

How to install a GRT Bullet File

Name	Date modified	Type	Size
folder datasheet	2023/03/28 05:59	File folder	
folder doku	2023/03/28 06:00	File folder	
folder libs	2023/03/28 06:00	File folder	
folder loads	2023/11/07 10:05	File folder	
folder locales	2023/03/28 06:00	File folder	
folder plugins	2023/03/28 06:00	File folder	
CHANGELOG	2022/12/04 21:56	Text Document	75 KB
GordonsReloadingTool.cfg	2023/11/08 16:17	CFG File	37 KB
GordonsReloadingTool.cfg~	2023/11/07 16:12	CFG~ File	37 KB
GordonsReloadingTool	2023/11/09 07:58	Data Base File	98 736 KB
GordonsReloadingTool	2022/12/04 21:56	Application	60 292 KB
LICENSE	2022/12/04 21:56	Text Document	7 KB
LIZENZ	2022/12/04 21:56	Text Document	8 KB
MANUAL	2022/12/04 21:56	Text Document	1 KB

Open GRT by clicking
on the Icon

Click on the bullet
dropdown list.

FN-FAL 7-62-S335-95-Percent-OBT

D:\GRT\GRT Latest-20221204T195206Z-001\GRT Latest\GordonsReloadingTool-2021.2030-NIGHTLY\GordonsReloadingTool-2021.2030-NIGHTLY\loads\FN-FAL 7-62-S335-95-Percent-OBT



Property	Value
308 Win. (308 Winchester, 7,62 x 51)	
Barrel Ø (grooves)	7.82 mm
Max. allowed pressure	4150 bar
eff. cross section	★ 47.510 mm ²
Case length	2.0100 in
Case volume	55.42 grain H ₂ O
Cartridge length	71.12 mm
eff. case volume	0.1923 in ³
Sebert factor	0.5
Barrel length	21.0000 in
Projectile path	491.48 mm
Optional Parameters / Info	
Gun weight	0.00 lb
Twist length	305.00 mm
Gas-Leakage (gas losses)	Edit..
Bullet Jump	Unlock



Property	Value
PMP, FMJ BT, 0.308, 143.00 grain	
Projectile Ø	0.308 in
Projectile mass	143.00 grain
Projectile length	29.20 mm
Seating depth	9.13 mm
Guided seating depth	7.57 mm (+21%)
Tail type	★ flatbase
Initial pressure	★ 250 bar
Bullet resistance	Unlock
Optional Parameters / Info	
Construction / Material	Edit..
G1 BC	0.456
G7 BC	0.000
Sectional Density (gsd)	0.1515 g/mm ²

Property	Value
Somchem S335-FN-Fal (2023-01-24)	
spec. explosive heat (Qex)	3800 kJ/kg
Isentropic exponent (k)	1.2281273
Combustion coefficient (Ba)	0.6856275
prog./deg. coefficient (a0)	0.5943
Transition limit (z1)	0.3779
Transition limit (z2)	0.7733
Material density (Pc)	1620 kg/m ³
Bulk density (Pcd)	58.62 lb/ft ³
Powder temperature (Pt)	★ 21 °C
Powder mass (mc)	★ 42.30 grain
Loading ladder steps	1 (disabled)

Results

Shot group

Pictures

Shot group

Measurement

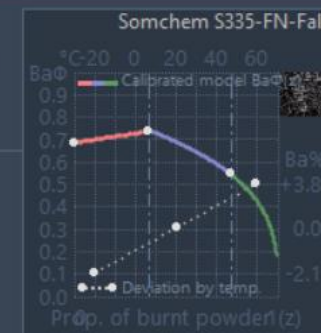
Note

+

.308 Win. (308 Winchester, 7,62 x 51)

Projectile: PMP, FMJ BT, 0.308, 143.00 grain, Propellant: Somchem S335-FN-Fal (2023-01-24), 42.30 grain
L3/CL: 2.0100 in, L6/OAL: 71.12 mm, Seating depth: 9.13 mm, Projectile length: 29.20 mm, Case volume: 55.42 grain H₂O

maximum pressure:	3505 bar	Gas outflow velocity:	3126.3 ft/s
Muzzle pressure:	687 bar	Projectile speed:	162.2 k 1/min
Projectile energy:	2323 ft-lb	Recoil energy:	-
Muzzle velocity:	2705.2 ft/s	IPSC/MIP-Factor:	387, 764
Barrel Time general (BT):	1.0939 ms	Load ratio:	92.6 %
Bullet Lead Time 10% pmax (BLT):	1.0473 ms	burnt propellant:	98.5 %
Optimal Barrel Time (OBT #5):	1.0763 ms	Effective efficiency rate:	30.2 %





FN-FAL 7-62-S335-95-Percent-OBT

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Property	Value
308 Win. (308 Winchester, 7.62 x 51)	
Barrel Ø (grooves)	7.82 mm
Max. allowed pressure	4150 bar
eff. cross section	47.510 mm ²
Case length	2.0100 in
Case volume	55.42 grain H ₂ O
Cartridge length	71.12 mm
eff. case volume	0.1923 in ³
Sebert factor	0.5
Barrel length	21.0000 in
Projectile path	491.48 mm
Optional Parameters / Info	
Gun weight	0.00 lb
Twist length	305.00 mm
Gas-Leakage (gas losses)	Edit..
Bullet Jump	Unlock

