




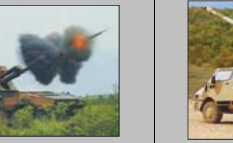




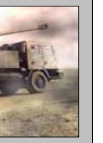






# WHEELED ARTILLERY

											
<b>System nomenclature</b>	<b>SH1</b>	<b>SH2</b>	<b>SH3 (PLZ-09)</b>	<b>SH4</b>	<b>SH5</b>	<b>VN1/ZBD-09</b>	<b>Caesar</b>	<b>RWG-52</b>	<b>HM41 Zelzal</b>	<b>Centaur 155mm/39</b>	<b>ATMOS 2000</b>
<b>Country of origin</b>	China	China	China	China	China	China	France	Germany & South Africa	Iran	Italy	Israel
<b>Developer</b>	NORINCO	NORINCO	NORINCO	NORINCO	NORINCO	NORINCO	Nexter (Giat) & Lohr Industrie	Rheinmetall & Denel Ordnance	Defence Industries Organisation	Iveco & OTO Melara	Soltam
<b>Entered service</b>	2008	2008	2008	2008	2008	2002	2002	2002	2002	2004	2004
<b>Users</b>	China	China	China (only in limited service)	China	China	France & other 3 Country	France & other 3 Country	Germany & South Africa	Iran	Italy	Azerbaijan, under evaluation by 2 other countries
<b>Chassis</b>	6x6	EQ2050 Mengshi 6x6	Hongyan CQ 261 6x6	6x6	EQ2050 Mengshi 6x6	ZBD-09 8x8	Mercedes-Benz UNIMOG U 2450 6x6	n.k.	MAN 7to GL	Centaur 8x8	Tatra T815 VVN 6x6
<b>Weight [kg]</b>	22,000	11,500	n.k.	n.k.	11,500	21,000	17,400	48,000	18,900	n.k.	22,000
<b>Length (gun forward) [m]</b>	n.k.	n.k.	7.94	n.k.	7.94	n.k.	10.00	12.30	8.62	n.k.	9.50
<b>Hull length [m]</b>	n.k.	n.k.	7.94	n.k.	7.94	n.k.	9.95	n.k.	8.62	n.k.	n.k.
<b>Width [m]</b>	n.k.	n.k.	2.50	n.k.	2.50	n.k.	2.55	3.70	2.50	n.k.	2.50
<b>Height [m]</b>	n.k.	n.k.	3.00	n.k.	3.00	n.k.	3.26	3.77	2.86	n.k.	3.24
<b>Crew</b>	5	4-5	4-5	n.k.	4-5	4-5	3-5	5	4-6	4	4-6
<b>Engine</b>	n.k.	n.k.	Chongfa 6150	n.k.	n.k.	Deutz BF6M1015C	Mercedes-Benz LA	n.k.	Deutz V8 F8L413	Iveco V-6 MTCA diesel	n.k.
<b>Engine power [hp]</b>	n.k.	215	200	n.k.	215	440	240	525	256	520	315
<b>Maximum road speed [km/h]</b>	90	90	70	n.k.	90	100	110	75	80	80	80
