POL GRUP



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Our in-house team of ballistic experts, construction specialists, architects and engineers can help you design and build, home indoor shooting range that delivers proven performance from floor to ceiling. If you plan on incorporating an indoor range to a building that you plan to build or a new building, it's important to consider a few things while planning the build in order to have a usable spot for a range. Your first step should be to connect your architect with your shooting range provider as soon as possible. This is key to specify requirements like ceiling height, ceiling type, and wall structure. By considering these requirements from the start, you will be able to make the process go a lot smoother.

The shooting activity of a shooting range can range from basic marksmanship shooting to sophisticated tactical operations training. Whether you are planning a range with a static firing line or a range that provides a dynamic movement and shooting training environment, our equipment and systems support both types of shooting ranges.

Our comprehensive product range includes everything needed to equip a live fire weapons facility, including a variety of bullet trap models, ballistic blocker and acoustic systems, shot dividers and target collection systems.

POL GRUP can help you create the right range for your needs. With our products, which are manufactured with proprietary, ballistic rubber and always designed with your shooting and tactical training needs in mind, we can help you design and build a commercial shooting range that appeals to both casual shooters and customers looking for more advanced tactical training.





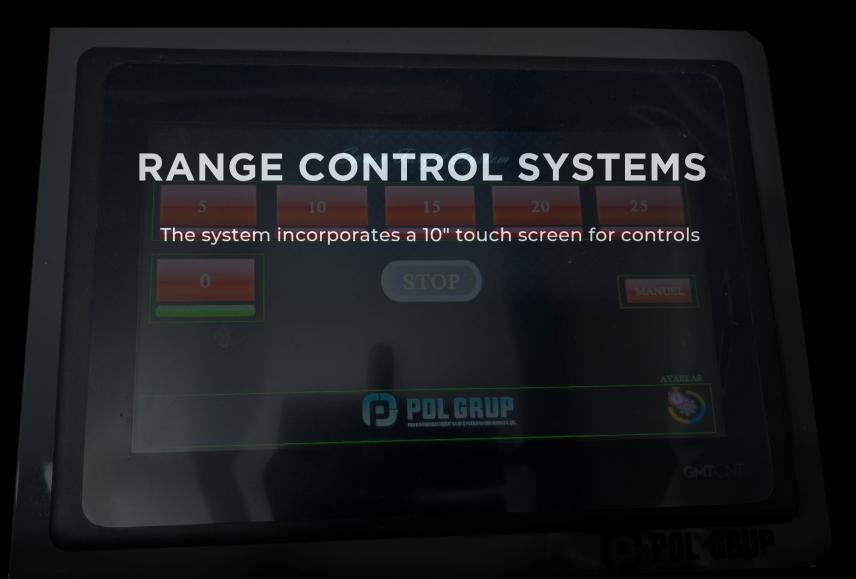


GUN SHOOTING RANGE DESING AND APPLICATION

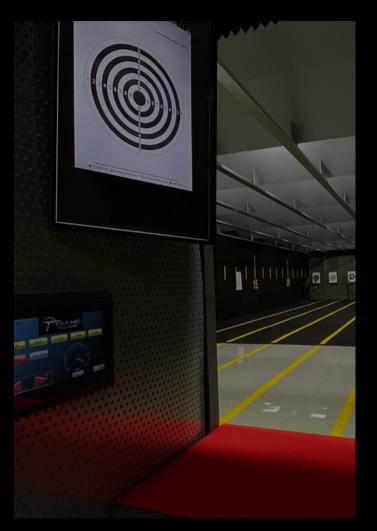
As Pol Group, we design and implement turnkey shooting ranges. After the polygon is delivered to us, we first make a business plan. Our application will be as follows:

- Covering all walls adjacent to the shooting range with sound insulation material
- Profile frame installation for polygon steel
- Pulling electrical and ventilation lines.
- Sheet metal coating on the profile frame. *
- Painting all metal surfaces.
- Creating bullet traps and fire line lanes.
- Rubber coating on wall boards.
- Installation of ceiling bullet strips.
- Target system installation starts with a call from the ceiling.
 -Target system tools and panel installation starts with a call from the ceiling.
- The entire floor is covered with 4 cm thick rubber.- Coating the 15-meter area from the viewing area to the fire line with polyurethane putty and paint.
- Placement of smoke detection detectors. Installation of steel doors and fire doors.
- Commissioning of the ventilation system.
- Installaton of bulletproof glass n the survellance room.
- Delvery of the shooting range ready for use as a result of all controls.





