

Inelco Hunter's engineering team helps customers with defined project requirements, and those with unformed product ideas. It is here that our expertise turns concepts into brilliant products.

We perform a set of pre-design activities, critical when defining product specifications, documenting design challenges, and identifying potential risks. Please contact us with any queries or for more details, and we will be happy to help you.

### 1. Establishing Features and Functionality

This is a critical decision-making process where our engineers work with you to clarify your project fundamentals and key requirements, creating a rational set of product features and functionality.

This will include:

- Core product functionality and key selling parameters for the product and intended market
- Key performance parameters
- Competitive product evaluation
- Assessment of appropriate market differentiators
- Side functionalities: adding value without burdening the system with non-essentials
- The degree of scalability – future planning to meet market changes
- The number of product variants feasible under the metrics of cost, size, weight etc.
- Expectations for the human-machine interface: ergonomics; ease of use; end-user learning curve.

### 2. Establishing Technical Specifications

Once the features have been established, we translate these into a technical requirements specification for the design stage. We will assist you with this specification, taking into account:

- Power consumption
- Size
- Weight
- Mechanical construction
- Environmental tolerance
- Ingress protection
- Accuracy
- Safety and immunity requirements
- EMC requirements and testing standards

### 3. Comparison of Technologies and Platforms

We compare competing technologies and platforms from our leading suppliers to establish the optimal choice for the longevity of your design. Our assessment will look at power, speed, cost, licensing terms, safety certifications and approvals testing, manufacturing support, performance, and product lifetime requirements, as appropriate.

Inelco Hunter's experience in many different markets enables us to leverage our expertise across a number of industry verticals. Working with our world-class suppliers, we will evaluate emerging technologies, assessing their potential for your application, and creating a winning market differentiator for you and your customers.

#### 4. Identifying Technology Risks, Challenges, and Backup Alternatives

All new product developments have some risks attached. Part of our Feasibility Research service seeks to identify and quantify these and, if necessary, to find ways to mitigate them. Examples of risks to product development could be:

- Immaturity of core technologies
- Lack of third party or manufacturer support
- Component supply or pricing issues
- Design limitations due to technology restrictions

The risks and solutions unearthed will be documented so that you can take account of them when making your commercial plans and timescales.

#### 5. Analysing Non-Recurring Engineering Cost and Manufacturing Cost

Before a project is commercially sanctioned, you will want to know the development costs and the expected unit costs. To this end, budgetary costs are calculated based on preliminary discussions, and initial quotations provided for discussion and review.

#### 6. Implementation - Development Costs and Milestones

Once the feasibility study is complete, we offer a development proposal to establish full costs and milestones required. Our engineering team can provide:

- 2D / 3D design and drawings
- Costs and milestone estimates
- First prototypes and initial testing
- Golden samples
- Type approval and initial testing
- Pre-production / Pilot batch production
- Test certification and approvals available (EMC, IEC, BS, VDE etc.)
- Production start and production ramp-up planning
- Full project planning using MSP

We offer full project plan implementation, allowing customers to work intuitively and efficiently directly with our engineering team, ensuring clear and open communication throughout your product design project.

Please contact us with any queries or for more details, and we will be happy to help you.

E-mail: [sales@inelcohunter.co.uk](mailto:sales@inelcohunter.co.uk)

Web: [inelcohunter.co.uk/contact-us/](http://inelcohunter.co.uk/contact-us/)

Phone: 0118 916 6928