<b>Range [km]</b>	600	600	700	n.k.	600	600-800	600	700-800	700	700	1,000
<b>Main gun</b>	155mm / 52 Calibre	PL96, 122mm / 38 Calibre	D-30 122mm / 38 Calibre	155mm / 39 Calibre	105mm / 38 Calibre	PL96, 122mm / 38 Calibre	155mm / 52 Calibre	Rheinmetall, 155mm / 52 Calibre	155mm / 39 Calibre	FH-70, 155mm / 39 Calibre	Soltam, 155mm / 52 Calibre
<b>Ammunition load</b>	20-25	24	n.k.	n.k.	40	24	18	40	n.k.	n.k.	27
<b>Maximum firing range (with standard HE round) [km]</b>	n.k.	15.3	15.3	14.8	15.3	22 (with ERFB-HB), 27 (with RAP)	30 (with ERFB)	40 (with ERFB-BB), 50 (with V-Lap)	14.6	24.7	30 (with ERFB)
<b>Maximum firing range (with extended range ammunition) [km]</b>	30 (with ERFB-HB), 53 (with RAP)	22 (with ERFB-HB), 27 (with RAP)	22 (with RAP)	30 (with ERFB-BB), 40 (with RAP)	18.1 (with BB)	22 (with ERFB-HB), 27 (with RAP)	42 (with ERFB-BB)	40 (with ERFB-BB), 50 (with V-Lap)	22 (with BB), 34 (with ERFB-BB)	30 (with RAP)	41 (with ERFB-BB)
<b>Maximum Rate of Fire</b>	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	3 rounds in 15 seconds	3 rounds in 10 seconds	n.k.	3 rounds in 10 seconds	3 rounds in 20 seconds
<b>Continuous Fire Rate</b>	n.k.	6-8 rounds per minute	6-8 rounds per minute	2-5 rounds per minute	6-8 rounds per minute	6-8 rounds per minute	6 rounds per minute	8-9 rounds per minute	4 rounds per minute	3-6 rounds per minute	4-9 rounds per minute
<b>Elevation range</b>	0° to +70°	-1° to +79°	n.k.	-23° to +23°	0° to +70°	-2.0 to +70°	-3° to +66°	-5° to 75°	-5° to 66°	n.k.	-5° to 70°
<b>Traverse range</b>	n.k.	-30° to +30°	n.k.	-23° to +23°	-22.5° to 22.5°	-22.5° to 22.5°	-17° to +17°	-90° to +90°	-25° to +25°	n.k.	-25° to +25°
<b>Air Transportable by Aircrafts (as C-130 or A400)</b>	n.k.	yes	n.k.	no	yes	yes	yes	no	yes	yes	yes
<b>Air Transportable by Helicopters (as CH-47 or CH-53)</b>	n.k.	n.k.	no	no	n.k.	n.k.	yes	no	n.k.	n.k.	no

