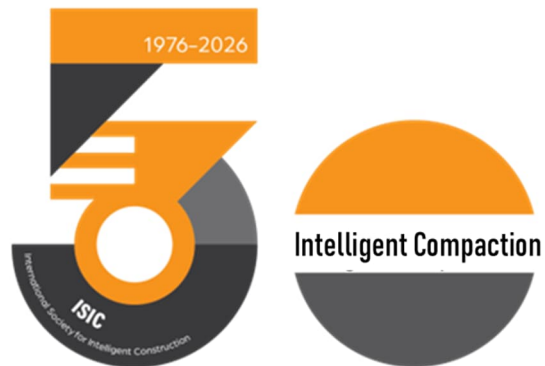


IC-50 Articles – No. 00-00

Notice Regarding the Launch of the "50 Years of Intelligent Compaction" Series of Activities



Since the birth of the first “Compactmeter” in 1976, the methodology—based on the dynamic response of vibratory rollers and involving continuous monitoring of compaction quality during the rolling process—has now spanned 50 years (1976–2026). From "Continuous Compaction" to "Intelligent Compaction (IC)," revolutionary changes have occurred across fundamental theories, control parameters, and control methodologies. At this juncture—which also happens to coincide with the simultaneous release of the Chinese and English editions of the book *Intelligent Compaction*—we find ourselves in a moment of serendipitous convergence. The ISIC Executive Committee has decided to seize this opportunity to designate 2026 as the "Year of Intelligent Compaction Promotion." Our goal is to promote and popularize the concepts and methodologies of Advanced Intelligent Compaction (Level 3 and above), thereby driving progress in earthworks construction technologies and elevating the overall level of construction automation.

To this end—and with a focus on the design, construction, and maintenance of earthworks—we will focus on Intelligent Compaction and its extended applications. We will publish a series of "concise and insightful" articles on the official ISIC2026 WeChat account and on the ISIC website, designed to be easily accessible to all readers. This initiative serves both as a commemoration of the 50th anniversary of IC (Intelligent Compaction) and as an interpretive guide to the book *Intelligent Compaction*. We also warmly invite contributions from individuals across all sectors; please feel free to submit short, illustrated articles detailing the achievements you have attained—or the challenges you have encountered—during the research, development, and application of Intelligent Compaction technologies, to share with the wider community.

As the inaugural event in this series, we present a diagram below illustrating the evolution of rolling operations in earthworks construction. This visual aid offers a broad overview of the key chronological

milestones and thematic developments in the evolution of earthworks construction methodologies. We encourage everyone to compare these developments against the prevailing technological standards of each respective era—and see what insights you might discover!

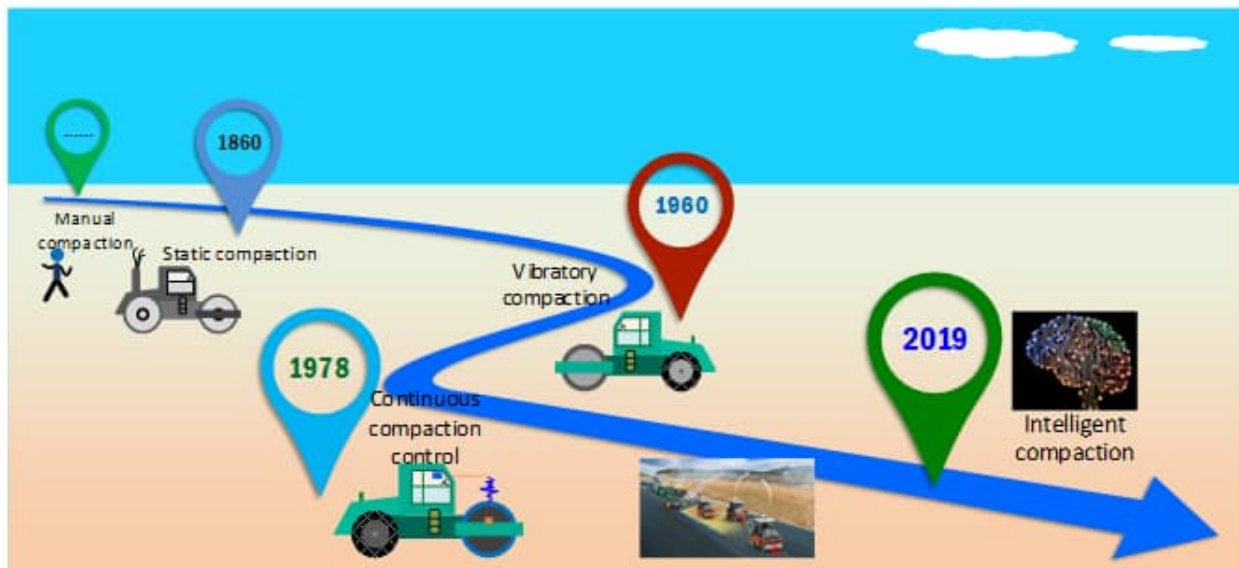


Figure 1: The Evolution of Compaction Technologies

(Adapted from the “Intelligent Compaction” volume)

As is readily apparent from this diagram, earthwork construction technology is inextricably linked to the prevailing technological landscape of its time; indeed, it is a direct result of the multidisciplinary convergence characteristic of each era. Today, as we usher in the age of intelligence, the ancient adage "borrowing stones from other mountains to polish one's own jade" (i.e., drawing upon external resources to refine one's own craft) is particularly relevant to transportation infrastructure. The "cross-pollination and integration" of knowledge and technology is underway—and Intelligent Compaction serves as a prime example of this transformative trend.