

Phillips Plastics Corporation®

INTERFACE

Built MIM Tough -

The FN Herstal FNP-45



In 2005, all United States military branches came together to create ideal specifications for a .45 ACP caliber pistol. The program sparked early collaboration between FN Manufacturing and Phillips Plastics to create the FNP-45. A first-rate, U.S.-manufactured pistol, the FNP-45 can withstand rigorous environmental testing including a 25,000-round endurance test without any part breakage.

FN Manufacturing

A manufacturing arm of Belgian-owned FN Herstal, FN Manufacturing is a world-class, small-arms manufacturer based in Columbia, South Carolina. FN Herstal specializes in the production of precision firearms and accessories for defense, law enforcement, home defense, and shooting sports. In addition, it supplies 70% of the small arms – including the M240, M249 SAW, and M16 – used by U.S. military forces. FNH USA in McLean, Va. is the sales and marketing arm of FN Herstal in the U.S. (www.FNHUSA.com)

A Clean Slate

At the program onset, FN Manufacturing didn't offer a .45 caliber pistol chambered for caliber .45 ACP (Automatic Colt Pistol). "We decided to compete and design a new handgun. Our engineers took on the project as well as a very aggressive timeline. But, we had an advantage: While competitors had guns off the shelf they could attempt to tweak to meet specifications, we were in a position to build a new design from scratch. Using a clean sheet of paper, we designed a handgun that met all of the objectives of the solicitation," says Olivier Coulombier, Engineering Product Manager at FN Manufacturing.

FNP-45 Pistol Features Strong Parts

The FNP-45 is a high-capacity, polymer frame, double-action pistol that uses an ambidextrous decocker, slide stop, and magazine release. Phillips Plastics metal injection molded nine FNP-45 parts in either 420 stainless steel, FNO8 carbon steel, or FNO2 carbon steel. In addition, Phillips Plastics performed heat treatment, bead blasting, coating, and black oxide treatment services for FN Manufacturing.

Takedown Lever



Magazine Release



Unlock Block



Extractor



Hammer

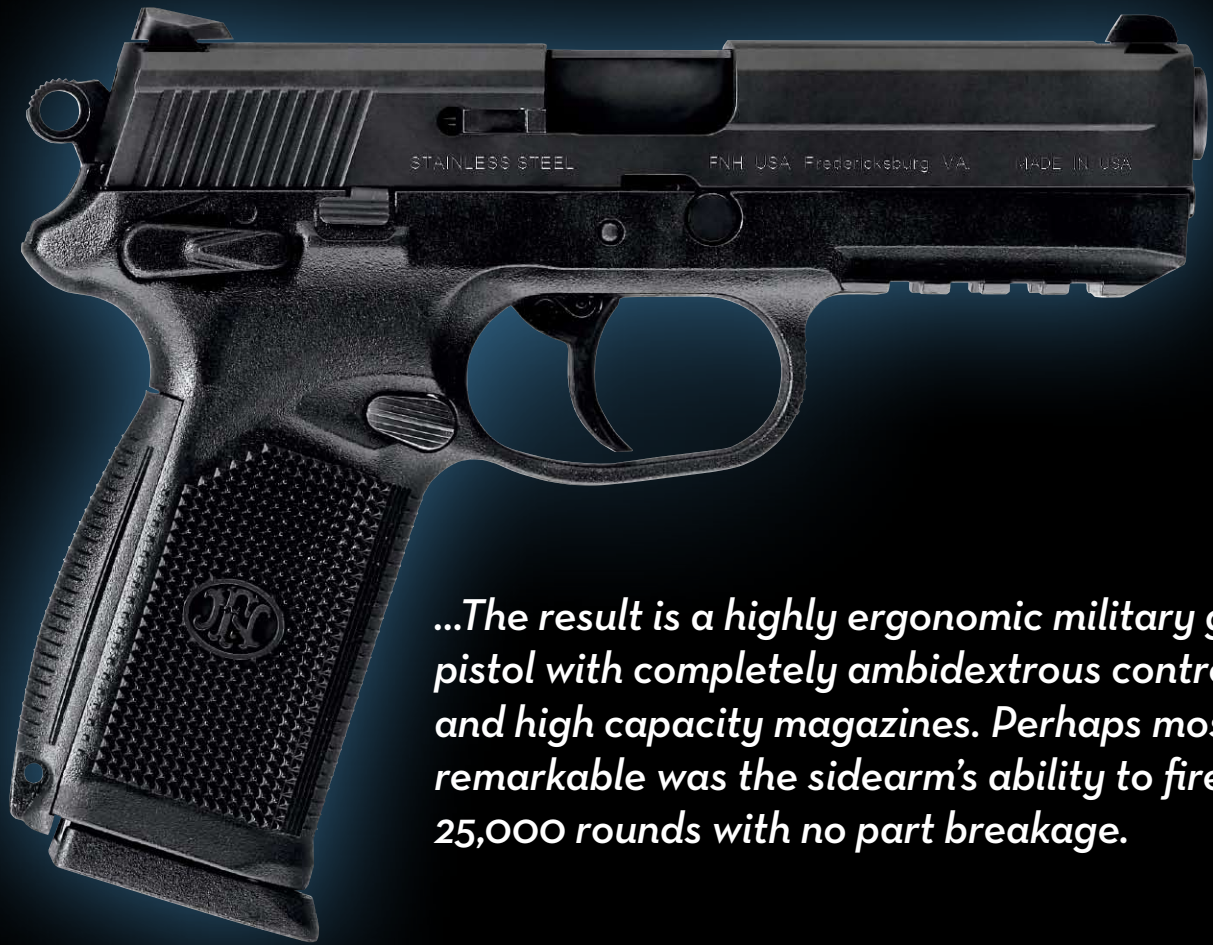


Front Sight (Day)



Front Sight (Night)





...The result is a highly ergonomic military grade pistol with completely ambidextrous controls and high capacity magazines. Perhaps most remarkable was the sidearm's ability to fire 25,000 rounds with no part breakage.

FN Manufacturing and Phillips Plastics

FN Manufacturing had to complete the program within a short time span. FN Manufacturing chose to partner with Phillips Plastics, a company that understands what it takes to metal injection mold parts for firearms.

Coulombier adds, "We consistently have good success with Phillips Plastics. The company has been able to meet our exacting demands for precision manufacturing and quality."

Early Collaboration Key to Program Success

FN Manufacturing partnered with Phillips Plastics to optimize part designs for manufacturability. "Together we marked up gate locations, parting lines, and ejectors. We also identified and alleviated areas of tolerance concern," says Dave Vuylsteke, Project Engineer, Phillips Plastics.

According to Tony Pelke, Engineering Manager, Phillips Plastics, early collaboration was key to the success of the program. "Working to identify issues of concern before building metal injection molding (MIM) tools helps reduce program costs and time-consuming issues from occurring down the line."

Phillips Plastics and FN Manufacturing also communicated regularly, and openly, throughout the program. "During weekly conference calls, we discussed status-report items one by one, identified opportunities, and resolved issues," says Pelke.

"During the development of the FNP-45, Phillips Plastics did a great job communicating with our company. Everyone we dealt with was very responsive and professional, and I believe

our good relationship contributed to the outstanding success of the FNP-45 program. We take a great deal of pride in our new handgun which is designed and assembled in Columbia, South Carolina with parts manufactured exclusively in the United States," says Coulombier.

He adds, "We continue to receive high-quality parts from Phillips Plastics; and we do plan to work with Phillips on future programs."

Phillips
PHILLIPS PLASTICS CORPORATION®

phillipsplastics.com info@phillipsplastics.com 877.508.0261

#164