											
<b>System nomenclature</b>	<b>Semser</b>	<b>ATROM</b>	<b>MOBAT</b>	<b>MSTA-K</b>	<b>A-222 Bereg</b>	<b>NORA B/52</b>	<b>NORA B/52K1 (M3)</b>	<b>SOKO SP RR122</b>	<b>LWSPH</b>	<b>DANA</b>	<b>ZUZANA II</b>
<b>Country of origin</b>	Israel & Kasachstan	Israel & Romania	Netherlands	Russia	Russia	Serbia	Serbia	Serbia	Singapore	Slovakia	Slovakia
<b>Developer</b>	Soltam	Soltam & Aerostar	RDM Technology BV	Uraltransmash Works & Sterlitamak	Barricade Production Association	Yugoimport	Yugoimport	Yugoimport	Singapore Technologies Kinetics	ZTS Dubnica nad Vahom	ZTS Dubnica nad Vahom
<b>Entered service</b>	2008	2004	1987	2004	1987	2004	2005	2002	1981	1981	2002
<b>Users</b>	Israel & Kasachstan	Romania	Bahrain & Jordan	Russia & Ukraine	Russia & Ukraine	Serbia	Serbia & other 2 Country	Slovakia & other 3 Country	Slovakia & other 3 Country	Slovakia & other 3 Country	2 Countries
<b>Chassis</b>	KamAZ-6350 8x8	DFAEG 6x6	DAF YA-4440 4x4	Ural-5323 or KrAZ-CHR-3130 8x8	MAZ-543M 8x8	FAP 2832 8x8	KamAZ 63501 8x8	FAP 2228	4x4	Tatra T815 8x8	Tatra 815 VP31 8x8
<b>Weight [kg]</b>	26,000	26,000	10,000	n.k.	43,700	n.k.	28,000	n.k.	n.k.	29,250	29,000
<b>Length (gun forward) [m]</b>	n.k.	n.k.	n.k.	n.k.	13.00	n.k.	n.k.	n.k.	10.00	11.16	12.90
<b>Hull length [m]</b>	n.k.	n.k.	7.19	n.k.	12.95	n.k.	n.k.	n.k.	n.k.	8.87	8.87
<b>Width [m]</b>	n.k.	n.k.	4.42	n.k.	3.07	n.k.	n.k.	n.k.	n.k.	3.01	3.20
<b>Height [m]</b>	n.k.	n.k.	2.79	n.k.	3.93	n.k.	n.k.	n.k.	2.60	2.85	3.01
<b>Crew</b>	5-6	5	3-4	n.k.	8	5	5	4-5	4	5-6	5-6
<b>Engine</b>	KamAZ-740.50.360	MAN 2866 LF 24	DAF DT 615	YaMZ-2388	D12A-525	OM 403	n.k.	Daimler Chrysler OM 906 LA	n.k.	Tatra 2-939-34	Tatra 2-930-52
<b>Engine power [hp]</b>	265	360	154	300	525	320	320	279	170	345	n.k.
<b>Maximum road speed [km/h]</b>	n.k.	n.k.	80	n.k.	60-65	80	80	80-90	80	80	80
<b>Range [km]</b>	n.k.	n.k.	500	n.k.	650	600	n.k.	650	600	750	750
<b>Main gun</b>	D-30, 122mm / 38 Calibre	Soltam, 155mm / 52 Calibre	M101, 105mm / 33 Calibre	Barrikady 2A64, 152mm / 47 Calibre	130mm	M84 NORA-A, 152mm / 45 Calibre	NORA B/52 155mm / 52 Calibre	D-301 122mm / 38 Calibre	ST Kinetics, 155mm / 39 Calibre	SAU-152, 152mm / 45 Calibre	155mm / 52 Calibre
<b>Ammunition load</b>	n.k.	32	40	n.k.	36	20	36	60	40	40	40
<b>Maximum firing range (with standard HE round) [km]</b>	15.3	30 (with ERFB)	14.4	24.7	27	23.9	20	15.3	19	18.7	29 (with ERFB)
<b>Maximum firing range (with extended range ammunition) [km]</b>	22 (with RAP)	41 (with ERFB-BB)	19.6 (with HERA)	28.9 (with BB), 36 (with RAP)	n.k.	28.1 (with RAP)	41 (with ERFB-BB), 65 (with HERA-BB)	17.3 (with BB), 22 (with RAP)	30 (with ERFB-BB)	20 (with RAP), 28 (with BB)	39 (with ERFB-BB)
<b>Maximum Rate of Fire</b>	n.k.	3 rounds in 20 seconds	n.k.	n.k.	n.k.	8 rounds per minute	n.k.	n.k.	3 rounds in 15 seconds	n.k.	n.k.
<b>Continuous Fire Rate</b>	6-8 rounds per minute	4-9 rounds per minute	12 rounds per minute	n.k.	10 rounds per minute	5 rounds per minute	6 rounds per minute	6-8 rounds per minute	3-6 rounds per minute	4 rounds per minute	5-6 rounds per minute
<b>Elevation range</b>	7° to 70°	n.k.	+1° to 30°	n.k.	+1° to +50°	+5° to 65°	+5° to 65°	-35° to +35°	n.k.	-4° to +70°	-3.5° to +70°
<b>Traverse range</b>	n.k.	n.k.	-45° to +45°	n.k.	-120° to +120°	-50° to +50°	n.k.	n.k.	n.k.	-225° to +225°	-225° to +225°
<b>Air Transportable by Aircrafts (as C-130 or A400)</b>	yes	yes	yes	n.k.	no	n.k.	n.k.	n.k.	yes	no	no
<b>Air Transportable by Helicopters (as CH-47 or CH-53)</b>	no	no	yes	n.k.	no	n.k.	n.k.	n.k.	yes	no	no

