BA 9000: National Institute of Justice Body Armor Quality Management System Requirements

January 2012

The contents of this document may be reproduced and/or distributed, in whole or in part, without prior written authorization, provided no alteration is made to the contents.

Contents

1	Scope	, 1
2	Normative references	, 1
3	Terms and definitions	. 1
4	Quality management system	. 1
5	Management responsibility	. 2
6	Resource management	. 2
7	Product realization	. 2
8	Measurement, analysis and improvement	. 3

Foreword

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research, development, and evaluation agency of the U.S. Department of Justice and is dedicated to researching crime control and criminal justice issues. NIJ provides objective, independent, evidence-based knowledge and tools to meet the challenges of crime and justice, particularly at the state and local levels. NIJ's principal authorities are derived from title I of the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. §§ 3721-3723) and subtitle D of title II of the Homeland Security Act of 2002 (6 U.S.C. §§ 161-165).

NIJ develops standards and test methods for law enforcement and corrections equipment, including body armor, and operates the voluntary NIJ Ballistic Body Armor Compliance Testing Program.

Introduction

ISO 9001:2008(E), *Quality Management Systems - Requirements* ("ISO 9001") specifies general requirements for a quality management system such that it can be applied to a wide range of products, services, and customers. This document, *BA 9000: National Institute of Justice Body Armor Quality Management System Requirements* ("BA 9000") is intended to be implemented and applied (on a voluntary basis) in conjunction with ISO 9001 with respect to processes for constructing/assembling body armor of manufacturers of ballistic-resistant body armor that supply members of the federal, state, tribal and local law enforcement and corrections community. In general, BA 9000 incorporates the requirements of ISO 9001, with modifications as set forth herein.

Although demonstration of conformity of the quality management system with BA 9000 also demonstrates compliance with ISO 9001, conformity of the quality management system with ISO 9001 does not of itself demonstrate compliance with BA 9000.

Users of this document are advised to consult the NIJ Standards and Testing Program web page, accessed from <u>www.nij.gov/standards</u>, on a regular basis to determine whether it has been revised or superseded.

Technical comments and recommended revisions are welcome. Please send all written comments and suggestions to Director, National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, Washington DC 20531, ATTN: NIJ Standards and Testing Program.

Nothing in this document is intended to create any legal or procedural rights enforceable against the United States. Moreover, nothing in this document creates any obligation for manufacturers or other entities to comply with these quality management system requirements.

1 Scope

Except as expressly provided herein, the provisions of ISO 9001:2008(E) ("ISO 9001") are hereby adopted in their entirety and incorporated by reference as though fully set forth herein.

ISO 9001, Subclause 1.2, paragraph 2, is supplemented by adding at the end the following:

"Any supplementary requirements specified in this document (BA 9000) shall be considered as applicable and cannot be considered for exclusion.".

2 Normative references

ISO 9001, Clause 2, is supplemented by adding at the end the following:

"ISO 9001:2008(E), Quality Management Systems-Requirements".

3 Terms and definitions

ISO 9001, Clause 3, is supplemented by adding at the end the following:

"3.1 Product

"Except where the context clearly and unmistakably indicates otherwise, use of the term "product" in ISO 9001 shall be understood to mean "ballistic-resistant body armor."

"3.2 Customer

"Except where the context clearly and unmistakably indicates otherwise, use of the term "customer" in ISO 9001 shall be understood to mean "a customer who is a member of the federal, state, tribal, and local law enforcement and corrections community.".

4 Quality management system

ISO 9001, Subclause 4.2.1, is supplemented by adding at the end the following:

"e) construction details such as build sheets and assembly instructions, and

"f) documented procedures for the preservation of product throughout the manufacturing process (from receipt of bulk materials to shipment of final product).".

ISO 9001, Subclause 4.2.3, is supplemented by adding the following paragraph at the end:

"The NIJ Ballistic Resistance of Body Armor Standard and NIJ Ballistic Body Armor Compliance Testing Program ("NIJ Body Armor CTP") documents (including forms, applications and SOPs) shall be considered documents of external origin necessary for the planning and operation of the quality management system.".

ISO 9001, Clause 4.2.4, is supplemented by adding at the end the following:

"The following items are specific records that, among others, must be controlled and maintained

- a) all documents and communications submitted to or received from the NIJ Body Armor CTP, and
- b) all test reports related to body armor listed or previously listed on the NIJ Body Armor CTP Compliant Product List.".

5 Management responsibility

This document BA9000 makes no supplement to ISO 9001, Clause 5.

6 Resource management

ISO 9001, Subclause 6.2.2, is supplemented as follows—(i) By adding the following at the end of a), immediately before the comma:

"(this shall include any personnel identified in the NIJ Body Armor CTP application documents)", and

(ii) By adding at the end the following:

"NOTE NIJ Body Armor CTP application documents include initial program application and ballistic-resistant body armor model-specific agreements.".

7 Product realization

ISO 9001, Subclause 7.1, is supplemented by adding the following paragraph before the notes:

"The NIJ Ballistic Resistance of Body Armor Standard, and NIJ Body Armor CTP documents, forms, applications and SOPs shall be considered as containing criteria for product acceptance.".

ISO 9001, Subclause 7.4.1, is supplemented as follows—(i) By adding the following at the end of paragraph 1:

"Purchase requirements and specifications for both ballistic materials and material used for panel covers shall include lot testing of bulk materials to provide greater assurance that production materials will perform similarly to materials utilized in conformity assessment testing.", and

(ii) By adding the following at the end of paragraph 2:

"The impact on ballistic performance of the end product shall be considered when determining purchase requirements (including verification, delivery and storage).".

ISO 9001, Subclause 7.5.3, paragraph 1, is supplemented by adding the following at the end:

"Product traceability is required and shall be accomplished with serial and lot numbers whose combinations are unique to each panel. Traceability documentation shall be sufficient to allow for traceability to the individual shipments of bulk materials and verification of those materials. Traceability documentation shall extend to the end user or purchasing agent in order to facilitate user notifications and recalls."

ISO 9001, Subclause 7.5.5, is supplemented by adding the following paragraph at the end:

"The preservation of ballistic materials shall include consideration of environmental factors (throughout the production cycle) such as temperature, humidity, contamination, rough handling and ultraviolet radiation.".

8 Measurement, analysis and improvement

This document BA9000 makes no supplement to ISO 9001, Clause 8.