## FIREARMS CONSTRUCTION SYSTEM

# GUN PRODUCTION LINE

## VERSION .5 Beta


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# FIREARMS DESIGN

**"I believe everyody in the world should have guns. Citizens should have bazookas and rocket launchers too. I believe that all citizens should have their weapons of choice. However, I also believe that only I should have the ammunition. Because frankly, I wouldn't trust the rest of the goobers with anything more dangerous than string."**
**-Scott Adams**

These rules are intended to allow players and gamemasters to design and customize weapons based on the Shadowrun, Third Edition standards. The design sequence is intended to produce weapons that are as realistic as possible and yet still be directly compatible with previously published weapons.

Unless otherwise noted, these rules are intended to produce modern firearms. That is, weapons that use a fixed cartridge consisting of a bullet (or bullets), propellant, and primer.

## THE DESIGN PROCESS

The design process begins with selecting a frame for the weapon, which gives the range of compatible round caliber's and its starting Design Point cost. The designer then chooses what sort of firing mechanism the weapon will use and the actual caliber of round that it will fire. The designer then picks a barrel length and additional options.

The design sequence is as follows:

1. Choose a Frame
2. Choose a Firing Mechanism
3. Select Barrel Length
4. Choose a Caliber
5. Add Additional Options
6. Calculate Derived Statistics

### 1. SELECT A FRAME

The weapons frame is arguably the most important aspect of the weapons design. The weapons frame not only determines the weapons base cost, but also available mounting locations for additional options and what calibers the weapon supports. It also determines what skill is used when firing the weapon.

**Mechanisms:** This will list the available types of firing mechanisms for that frame.

**Mounts:** The available locations to mount additional options on the weapon.

**Calibers:** The round calibers that the frame can be designed to fire

**Barrel:** The minimum and maximum length of the barrel that can be used with the frame.

**Size:** The frames base number of Size Points (SP).

**Weight:** The frames base number of Weight Points (WP).

**DP:** The number of Design Points (DP) that the frame costs.

### 2. CHOOSE A FIRING MECHANISM

The firing mechanism will determine what firing modes the weapon can utilize.

**Mode:** The firing mode that the weapon possesses with this option.

**DM:** The modifier to the weapons final Power or Damage Level (if any).

**Size:** The mechanisms base number of Size Points (SP).

**Weight:** The mechanisms base number of Weight Points (WP).

**DP:** The number of Design Points (DP) that the mechanism costs.

### 3. SELECT BARREL LENGTH

From the range of barrel lengths given for the frame type the designer should choose a barrel length. If converting a real-word weapon to this system then only use the length for the barrel itself, without factoring in the receiver assembly.

The weapons barrel length will impact the weapons final size as well as the adjusted damage for the weapons projectiles (see below).

### 4. CHOOSE A CALIBER

This is the actual round that the weapon will be firing. Consult the Caliber Compatibility Chart to check that the chosen frame can fire the round.

**Base Damage:** The base Power and Damage Level for the round unadjusted for barrel length or frame.

**Barrel Length:** These list the breakpoints in barrel length, and the adjusted damage of the round fired from it. If the weapons barrel length does not match any of the listed lengths then round to the nearest listed length.

**Barrel Points:** The Barrel Points are added to the calibers base SP, WP, and DP.

**Range:** The weapons range band.

**Size:** The mechanisms base number of Size Points (SP).

**Weight:** The mechanisms base number of Weight Points (WP).

**DP:** The number of Design Points (DP) that the mechanism costs.

## 5. ADD ADDITIONAL OPTIONS

These are additional modifications and additions that can be added to the weapon at design time. Unless otherwise noted these options may not be added at a later time.

Most options have their prices listed either as positive or negative percentages. All of the weapon options modifiers are added together before final calculations.

