Civilian American and European Surface Anthropometry Resource Project—CAESAR®

CAESAR®I

The most comprehensive source for body measurement data

If you have questions or are interested in acquiring CAESAR products, Please call Shape Analysis Ltd., exclusive distributor of CAESAR products: phone +44 772-0851196, email—richard@shapeanalysis.com.

Products that make your designs fit.

Whether designing new clothing lines or cockpits accurate body measurements are critical to create better and more cost effective products. The CAESAR Product Line (Civilian American and European Surface Anthropometry Resource) was designed to provide you with the most current measurements for today's body. This product line was developed as a result of a comprehensive research project that brought together representatives from numerous industries including apparel, aerospace, and automotive. CAESAR began as a partnership between government and industry to collect and organize the most extensive sampling of consumer body measurements for comparison. The project collected and organize data on 2,400 U.S. & Canadian and 2,000 European civilians and a database was developed. The following product line makes the results of this research study available to designers everywhere.

CAESAR Products

- CAESAR 3-D Anthropometric Database, North American Edition
- CAESAR Measurements on CD-ROM, North American Edition
  Including 1-D Data with 3-D Landmarks
- CAESAR 3-D Anthropometric Database, European Edition
- CAESAR Measurements on CD-ROM, European Edition Including 1-D Data with 3-D Landmarks
- CAESAR Final Report on CD-ROM

How to order: call +44 772-0851196 or email richard@shapeanalysis.com.

More About CAESAR

CAESAR Products

CAESAR 3-D Anthropometric Database, North American Edition

This extensive database product includes measurements from the entire North American population sample (2,400 male and female subjects, aged 18-65) including demographics (in comma delimited text and Excel spreadsheet formats). This database is the first to include 3-D model scans in addition to traditional 1-D measurements. The camera views from the 3-D scan have been accurately stitched together to provide complete 3-D models of each pose. Scanned poses include standing, relaxed seated, and coverage poses. In addition the database contains 40 traditional (1-D) measurements that were done with a tape measure and caliper. Extracted 1-D measurements using landmarks from the scans - standing and relaxed seated poses are also included (both in comma-delimited text and Excel spreadsheet formats). All measurements are presented in both English and metric units. Several reports are also included that cover protocol of how the database was generated for the population of the United States of America (18-65). *Price: $10,000 (50% off original price). To order: call +44 772-0851196 or email richard@shapeanalysis.com.*

CAESAR Measurements on CD-ROM, North American Edition

Including 1-D Data with 3-D Landmarks

This CD-ROM contains traditional anthropometric measurements and extracted data from human body scans. The anthropometric database on this CD was collected from the CAESAR research project that includes approximately 2,400 North American male and female subjects, aged 18-65. This database is presented in English and metric units, and includes:

- 40 traditional (1-D) anthropometric measurements that were done with a tape measure and caliper (in comma-delimited text and Excel spreadsheet formats)
- Extracted 1-D measurements that were done using landmarks from 3-D scans-standing and relaxed seated poses (in comma-delimited text and Excel spreadsheet formats)
- Demographics of subjects (in comma-delimited text and Excel spreadsheet formats)
- Reports covering protocol of how the database generated

Price: $3,500 (50% off original price). To order, call +44 772-0851196 or email richard@shapeanalysis.com.

CAESAR 3-D Anthropometric Database, European Edition

This extensive database product includes measurements from the entire European population sample (2,000 male and female subjects, aged 18-65) including demographics (in comma delimited text and Excel spreadsheet formats). This database is the first to include 3-D model scans in addition to traditional 1-D measurements. The camera views from the 3-D scan have

been accurately stitched together to provide complete 3-D models of each pose. Scanned poses include standing, relaxed seated, and coverage poses. In addition the database contains 40 traditional (1-D) measurements that were done with a tape measure and caliper. Extracted 1-D measurements using landmarks from the scans—standing and relaxed seated poses are also included (both in comma-delimited text and Excel spreadsheet formats). All measurements are presented in both English and metric units. Several reports are also included that cover protocol of how the database generated for the population of Europe (18-65).
Price: $10,000 (50% off original price). To order: call +44 772-0851196 or email richard@shapeanalysis.com.

