



ISC CASE STUDY

GOOGLE

OVERVIEW

- Google and ISC officially began a business relationship with an order of 70 strain reliefs and 500 boots in February 2017.
- ISC built the strain reliefs and boots in-house with over 88,000 different configurations of stock strain reliefs available. ISC is also vertically integrated to build custom tools for any unique strain relief needed.
- After 5 months, ISC took the discreet boots and strain reliefs and provided a value-added solution by building and overmolding the connector.
- By directly overmolding the connector, the part offered several benefits. The inner conductors are encapsulated which protects them from the outside elements. This design allows the part to be more functional as the strain relief is directly applied over the cable jacket, and the aesthetics of the parts are improved.
- Since 2017 ISC has continued to expand the partnership with Google and has made several custom mold tools and assemblies to support their developing business.
- One of the latest plans was for the Loon project. This was an initiative to create a network of high-altitude balloons internet connection like 3G for anyone below in a 40k diameter. The balloons are usually in packs of 5-10 and are particularly useful in isolated areas where military personnel may be positioned.
- The balloons are roughly 12 miles up almost twice the cruising altitude of a commercial airplane.
- Collectively these balloons have flown in the sky for over 1 million hours.
- Since 2017 we shipped over 25,000 parts to Google.

CHALLENGE:

Initially, Google needed a supply of strain reliefs and boots. The opportunity for ISC arose when the products could be improved and customized.

SOLUTION:

A turnkey assembly was created, which allowed ISC to customize and produce more strain reliefs and boots while adding value through direct overmolding.

OUTCOME:

Adding and developing new projects, such as the loon project, to further support their needs.

FUN FACTS

Today Google is valued at 999.83 Billion USD making it the 3rd highest valued company in the world.

Google began in 1996 and launched in 1998.

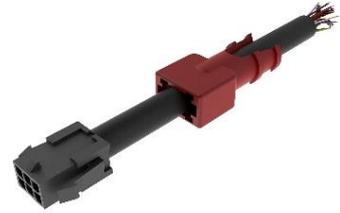
Google was added to the Oxford and Webster dictionary in 2006 for being such a popular verb.



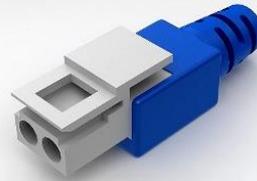
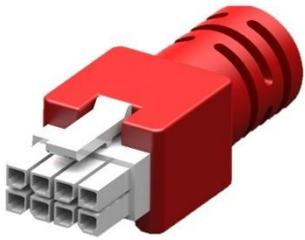
Overmolded solution designed for longevity and to provide proper strain



Overmolded solution designed for two pin connections



Insides of a Circular Molded Strain Relief



Slip-on boot for Molex assemblies

OPPORTUNITY/CHALLENGE:

Google needed 70 strain reliefs and 500 boots to support their cabling and connectors. With an array of over 88,000 different products, ISC was able to provide best choices for the job. Once our relationship with Google formed, opportunities arose to supply them with customized strain relief and connector products.

SOLUTION:

To solve Google's growing need of custom strain reliefs, boots, and other products, ISC was able to take these components and provide a value-added solution by building and overmolding the connector. These innovative solutions have saved Google time and money



OUTCOME

Since 2017 ISC has continued to expand the Google partnership, shipping upwards of 25,000 parts, and having made several custom mold tools and assemblies to support their developing business.

One of the latest projects ISC completed for Google was the Loon project. The initiative allowed ISC to create a network of high-altitude balloons that could provide an internet connection (such as 3G) to anyone below in a 40km diameter. These balloons are particularly useful in isolated areas where military personnel may be positioned.