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screen for control

Screen Size: 10 inches. The shooter can fix the target at distances of 5-10-15-20-25-30-35-40-45-50 meters using the touch buttons on the screen. Additionally, the target can be stopped at desired distances thanks to the manual button.

Electronik Target System is a rail and battery powered system designed to operate from the ceiling. It uses -100 mm I iron in the ceiling-based target system rails. The callable target car is constructed of Armox 500 quality sheet metal, with wheels that are PU coated and bearings made from friction and wear-resistant materials, also incorporating sound-proofing. Targets can stop at 0-5-10-15-20-25-30-35-40-45-50 meters. Throughout the 50-meter range, targets move quickly and silently, incorporating automatic slowing for take-off and stopping. Users can see the target paper from their location in the shooter's compartment, with distance controls managed by electronic equipment. A wireless system facilitates information exchange between the electromechanical target system and the control unit. The system incorporates a 10" touch screen for controls, and a speed dome camera is integrated. Targets within the 0-50 meter range are visible on a 32" LCD screen, allowing clear viewing without the shooter needing to call the target. The target system can be manufactured in special dimensions according to the length of the shooting range.

- Profile Features Line Length: 50 mt.
- Distance Control: 5-10-15-20-25-30-35-40-45-50 Mt.
- Includes Current Fuse and Software in Automatic Charge Control Panel Batteries and Electronics are for Target Car
- Wireless Target Trolley Rail System ;Profile specifications:100*55*5.7*4.1 Wireless Target Trolley Rail System
- Length: 67 cm Width: 31 cm Height: 21 cm Weight: 23 Kg



SHOOTING RANGE TARGET SYSTEMS







wireless system

Advanced technology

The system developed by Pol Group engineers as a result of R&D studies.

System features

All necessary sub-parts for ceiling mounting of the target system and moving the target (rails, mounting profiles, profile section where the target will be hung, forward-backward movement motor, etc.) are included in the system. The target unit is powered by a rechargeable battery. When the battery level drops, the target unit automatically goes to the starting point and recharges itself. Additionally, when the target system is not in use, the system moves itself to the starting position and recharges itself. In the rope system, the rope or rope is hidden inside the rail and is not visible from the outside. The target car wheels in the target system are made of friction and wear resistant material and have bearings.

The outside of the wheels is covered with rubber material and is made of sound-proofing/reducing material. The target can be sent to the specified distance via a key and recalled.

3 different speeds are defined for a distance of 50 meters. If this is not enough, it is possible to ensure that the target system goes at the desired speeds via the screen.

Speed dome camera

A speed camera will be integrated into the system. • The 32' LCD screen allows the shooter to clearly see the target area between 0-50 meters. The target system can be produced in special sizes according to the length of the shooting range.









Ghost Target System

Advanced technology

The system developed by Pol Group engineers as a result of R&D studies.

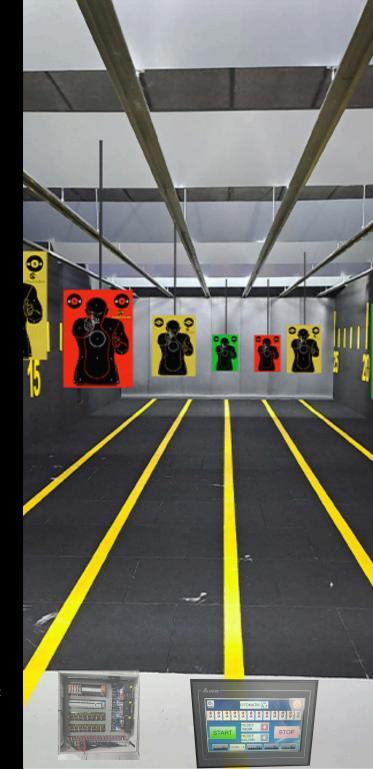
System features

Ghost Target target system appears and becomes invisible, descends and becomes visible. The Ghost Target target system can be operated computer-controlled by taking energy from the supply and communication card. Optionally, lighting systems, motion detection sensors, etc. can be connected to the target device. External units can be connected. It can be controlled optionally with a remote control. If desired, the remote control must be supplied with an external battery pack that can be used in the device. Operating temperature is between -20 °C and +50 °C. For fixed models, the target mass is more than 8 kg. The gun firing range can be mounted in 8-12-16-20 pieces depending on the number of lanes. The entire system is controlled by a special software.