**For example, a weapon that has two options with +5% DP and a single -5% option will total +5% when calculating the weapons final DP total.**

**Price Factor:** The options Price Factor (if any).

**Size:** The multiplier to the base number of Size Points (SP).

**Weight:** The multiplier to the base number of Weight Points (WP).

**DP:** The multiplier to the base number of Design Points (DP).

## 6. CALCULATE DERIVED STATISTICS

This is the final stage of weapon design. There are X derived statistics, and they are listed below:

**Weight:** This equals the total number of Weight points multiplied by the total Weight multiplier for the various options. You then multiply that total by the weapons original number of Weight Points. This total is then divided by 200 to give the weapons final weight in kilograms. Round to the nearest $10^{th}$ of a kilogram.

**Concealability:** This is determined by multiplying the total number of Size Points by any Size Multipliers for option. The number is then divided by ten, rounded down. This result is then subtracted from 10 to give the weapons base Concealability.

**Cost:** The weapons cost in nuyen is equal to its total number of Design Points multiplied by 10. The final number then multiplied by its Price Factor to get the final cost. Round to the nearest 100 nuyen.

# FRAMES

**Hold-Out Pistol**
**Mechanisms:** Single-Shot, Semi-Automatic
**Mounts:** None
**Calibers:** All calibers listed in the Pistol category
**Barrel:** 2cm minimum/5cm maximum
**Ammunition Feed:** Magazine
**Size:** 3
**Weight:** 3
**DP:** 3

**Light Pistol**
**Mechanisms:** Single-Shot, Semi-Automatic
**Mounts:** Barrel, Top, Grip, Under
**Calibers:** All calibers listed in the Pistol category
**Barrel:** 6cm minimum/15cm maximum
**Ammunition Feed:** Clip
**Size:** 5
**Weight:** 5
**DP:** 5

**Heavy Pistol**
**Mechanisms:** Single-Shot, Semi-Automatic
**Mounts:** Barrel, Top, Grip, Under
**Calibers:** All calibers listed in the Pistol category
**Barrel:** 6cm minimum/15cm maximum
**Ammunition Feed:** Clip
**Size:** 5
**Weight:** 5
**DP:** 5

**Machine Pistol**
**Mechanisms:** Semi-Automatic, Burst-only, Full-Automatic, Under
**Mounts:** Barrel, Top, Grip
**Calibers:** All calibers listed in the Pistol category
**Barrel:** 6cm minimum/15cm maximum
**Ammunition Feed:** Clip
**Size:** 5
**Weight:** 5
**DP:** 5

**Carbine**
**Mechanisms:** Semi-Automatic, Burst-only, Full-Automatic
**Mounts:** Barrel, Top, Grip, Stock, Under
**Calibers:** All calibers in the Pistol category
**Barrel:** 15cm minimum/50cm maximum
**Ammunition Feed:** Clip
**Size:** 8
**Weight:** 8
**DP:** 8

**Sport Rifle**
**Mechanisms:** Single-Shot, Semi-Automatic
**Mounts:** Barrel, Top, Grip, Stock, Under
**Calibers:** All calibers
**Barrel:** 15cm minimum/50cm maximum
**Ammunition Feed:** Magazine
**Size:** 8
**Weight:** 8
**DP:** 8

**Sniper Rifle**
**Mechanisms:** Single-Shot, Semi-Automatic
**Mounts:** Barrel, Top, Grip, Stock, Under
**Calibers:** All calibers
**Barrel:** 40cm minimum/90cm maximum
**Ammunition Feed:** Magazine
**Size:** 10
**Weight:** 10
**DP:** 10

**Assault Rifle**
**Mechanisms:** Semi-Automatic, Burst-only, Full-Automatic, Auto-Only
**Mounts:** Barrel, Top, Grip, Stock, Under
**Calibers:** All calibers
**Barrel:** 25cm minimum/60cm maximum
**Ammunition Feed:** Clip
**Size:** 10
**Weight:** 10
**DP:** 10

## FIRING MECHANISMS

**Single-Shot**
- **Mode:** SS
- **DM:**
  - **Sport Rifle:** +1 Damage Level
  - **Sniper:** +2 Power/+1 Damage Level
- **Size:** 5
- **Weight:** 5
- **DP:** 5

