 1980s industrial robot costs have fallen substantially while their precision has increased; controlling for size robot cost has decreased by 50-66% while simultaneously getting 50-100x more precise. @ brianpotter

**Summary:** The 1984 robots are not that much more repeatable than the 1972 robots. Our 1-meter reach, 10kg payload robot would on average have a repeatability of around 1 mm in both years (with a lot of variation, as some 1984 robots could evidently achieve 0.1mm of repeatability). But since then, there's been a huge improvement. Our 2023 1-meter reach, 10kg payload robot will have a repeatability closer to 0.01 or 0.02 millimeters, or 50 to 100 times more precise than the robots in the 70s and 80s. Overall, robots have fallen substantially in cost since the 1980s, while simultaneously getting more precise. A robot with a 1-meter reach and 10 kg payload capacity would cost anywhere from 2 to 3 times as much in the 1980s as it does today, even before considering the rise of cheap Chinese robot arms, which seem poised to make prices fall even more. Related: The Characteristics and Geographic Distribution of Robot Hubs in U.S. Manufacturing Establishments and Making Manufacturing Great Again and Factory Boom Sweeps US With Construction at Record \$190 Billion

**Primary Topic:** Investment

Topics: Investment, Op-Ed/Blog Post, Productivity

**Permalink:** <a href="https://www.edwardconard.com/macro-roundup/since-the-1980s-industrial-robot-costs-have-fallen-substantially-while-their-precision-has-increased-controlling-for-size-robot-cost-has-decreased-by-50-66-while-simultaneously-getting-50-100x-more-p?view=detail">https://www.edwardconard.com/macro-roundup/since-the-1980s-industrial-robot-costs-have-fallen-substantially-while-their-precision-has-increased-controlling-for-size-robot-cost-has-decreased-by-50-66-while-simultaneously-getting-50-100x-more-p?view=detail</a>

**Featured Image Link:** https://www.edwardconard.com/wp-content/uploads/2024/01/Robot-Siz e-Vs-Repeatability.png