



How Does a Cartridge Become a SAAMI Standard and What is the Benefit?

The Sporting Arms and Manufacturers' Institute® (SAAMI®) frequently receives inquiries from people asking how they can get their cartridge design standardized by SAAMI. In this article we will walk through the process, restrictions and benefits of a cartridge design being standardized within SAAMI.

Who Can Introduce a Cartridge Design for Standardization?

In short, only a Voting or Associate SAAMI member company is allowed to submit a cartridge and chamber design for consideration of acceptance to the SAAMI Technical Standards.

While this may seem restrictive on its face, the reasoning for this is that a new cartridge introduction is much more than just drawings of the cartridge and chamber designs. The performance expectations for velocity and limits for pressure for the new design must both be established in a ballistics range equipped with SAAMI-compliant test equipment and operated in accordance with the SAAMI procedures for those measurements.

Additionally, in order for the ammunition to be manufacturable, a reliable and quality supply of ballistic range reference ammunition must be available to laboratories wanting to test ammunition during manufacture or after purchase. Without reference rounds to validate the performance of a test facility, such testing cannot be carried out to SAAMI procedures, by definition.

As a side note, cartridges that are no longer in production by a SAAMI-member company and lack a current lot of reference ammunition is considered "inactive" by SAAMI.

On the firearm side of our industry, those manufacturers, gunsmiths and armorers need a reliable and quality supply of proof ammunition to verify the pressure-holding capability of firearms as well as action proving dummy loads to check the function of the actions.

What does the introduction process look like?

The company sponsoring the new introduction submits a complete data package to the SAAMI Technical Office. Those familiar with the public American National Standards published by SAAMI (available as free downloads at www.saami.org) know that there are many characteristics defined for every cartridge that has been standardized. Beyond the cartridge and chamber drawing, including such information as the only recognized full and abbreviated name of the cartridge, bullet weight and velocity, the velocity and pressure test barrel drawing, part numbers for reference ammunition, proof rounds, action proving dummies and more is necessary.

Once a complete submission package is in-hand, drawings of the cartridge, chamber and test barrel are prepared in SAAMI format, and the introduction, with the added SAAMI drawings, is distributed to the full membership of the SAAMI Joint Technical Committee (JTC) either at its next regularly scheduled meeting or via email up to 90 days prior to the next meeting. This allows members three months to review the information and ask questions or provide input to ensure all SAAMI requirements for a design are answered or addressed.

At the next JTC meeting, a vote is taken to accept the new cartridge. If accepted by the JTC, the new cartridge is presented to the SAAMI Board of Directors. If there are no objections at the board level, the cartridge becomes a new SAAMI-accepted cartridge.

Once those approvals are final, a new cartridge introduction summary document is prepared and posted to the SAAMI website and included in the next revision of the appropriate volume of the American National Standards.

In all, this process can take between three and six months. Occasionally it may take longer in the case of a design with unusual or special features which depart from historical norms.

What are the benefits of SAAMI acceptance?

SAAMI is internationally recognized as the preeminent organization for establishing dimensional and performance standards for ammunition, firearms and suppressors. The standards published by SAAMI are used by manufacturers worldwide to ensure those products are safe and that interchangeability between them exists. They can further be assured the measurements they make on the

performance of those products are being measured by a consistent method and can safely be used to compare to the limits published by SAAMI.

I am not a SAAMI member, is there a way for my design to become a standard?

For manufacturers, the most straight forward path would be to become a SAAMI member. Associate and Voting members have the right to introduce new cartridges, along with being able to assign representation to the SAAMI committees and participate in those meetings.

A possible alternate route would be for the designer to partner with a SAAMI Associate or Voting Member company, who can then sponsor the cartridge. SAAMI is not involved in such arrangements and those need to be established between the designer and member company directly. Associate and Voting members are listed on the SAAMI website at www.saami.org.

By having a rigorous review and standardized process for cartridge and chamber designs by the best technical resources from its member companies, SAAMI ensures it fulfills its mission of promoting the safety, interchangeability and reliability of sporting arms and ammunition.

About SAAMI

The [Sporting Arms and Ammunition Manufacturers' Institute](http://www.saami.org), founded in 1926 at the request of the federal government, is dedicated to creating and promulgating technical, performance and safety standards for firearms, ammunition and components, and is committed to being the preeminent global resource for the safe and responsible transportation, storage and use of these products.