**Semi-Automatic**
- **Mode:** SA
- **DM:**
  - **Sport Rifle:** +1 Damage Level
  - **Sniper:** +2 Power/+1 Damage Level
- **Size:** 4
- **Weight:** 4
- **DP:** 4

**Burst**
- **Mode:** SA/BF
- **DM:** None
- **Size:** 5
- **Weight:** 5
- **DP:** 5

**Burst Only**
- **Mode:** BF
- **DM:** None
- **Size:** 3
- **Weight:** 3
- **DP:** 3

**Full Automatic**
- **Mode:** SA/BF/FA
- **DM:** None
- **Size:** 10
- **Weight:** 10
- **DP:** 10

**Automatic Only**
- **Mode:** FA
- **DM:** None
- **Size:** 7
- **Weight:** 7
- **DP:** 7

## CALIBERS

**.22**

| **Base Damage:** 5L | | | **DP**: 6 | | | **Size:** 5 | | | **Weight:** 5 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 2 | 4 | 5 | | 8 | 10 | 15 | 20 | 25 | 35 | |
| **Damage** | 3L | 4L | 4L | | 5L | 6L | 6L | 7L | 8L | 8L | |
| **Range** | HO | HO | LP | | LP | LP | MP | HP | HP | SH | |
| **Barrel Points** | 4 | 8 | 10 | | 16 | 20 | 30 | 40 | 60 | 90 | |

**.38**

| **Base Damage:** 6L | | | **DP:** 8 | | | | **Size:** 6 | | | **Weight:** 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 2 | 4 | 5 | | 8 | 10 | 15 | 20 | 25 | 35 | |
| **Damage** | 4L | 4L | 5L | | 6L | 6L | 7L | 8L | 9L | 9L | |
| **Range** | HO | LP | LP | | LP | MP | MP | HP | SH | SMG | |
| **Barrel Points** | 4 | 8 | 10 | | 16 | 20 | 30 | 40 | 60 | 90 | |

**9mm**

| **Base Damage:** 6M | | | **DP:** 10 | | | | **Size:** 8 | | | **Weight:** 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 3 | 4 | 5 | 7 | 9 | 12 | 15 | 20 | 25 | 35 | |
| **Damage** | 2M | 2M | 4M | 5M | 5M | 6M | 7M | 8M | 7M | 6M | |
| **Range** | HO | LP | LP | LP | MP | MP | HP | HP | SH | SMG | |
| **Barrel Points** | 6 | 8 | 10 | 14 | 18 | 24 | 30 | 40 | 60 | 90 | |

**.357**

| **Base Damage:** 8M | | | **DP:** 12 | | | | **Size: 9** | | | **Weight:** 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 3 | 4 | 5 | 7 | 9 | 12 | 15 | 20 | 25 | 35 | |
| **Damage** | 3M | 4M | 5M | 6M | 8M | 8M | 8M | 9M | 8M | 8M | |
| **Range** | HO | LP | LP | MP | MP | HP | HP | HP | SH | SMG | |
| **Barrel Points** | 6 | 8 | 10 | 14 | 18 | 24 | 30 | 40 | 60 | 90 | |

**.40**

| **Base Damage:** 9M | | | **DP:** 14 | | | | **Size:** 10 | | | **Weight:** 10 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 4 | 5 | 6 | 7 | 9 | 12 | 15 | 20 | 25 | 35 | |
| **Damage** | 4M | 5M | 6M | 7M | 8M | 9M | 9M | 9M | 9M | 9M | |
| **Range** | HO | LP | LP | MP | MP | HP | HP | SH | SH | SMG | |
| **Barrel Points** | 8 | 10 | 12 | 14 | 18 | 24 | 30 | 40 | 60 | 90 | |