CAESAR Measurements on CD-ROM, European Edition

Including 1-D Data with 3-D Landmarks
This CD-ROM contains traditional anthropometric measurements and extracted data from human body scans. The anthropometric database on this CD was collected from the CAESAR research project that includes approximately 2,000 European male and female subjects, aged 18-65. This database is presented in English and metric units, and includes:

- 40 traditional (1-D) anthropometric measurements that were done with a tape measure and caliper (in comma-delimited text and Excel spreadsheet formats)
- Extracted 1-D measurements that were done using landmarks from 3-D scans-standing and relaxed seated poses (in comma-delimited text and Excel spreadsheet formats)
- Demographics of subjects (in comma-delimited text and Excel spreadsheet formats)
- Reports covering protocol of how the database was generated

Price: $3,500 (50% off original price). To order, call +44 772-0851196 or email richard@shapeanalysis.com.
CAESAR Final Report on CD-ROM

Custom Data Sets

Custom sub-sets of the CAESAR database are also available. For details, phone +44 772-0851196, email—richard@shapeanalysis.com.

More About CAESAR

Database Content

The CAESAR database contains anthropometric variability of men and women, ages 18-65. Representatives were solicited to ensure samples for various weights, ethnic groups, gender, geographic regions, and socio-economic status. The study was conducted from April 1998 to early 2000 and includes three scans per person in a standing pose, full-coverage pose and relaxed seating pose. Data collection methods were standardized and documented so that the database can be consistently expanded and updated.

High-resolution measurements of body surfaces were made using a new data collection technology--Three Dimensional (3D) Surface Anthropometry. This technology can capture hundreds of thousands of points in three dimensions on the human body surface in a few seconds. It has many advantages over the old measurement system using tape measures,

anthropometers, and other similar instruments. It provides detail about the surface shape as well as 3D locations of measurements relative to each other and enables easy transfer to Computer-Aided Design (CAD) or Manufacturing (CAM) tools. The resulting scan is independent of the measurer, making it easier to standardize. Automatic landmark recognition (ALR) technology was used to automatically extract anatomical landmarks from the 3D body scans. Eighty landmarks were placed on each subject. More than 100 univariate measures were provided, more than 60 from the scan and approximately 40 using traditional measurements. Demographic data such as age, ethnic group, gender, geographic region, education level, and present occupation, family income and more were also captured.

3-D Scans: The newest technology available

The use of averages and percentiles (traditional methods of characterizing populations), have often resulted in erroneous and inaccurate designs that don't fit the target audience. 3-D Scans are the newest way to size your products for the best fit. Scanning technology can be used to modify products in the design stage to accurately fit a wide range of subjects. The broad variations in humans make 3-D a much more accurate end result when considering combinations than using percentiles with 1-D measurements. The scan can easily be used in computer aided design and rapid prototyping which reduces the guesswork in body surface measurements. The three scanned poses included in CAESAR gives you access to the first viable method for capturing 3-D information about subjects in realistic postures allowing you to extract an almost infinite number and variety of measurements long after the subject has moved. Plus the extensive database that comes with CAESAR gives you the capability to create a sample tailored specifically to your target market.

Benefits of CAESAR

- Helps reduce guesswork about body surface measurements making it easier to use in computer aided design and rapid prototyping
- Allows extraction of almost infinite number and variety of measurements long after the subject has moved
- Gives you access to the first viable method for capturing information about of subjects in realistic postures
- Provides visualization of the entire subject so design issues can be readily understood
- Provides extensive database that permits you to create a sample tailored to your target market
- Provides 3-D scans that can be used to modify products in the design stage to more accurately fit the wide range of subjects. The use of traditional methods of characterizing populations (averages and percentiles) often results in erroneous and inaccurate designs that don't fit the target audience. The use of percentiles, for example, may be appropriate for measuring in one dimension, but due to the wide variations in humans, the 3-D scans provide a more accurate end result when considering combinations of variables

Unique features of CAESAR

- Most anthropometric surveys provide reports with summary statistics for the wrong target population, which means they are the wrong statistics. CAESAR database allows you to regroup and calculate or view any aspect of interest for your products
- *First survey to provide complete 3-D models!* The camera views from the 3-D scans have been accurately stitched together to provide complete 3-D models of each pose
- Database contains anthropometric information from approximately 2,400 North American male and female subjects, aged 18-65 and 2,000 European subjects
- Demographics of subjects (in comma-delimited text and Excel spreadsheet formats)
- 40 traditional (1-D) measurements that were done with a tape measure and caliper (in comma-delimited text and Excel spreadsheet formats)
- Extracted 1-D measurements that were done using landmarks from the scans-standing and relaxed seated poses (in comma-delimited text and Excel spreadsheet formats)
- 3-D scans of each subject in standing, relaxed seated, and coverage poses (3-D software is needed to view scans).
- 3-D landmarks of standing and relaxed seated poses (in comma-delimited text and Excel spreadsheet formats)
- Reports covering protocol of how the database was generated.
- Measurements are presented in English and metric units.
- Report including summary statistics for the adult population (18-65) of the United States of America

More about the CAESAR Research Project