

# Safety Helmet Project Development R&D service



Aurora Sports offers one-stop-service for new bicycle helmet development. Thanks to our engineers and expertises in our R&D team.

Our director has more than 28 years helmet developing experience. Engineers are familiar with the related helmet safety standard, eg EN1078, CPSC1203, and skilled with CAD drawing program. Our service scope includes but not limited to helmet idea evaluation, convert idea or scratch into the CAD drawing, Making prototype, In-house testing.

## ***Following is our R&D helmet project guideline::***

- Helmet Concept/Idea
- Clay Model
- CAD Drawing
- 3D Prototype
- MOLDS
- SAMPLE
- TESTING

## ***The purpose of 3D printing prototype:***

- Consumer Review / / Having a physical product in your customers' hands will allow your team to gather feedback and test functionality.
- Proof of Concept / / Having a physical product for each design iteration can provide valuable part functionality insights.
- Manufacturing Prep / / Use a prototype to test and edit the product design before investing in tooling and large-scale production.

## ***The detail pictures of safety helmet prototype:***







## ***The head circumference knowledge of bmx helmets uk :***

### **European Headform:**

An Oval shaped helmet is designed for a rider's head with a dimension which is considerably fit for Europeans.

### **Generic headform:**

A generic headform helmet is designed for a rider's head with a dimension which is slightly longer front-to-back than its side-to-side measurement.

### **Asian headform:**

A Round shaped helmet is designed for a rider's head with a dimension which is condierably fit for Asians.

# Helmet Shape 101



## European Headform

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## Generic headform

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## Asian headform

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## ***Our Test lab:***

In order to manufacture quality helmets, we learn not only from the design theory, but also make progress from testing result! That's why our factory equipped with professional testing lab to ensure every design is practical & amenable! Our testing standard is more strict than the related certificate requirements, that's why we can promise the model that we provide can definitely pass the corresponding test by third-party!



## Our In-house Testing Lab



### **Certification:**

Below is our certificate :we have ISO9001 ,letters patent ,CE documents ,and we have our own lab to make sure every our product can meet the testing requirements

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Aurora Sports is a helmet manufacturer, with more than 15 years experience in producing all types of helmets. In-house design and R&D teams with established experience, allows Aurora Sports to quickly answer to demanding requirements and create from scratch whole programs and collections with rigorous quality standards.

## CUSTOMIZE FOR BRAND



*Logo style: Dome, Metal, UV-Dart sticker, Water decal..*



## ***The helmet production procedure is as below:***

silk screen → PC blister tooling → PC blister manufacture → Trimming dug hole → EPS raw material by different density → EPS in-mold tooling → helmet in-mold workshop → in-mold machines → in-mold tooling → in-mold producing process → semi-finished in-mold helmet → IQC inspection → helmet grinding → inner padding production → plastic injection workshop → assembly line → inside labeling → packing → warehouse → installed counters.



## Production Procedure



Silk screen



PC blister tooling



PC blister manufacture



Trimming dug hole



Eps raw material  
by different density



EPS in-mold tooling



Helmet in-mold workshop



In-mold machines



In-mold tooling



In-mold producing  
process



semi-finished In-mold  
helmet



IQC inspection



Helmet grinding



Inner padding production



Plastic injection  
workshop



Assembly line



Inside labeling



Packing



Warehouse



Installed counters

### ***The delivery express:***

International express, air freight & sea transportation are all can be well arranged here! You can pick every possible transportation that you want & we will do our best to assist you! We have already built a long-term relationship with different shipping companies & shipping agent, all our efforts aim at providing you the best shipping experience! Choose us, it will be easy to keep the helmets safe all the time!

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