**10mm**

| **Base Damage:** 9M | | | **DP:** 16 | | | | **Size:** 11 | | | **Weight:** 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 4 | 5 | 6 | 7 | 9 | 10 | 15 | 20 | 25 | 35 | |
| **Damage** | 4M | 5M | 6M | 7M | 8M | 9M | 9M | 10M | 9M | 9M | |
| **Range** | HO | LP | MP | MP | HP | HP | HP | SH | SMG | AR | |
| **Barrel Points** | 8 | 10 | 12 | 14 | 18 | 20 | 30 | 40 | 60 | 90 | |

**.44**

| **Base Damage:** 9M | | | **DP:** 18 | | | | **Size:** 12.5 | | | **Weight:** 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 4 | 5 | 6.5 | 7.5 | 9 | 10 | 15 | 20 | 25 | 35 | |
| **Damage** | 5M | 6M | 6M | 7M | 8M | 9M | 9M | 10M | 9M | 9M | |
| **Range** | HO | LP | MP | HP | HP | HP | SH | SMG | AR | SR | |
| **Barrel Points** | 8 | 10 | 13 | 15 | 18 | 20 | 30 | 40 | 60 | 90 | |

**.45**

| **Base Damage: 9M** | | | **DP:** 20 | | | | **Size: 14** | | | **Weight:** 14 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 35 | |
| **Damage** | 6M | 6M | 7M | 8M | 8M | 9M | 9M | 10M | 10M | 9M | |
| **Range** | HO | LP | MP | MP | HP | SH | SMG | SMG | AR | SR | |
| **Barrel Points** | 10 | 12 | 14 | 16 | 18 | 20 | 30 | 40 | 60 | 90 | |

**.50 Action Express**

| **Base Damage:** 10M | | | **DP:** 22 | | | | **Size:** 15 | | | **Weight:** 16 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 35 | 45 |
| **Damage** | 6M | 6M | 7M | 8M | 9M | 10M | 10M | 11M | 11M | 11M | 12G |
| **Range** | LP | MP | MP | HP | HP | SH | SMG | SMG | AR | SR | SN |
| **Barrel Points** | 10 | 12 | 14 | 16 | 18 | 20 | 30 | 40 | 60 | 90 | 140 |

**.30-06**

| **Base Damage:** 6M | | | **DP:** 4.5 | | | | **Size:** 5.5 | | | **Weight:** 4.5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | |
| **Damage** | 4M | 5M | 5M | 6M | 6M | 7M | 7M | 8M | 8M | 10M | |
| **Range** | SH | SH | SMG | SMG | AR | AR | SR | SR | SN | SN | |
| **Barrel Points** | 30 | 37 | 45 | 50 | 60 | 70 | 90 | 100 | 120 | 140 | |

**.308**

| **Base Damage:** 7M | | | **DP:** 5 | | | | **Size:** 5 | | | **Weight:** 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | |
| **Damage** | 5M | 6M | 6M | 7M | 7M | 8M | 8M | 9M | 9M | 11M | |
| **Range** | SH | SH | SMG | SMG | AR | AR | SR | SR | SN | SN | |
| **Barrel Points** | 30 | 37 | 45 | 50 | 60 | 70 | 90 | 100 | 120 | 140 | |

**5.56mm**

| **Base Damage:** 8M | | | **DP:** 5.5 | | | | **Size:** 5.5 | | | **Weight:** 7 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | |
| **Damage** | 6M | 7M | 7M | 8M | 8M | 9M | 9M | 10M | 10M | 12M | |
| **Range** | SH | SH | SMG | SMG | AR | AR | SR | SR | SN | SN | |
| **Barrel Points** | 30 | 37 | 45 | 50 | 60 | 70 | 90 | 100 | 120 | 140 | |

**7.62mm**

| **Base Damage:** 9M | | | **DP:** 6 | | | | **Size:** 6 | | | **Weight:** 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barrel Length (cm)** | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | |
| **Damage** | 6M | 7M | 7M | 8M | 8M | 9M | 9M | 10M | 10M | 13M | |
| **Range** | SH | SH | SMG | SMG | AR | AR | SR | SR | SN | SN | |
| **Barrel Points** | 30 | 37 | 45 | 50 | 60 | 70 | 90 | 100 | 120 | 140 | |