- With the ghost target system, multiple people can shoot at targets at the same time.
- Different target papers can be placed for each person to shoot.
- Each shooter waits for the target paper to appear and tries to hit it because the target becomes invisible after a short time.
- Targets move in different combinations each time, making it impossible for the shooter to memorize them. The system can be stopped and started at any time from where it left off.
- For example, in a 12-arm system, you can stop it by selecting any of the targets you want to work with. Ghost Target system can be operated at 3 different speed levels. Ghost Target System is hidden between the ceiling and bullet bounce in shooting ranges.
- In the ghost target system, one fast camera is placed for each target. As a result of the shot, all targets can be called and hit areas can be detected on a single screen.

The reclining and rotating target system is placed in computer-controlled positions. Targets can also be invisible when lying down. The reclining and rotating target system is powered by energy from the communication panel and computer. It is made of rust and corrosion resistant materials.

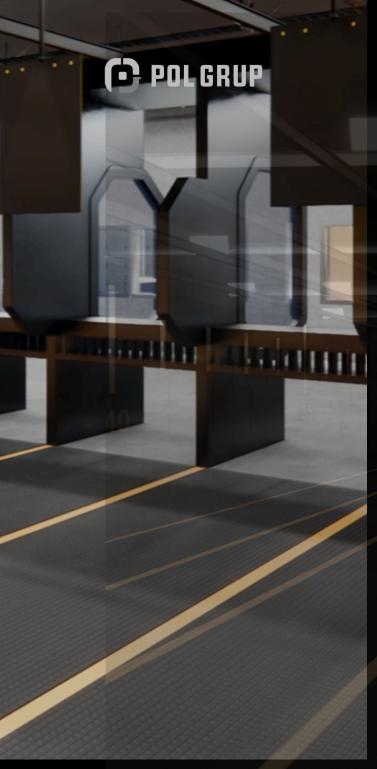
Optionally, lighting systems, motion detection sensors, etc. can be added to the target device. can be added. Optionally, the target system can be controlled by remote control.





Shooter Compartment

Bulletproof glass partition



SHOOTER COMPARTMENT

Bulletproof glass partition

The lower part of the gunner's compartment is 1 meter high and 10 cm wide. There is St 52 steel sheet in the middle and 10 mm MDF is coated on both sides of the steel. There is stainless steel sheet at the top of this. Thereupon, a hexagonal or different shaped frame is created from 3 mm st-52 sheet metal and bulletproof glass is mounted in the middle. It is a completely modular system. There is a section for a 10-inch screen that controls the target system.

Manufacturing can be done in any color you want in RAL colors. Visuality is enriched with LED lights and special coating material for stylish design.

Special manufacturing is made from bulletproof glass with the thickness and features specified in the table below, depending on the caliber to be used.

nıf (EN 1063)	Silah türü	Kalibre	Kalınlık (mm)	Ağırlık (kg/m²)	Yapılabilirlik	
					Maks. (mm)	Min.
BR1	Tüfek	0.22 LR, 2.6 g, L/RN	17	40,00 kg/m²	2400 X 5000	300 >
BR ₃ -NS	Tabanca	o.357 Magnum	23	61,50 kg/m²	2900 X 2000	300)
BR4-NS	Tabanca	o.44 Rem.Magnum	30	79,00 kg/m²		
BR5-NS	Tüfek	5.56 x 45 SS109	34	89,00 kg/m²		
BR6-NS	Tüfek	7.62 x 51 FJ,PB,SC	45	116,50 kg/m²		
BR7-NS	Tüfek	7.62 x 51 FJ,PB,HC1	79	201,50 kg/m²		







Why Should You Work with Pol Group?

Our team has a long history of delivering facilities with proven designs, quality production and dedicated installation teams. This guarantees the success of every project worldwide. We have set the standard for range safety, unmatched capabilities and unmatched ballistic performance in our solutions. Custom Solutions We know that every project is unique and requires careful planning and evaluation. Thanks to our ten years of experience, we understand that every customer has unique requirements and that joint effort is required to solve them. Our team has a wide network of resources and industry partners to solve any challenge to achieve a successful outcome.

When you work with POL GROUP, you are working with an extension of your team. Customer relations are very valuable to us and an integral part of our business.

Comprehensive Product Selection POL GROUP has all the products you need to operate your shooting range efficiently, cleanly, safely and effectively once your facility is up and running. We have a full range of products and accessories to make your shooting range a success.

