

COLT'S MODEL CR-26

WEAPON SYSTEM

Colt Industries  **Colt's** Inc
Military Arms Division

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WEAPON SYSTEMS

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COLT'S CR-26 SYSTEM

1. The CR-26 is a high performance heavy machine gun based on new concepts. The first prototype, now firing, has demonstrated its novel features, and the second improved prototype is now being assembled.
2. The CR-26 is a Constant Reaction Gun offering continuous trunnion reaction during firing, with peak reaction of less than 30% that of known type weapons.
3. The CR-26 is very short, unusually compact and light in weight, with very low elevation and traverse inertia.
4. The CR-26 creates negligible breech gassing due to its recoil operation, delayed extraction, and forward ejection.
5. The CR-26 has a quick change dual feed in which the new round selected is the first round fired, and in which the active belt feeds into the gun at substantially constant velocity.
6. The CR-26 is designed for use with steel or aluminum cartridge cases and steel or aluminum ammunition links. Both types have been tested in the first prototype.
7. The CR-26 and its ammunition offer 30mm level of performance with the dimensions and weight of 20mm weapon and ammunition and with the trunnion reaction of a cal .50.
8. Ammo Types -
 - a). H.E.
 - b). A.P.
 - c). Multiple Flechettes

COLT'S CR-26 SYSTEM
 WEAPON DATA

Physical Characteristics

Caliber	26mm
Basic Weapon:	
Weight	104 lb
Width	8.00 in.
Height	9.250 in.

Weapon complete with selectable dual feeder, power charger and manual charger, power and manual trigger:

Weight	119 lb
Width	10.05 in.
Height	11.10 in.
Length Overall (As Charged)	79.25 in.
Receiver Length	17.50 in.
Back of Belt to back of gun	4.90 in.
Barrel Length	65.50 in.
Quick Change Barrel	Push plunger, turn 90° and withdraw

Type of Operation

Long Recoil - Constant Reaction Principle

Normal Barrel Reciprocation	4.5 in.
Equiv. Recoil - Firing from Rest	18 in.
Forward (Misfire) Buffer stroke	0.80 in.
Rearward (Hangfire) Buffer stroke	1.40 in.
Receiver movement	0 in.
Peak trunnion reaction (rigid or resilient mount)	Less than 1000 lb
Buffer type	Double-acting ring springs plus hydraulic

Performance

Rate of Fire - normal auto	550 SPM
Angle of Operation	+90° to -45°

COLT'S CR-26 WEAPON DATA (CONT.)

Special Features:

Weapon

Low and continuous trunnion reaction
Light weight, compact receiver
Very low breech gassing
Quick change barrels
Separate adjacent Semi-Auto & Full-Auto triggers
Recoil operation: Weapon and feeder self-powered
Complete strip without tools
100% commercial steel construction

Ammunition Feed

Quick change dual feeder
No residual rounds after feed changeover
Steady, no snatch feed. (Feeds during recoil and runout)
Non-handed disintegrating steel or aluminum alloy links.

COLT'S CR-26 SYSTEM
AMMUNITION DATA

ARMOR PENETRATION – TRACER

Complete Cartridge

Length Overall	7.25 in.
Max. Dia. (at Base)	1.425 in.
Weight Complete – Drawn Steel Case	5,855 gr (.84 lb)
– Alum. Alloy Case	3,980 gr (.57 lb)

Projectile

Gross weight	1,725 gr
Penetrator weight	1,000 gr
Penetrator material	WC or DU
L/D Penetrator	20/1 (5.125 x .250 in.)
Point fineness ratio	4/1

Performance

Muzzle Velocity	4,150 ft/sec
Maximum Pressure	50,000 psi (Piezo)
Muzzle Momentum	56 to 58 lb-sec impulse
Stabilization	Fin stabilized and spin stabilized @ 1,360 RPS
Armor Defeat Limit	1.05 in @ 60° @ 2,000 meters

HIGH EXPLOSIVE – TRACER

Complete Cartridge

Length Overall	7.25 in.
Max. Dia. (at Base)	1.425 in.
Weight Complete – Drawn Steel Case	6,930 gr (.99 lb)
– Alum. Alloy Case	5,055 gr (.725 lb)

COLT'S CR-26 – AMMUNITION DATA (CON'T)

Projectile

Gross Weight	3,000 gr
Fuze mod. (To be selected)	Bulova (Mod. of existing 30mm fuze) Breed, (Mod. of existing 20mm fuze)
H.E. Content	1.02 cu in., 430 gr
Length, incl. tracer stub	4.625 in.

Performance

Muzzle Velocity	3,100 ft/sec
Max Pressure	50,000 psi
Muzzle Momentum	56 to 58 lb-sec impulse
Stabilization	Spin (1,040 RPS initial)
Detonation Delay	Contact to .004 sec delay
Self-Destruct Range Bracket	4,000 ($\pm 1,000$) meters