## OPTIONS

**Unavailable Mounting Space**
One space from the frame is disabled, which limits the ability to add some options.
**Price Factor:** -5% per unavailable space
**Size:** None
**Weight:** None
**DP:** None

**Steel Construction**
Steel is used for the weapon, instead of alloys. This is cheaper but also heavier than standard alloy. No firearm may have more then 2 levels of steel construction. Steel construction is not compatible with polymer-resin or ceramic construction.
**Price Factor:** -5% per level
**Size:** None
**Weight:** +10% per level
**DP:** None

**Polymer-Resin Construction**
The weapon may have no more then two levels of polymer construction. It may be combined with ceramic construction, but in that case each modification is limited to one level.
**Price Factor:** +15% per level
**Size:** -10% per level
**Weight:** -10% per level
**DP:** None

**Ceramic Construction**
The weapon may have no more then two levels of cermic construction. It may be combined with polymer-resin construction, but in that case each modification is limited to one level.
**Price Factor:** +30% per level
**Size:** -15% per level
**Weight:** -20% per level
**DP:** None

**Bullpup Design**
**Price Factor:** +30%
**Size:** -20%
**Weight:** None
**DP:** None

**Folding Stock**
This is only available to frames with the Stock mounting space. It removes the solid stuck with a folding version. The size reduction only applies when the stock is folded. While the stock is folded the weapon has double the usual recoil penalties. It requires a Simple Action to unfold a stock.
**Price Factor:** None
**Size:** Final Size Points are reduced by 40% when calculating Concealability while folded.
**Weight:** None
**DP:** 5

**Personalization**
This option allows for the end-user to adjust the grip to a more comfortable setting, thereby giving 1 point of recoil reduction.
**Price Factor:** None
**Size:** None
**Weight:** None
**DP:** 15

**Gas Vent**
Max Level 3. Each level grants 1 point of recoil compensation. Uses the Barrel space. When calculating damages, each level shifts the effective barrel length down by one category.

**For example, a 9mm with a barrel length of 12cm and two levels of Gas vent will use the 7cm barrel length for calculating damage and range (but not Barrel Points).**

**Price Factor:** None
**Size:** None
**Weight:** None
**DP:** 15 per level

**Improved Gas Vent**
Max Rating 4. Grants (Level+1) points recoil compensation. Uses the Barrel space. When calculating damages, every two full levels of Improved Gas Vent shifts the effective barrel length by one category.

**Price Factor:** None
**Size:** None
**Weight:** None
**DP:** 25 per level

**Shock Pads**
Max Level 2. Uses the Stock space. Grants as many points of recoil compensation as the level. May not be combined with a folding stock

**Price Factor:** None
**Size:** None
**Weight:** 2 per level
**DP:** 5 per level

**Smartlink Level I (Internal)**
Uses either the Grip or Under space.

**Price Factor:** None
**Size:** None
**Weight:** None
**DP:** 10

**Smartlink Level II (Internal)**
Uses either the Grip or Under space.

**Price Factor:** None
**Size:** None
**Weight:** None
**DP:** 25

**Smart Safety**
Can only be used with an integral smartlinked weapon. A small firmware chip is encoded and encrypted with the Serial Number of the corresponding connected device (smartlink interface, datajack or smartgoggles). Upon any attempt to fire the weapon, it interrogates the connected device and will remain on safety until connected to an authorized device.

Removing the smart safety requires a Gunsmithing (4) Test, with a Base Time of 2 hours.

**Price Factor:** None
**Size:** None
**Weight:** None
**DP:** 10

**Transponder Safety**
A simple two-part device consisting of a transmitter and a sensor in the grip of the firearm. If the device is beyond a certain range of the sensor, the firearm will not fire. The typical setup is a watch and a set distance of a dozen or so centimeters. Uses the Grip space.

**Price Factor:** None
**Size:** None
**Weight:** 1
**DP:** 20