



Fig.12. Arc height variation with shot peening time.

There are three different standard thicknesses of Almen strips. This permits sensitive arc heights to be developed over a wide range of peening intensities. The three thicknesses are labelled N, A and C with N being the thinnest and C being the thickest.

Everything about measuring peening intensity is rigorously controlled in order ensure that different organizations derive very similar values for a given shot stream. Fig.13 shows the basic principle of arc height measurement. An accurate dial gauge presses lightly on the Almen strip having been previously zeroed using a standard metal block. The strip itself is held lightly by magnetic forces generated in the four support balls.



Fig.13. Almen gauge.

## DISCUSSION

A range of typical questions has been presented but it is by no means comprehensive. Some questions that have been fielded were posed by students, some by casual acquaintances. One important consideration is that enlightening questioners must be in the form of short replies. There is a strict limit on the information that can be absorbed in a matter of minutes. Technical articles concentrating on one specific topic can take hours, even weeks, to fully absorb. Illustrative figures for aiding answers to questions can be kept on either a smartphone or a laptop, or both. ●

## ITAMCO Revolutionizes Gear Manufacturing at THRIVE Energy Conference

The recent THRIVE Energy Conference in February, 2024 served as a prime platform for ITAMCO (Indiana Technology and Manufacturing Companies) to unveil its ground-breaking advancements in gear manufacturing technology. Amidst discussions on energy innovation and sustainability, ITAMCO seized the opportunity to showcase its key innovations that are reshaping the landscape of gear production.

At the heart of ITAMCO's presentation was its cutting-edge use of machine learning (ML) and advanced analytics in gear manufacturing processes. By harnessing ML algorithms, ITAMCO has pioneered energy efficient solutions specifically tailored for gear systems. These solutions enable lower energy consumption of the gear manufacturing process.

Moreover, ITAMCO spotlighted its IoT-enabled gear monitoring systems which provide real-time insights into gear performance and health. Through continuous monitoring and data analytics, organizations can optimize gear operation, prevent unexpected failures, and maximize energy efficiency across various applications.

In addition to its technological advancements, ITAMCO emphasized its commitment to sustainability in gear manufacturing. ITAMCO ensures transparency and traceability in the supply chain, promoting responsible sourcing of materials and ethical manufacturing practices made in the USA. This not only aligns with the growing demand for sustainable solutions but also reinforces ITAMCO's dedication to environmental stewardship.

By participating in the THRIVE Energy Conference, ITAMCO demonstrated its leadership in revolutionizing gear manufacturing through innovation and sustainability. Through collaboration with industry peers and stakeholders, ITAMCO continues to drive positive change and shape the future of energy by delivering reliable, efficient, and environmentally conscious gear solutions.

In conclusion, ITAMCO's participation in the THRIVE Energy Conference underscored its commitment to advancing gear manufacturing technology while promoting sustainability in the energy sector. Through its pioneering innovations, ITAMCO is poised to lead the industry towards a more resilient and sustainable energy future.

### About ITAMCO

ITAMCO has been recognized as one of the premier advanced manufacturing and technology firms in the United States. The company collaborates with like-minded professionals from the world's most respected companies and universities across the globe to solve complex challenges and deliver innovative solutions. ●