Our business and company culture are guided and informed by our beliefs and commitments to our six core values: Passion, Integrity, Intellectual Curiosity, Proactivity, Faith and Respect. Our core values are important because they form the basis of who we are and how we interact with our colleagues, customers and partners. They ultimately form the culture of our company, and every day we see these values reflected in our company and in what we do.

Nothing can replace experience. We have assembled a team of experienced experts to create the most innovative and versatile firearms training environments for a wide range of customers. Put our experience to work and solve your problems.



GUN SHOOTING RANGE BULLET TRAP

Bullet ricochets and ricochets, which are frequently encountered during shooting, can be controlled thanks to properly designed and manufactured bullet traps. Ceiling Bullet traps should be mounted at a 30° angle to the firing line (this angle is adjusted to allow the bullets to be directed into the bullet trap). The bullet trap should be used with the most powerful cartridge allowed for use at range (usually, 357 (example: magnum) and 9 mm ammunition should be designed to withstand (see Note 1) and the thickness of the bullet trap must be selected to withstand the cartridge planned to be used. The ventilation system removes all dirt, dust, etc. from the bullet trap area. It removes substances. It must be designed for shooting. a) It must have shutter type bullet trap features. b) Shutter type: If there is enough space for installation, the "shutter" type bullet trap can be used.



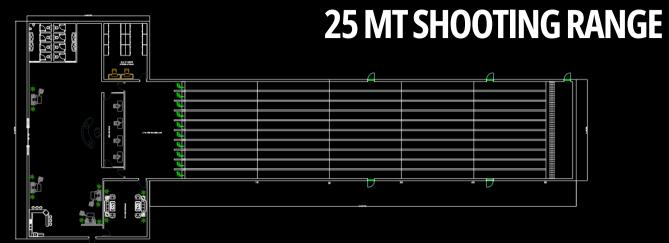
GUN SHOOTING RANGE BULLET TRAP

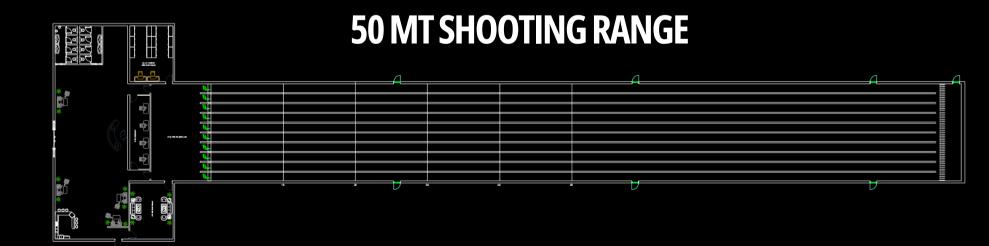
The bullet trap (catcher) must be firmly fixed to the wall. The bullet trap must be manufactured in such a way that the target positions do not coincide with the edges and corners of the steel sheet. Bullet trap shutters should be placed at a 45 degree angle to prevent the incoming bullet from bouncing off at any angle; Bullet cores entering the bullet trap should be collected in the lower compartment. The bullet trap consists of 4 parts; - Back wall - Standing walls - Shutters - Chamber that collects bullet cores. The chamber that collects the bullet cores must be made of \$3555J2 quality steel or equivalent with a thickness of at least 4 mm (four) according to TS EN 10025-2. The inner surface of the shutters must be covered with rubber with a thickness of at least 2 cm to prevent possible ringing sounds in the bullet traps. All sheets used in the lead holder must be painted with anti-rust paint.

BULLET TRAP AND PVC CURTAIN

Bullet traps are appled according to the usage pattern of the shooting range. Bullet traps will reset the energy of the bullets fred at the targets towards the bullet trap after the bullet hts the trap; They are designed to prevent the core from jumping out of the bullet trap. Bullet traps are manufactured in such a way that they completely cover the front of the wall behind the targets, facing inside the shooting range. The thickness and strength of the steel to be used in the manufacture of bullet traps are determined according to the types of weapons and ammunton to be used in the shooting range. Bullet chambers are placed under the bullet trap, where the ncoming bullet cores are collected. The chambers are manufactured in such a way that they can be easily pulled out and empted. PVC curtans are used to prevent the shrapnel fragments, which are formed as a result of the bullets httng the bullet trap, from coming out of the bullet trap. PVC curtans; The hole formed after the bullet cores perce the PVC curtans has the feature to shrink to 1mm in dameter. Thus, the number of shots to be made per square meter can be 45,000-60,000 shots, and the PVC curtans can be used for a long time without losing their feature.











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