							
<b>System nomenclature</b>	<b>G6-45 Rhino</b>	<b>G6-52ER</b>	<b>T5-52 Condor</b>	<b>LAV III / T7 Leo Efec</b>	<b>SK101 WSP</b>	<b>Archer FH77 BW L52</b>	<b>Portee</b>
<b>Country of origin</b>	South Africa	South Africa	South Africa	South Africa	South Korea	Sweden	United Kingdom
<b>Developer</b>	Denel Ordnance	Denel Ordnance	Denel Ordnance	Denel Ordnance / LIW & GDLS	Kia & Samsung Techwin	BAE Systems Bofors	BAE Systems
<b>Entered service</b>	1988	2003	2009	Prototype	Prototype	2008	Prototype
<b>Users</b>	South Africa & other 2 Country	offered for Exports	offered for Exports	none	2 Countries, under evaluation by 3 other countries	2 Countries, under evaluation by 3 other countries	none
<b>Chassis</b>	n.k.	n.k.	Tatra 8x8	LAV III 8x8	KN500	6x6	Supacat 8x6
<b>Weight [kg]</b>	47,000	49,000	18,200	18,200	n.k.	18,500	12,300
<b>Length (gun forward) [m]</b>	10.36	n.k.	10.10	7.65	n.k.	14.1	n.k.
<b>Hull length [m]</b>	9.20	n.k.	6.98	6.98	n.k.	7.65	n.k.
<b>Width [m]</b>	3.40	n.k.	2.90	2.70	n.k.	2.48	n.k.
<b>Height [m]</b>	3.30	n.k.	3.48	2.90	n.k.	2.94	n.k.
<b>Crew</b>	6	3-4	n.k.	3-5	n.k.	3-4	6
<b>Engine</b>	n.k.	n.k.	Caterpillar 3126	MAN D2156 HM	n.k.	n.k.	n.k.
<b>Engine power [hp]</b>	518	525	355	340	n.k.	n.k.	n.k.
<b>Maximum road speed [km/h]</b>	85	80	85	80	n.k.	100	n.k.
<b>Range [km]</b>	700	600	650	400	450-500	400-500	n.k.
<b>Main gun</b>	Denel Ordnance, 155mm / 45 Calibre	Denel Ordnance, 155mm / 52 Calibre	Denel Ordnance, 155mm / 52 Calibre	Denel Ordnance, 105mm / 58 Calibre	105mm / 22 Calibre	Bofors, 155mm / 52 Calibre	M777, 155mm / 39 Calibre
<b>Ammunition load</b>	45	48	27	36	n.k.	20+20	70
<b>Maximum firing range (with standard HE round) [km]</b>	30 (with ERFB)	44 (with ERFB)	33 (with ERFB)	23	11.2	30	24.7
<b>Maximum firing range (with extended range ammunition) [km]</b>	39 (with ERFB-BB), 50 (with V-Lap)	67 (with V-Lap)	42.5 (with ERFB-BB), 55 (with V-Lap)	28 (with BB), 36 (with V-LAP)	14.7 (with HERA)	38 (with ERFB-BB)	30 (with RAP)
<b>Maximum Rate of Fire</b>	n.k.	n.k.	3 rounds in 15 seconds	n.k.	10-12 rounds per minute	3 rounds in 13 seconds	n.k.
<b>Continuous Fire Rate</b>	3 rounds per minute	6-8 rounds per minute	2 rounds per minute	6 rounds per minute	4-6 rounds per minute	75 rounds an hour	5 rounds per minute
<b>Elevation range</b>	-5° to 75°	-5° to 75°	0° to 75°	0° to 75°	0° to +70°	0° to +70°	n.k.
<b>Traverse range</b>	-90° to +90°	-90° to +90°	-40° to +40°	-30° to +30°	-75° to +75°	-30 to +30°	-23° to +23°
<b>Air Transportable by Aircrafts (as C-130 or A400)</b>	no	no	no	yes	n.k.	yes	yes
<b>Air Transportable by Helicopters (as CH-47 or CH-53)</b>	no	no	no	no	n.k.	no	yes

**Ammunition Key:**  
BB: Base Bleed  
ERFB: Extended Range Full Bore  
ERFB-BB: Extended Range Full Bore - Base Bleed  
ERFB-HB: Extended Range Full Bore - Hollow Base  
HERA: High-Explosive Rocket-Assisted Projectile  
HERA-BB: High-Explosive Rocket-Assisted - Base Bleed  
V-Lap: Velocity-enhanced Long Range Artillery Projectile