Cartridge Chamber



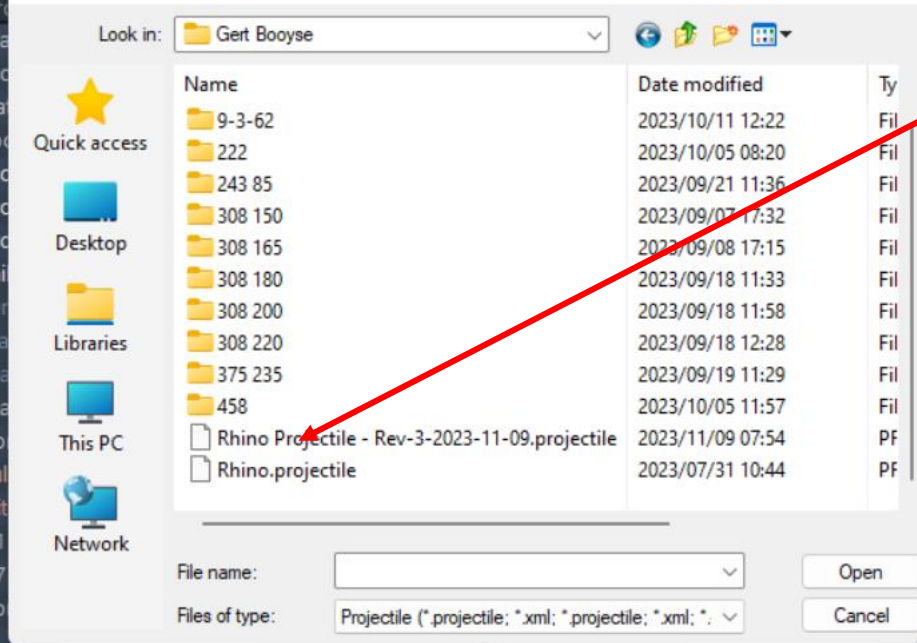
Property	Value
PMP, FMJ BT, 0.308	
Projectile Ø	
Projectile mass	
Projectile length	
Seating depth	
Guided seating depth	
Tail type	
Initial pressure	
Bullet resistance	
Optional Parameters / Info	
Construction / Material	
G1 BC	
G7 BC	
Sectional Density (gsd)	

Property	Value
Somchem S335-FN	
spec. explosive heat (Qex)	
Isentropic exponent (k)	
Combustion coefficient (Ba)	
prog./deg. coefficient (a0)	
Transition limit (z1)	
Transition limit (z2)	
Material density (Pc)	
Bulk density (Pcd)	
Powder temperature (P)	
Powder mass (mc)	
Loading ladder steps	

Projectile Database

File Edit

Open



Click on file and choose the import option..

Then click on the projectile file in the location you saved it.

Press F1 or click here for help!

Cancel

Select values and apply

Apply to load data

Full text search (Leave empty for complete list, wildcards: '*' and '?')



Full text search (Leave empty)

5656 Projectiles

GRT Database

User Database

Property	Value
Manufacturer	/
Product name	/
Date/Lot/ID	/
Lookup-Caliber Ø inch	/ 0
Projectile Ø	/ 0.000 in
Projectile mass	/ 0.00 grain
Projectile length	/ 0.00 n
Tail type	/ flatba
Length/Depth	0.00 n
diameter A	0.00 n
Diameter B	0.00 n
Max. seating depth	/ 0.00 n
Construction / Material	/
Bullet resistance	/ (Defa
Initial pressure	/ (Defa
G1 BC	/ 0.000
G7 BC	/ 0.000
Construction / Material (UBCS)	/

Example: '.308 hornady 150', or 'lapua .338 250' and so on

Manufacturer	Product name	Ø Calibe	Ø mm	Grain	IP	BF	G1	G7
► Frontier-CMJ								
► Hornady								
► Military								
► Peregrine								

Multiple entries

This file contains multiple entries.

Select "Check individually" for a step-by-step import. A window will open for editing and saving into the database. You can also skip individual entries by selecting "Skip" in the edit window

Select "All immediately" to import all entries into the database in one go.

Check individually

All immediately

Cancel



Press F1 or click here for help!

Cancel

Select values and apply

Apply to load data

Click on the all immediately option.

5741 Projectiles

Property	Value
Manufacturer	/ Rhino
Product name	/ Solid Shank-165gr
Date/Lot/ID	/ 2023-07-19
Lookup-Caliber Ø inch	/ 0.308
Projectile Ø	/ 0.308 in
Projectile mass	/ 165.00 grain
Projectile length	/ 29.00 mm
Tail type	/ flatbase
Length/Depth	0.00 mm
diameter A	0.00 mm
Diameter B	0.00 mm
Max. seating depth	/ 0.00 mm
Construction / Material	/
Bullet resistance	/ (Default)
Initial pressure	/ 250 bar
G1 BC	/ 0.407
G7 BC	/ 0.000
Construction / Material (UBCS)	/

GRT Database

User Database

Example: '.308 hornady 150', or 'lapua .338 250' and so on

Manufacturer	Product name	Caliber	mm	Grain	IP	BF	G1	G7
▶ Hornady								
▶ Military								
▶ Peregrine								
▶ Rene Missen								
▼ Rhino								
▶ 0.224								
▶ 0.243								
▶ 0.257								
▶ 0.264								
▶ 0.277								
▶ 0.284								
▼ 0.308								
▶ Rhino	Solid Shank-150gr	.308	7.82	150	250 bar		0.371	0.000
▶ Rhino	Solid Shank-165gr	.308	7.82	165	250 bar		0.407	0.000
▶ Rhino	Solid Shank-180gr	.308	7.82	180	250 bar		0.445	0.000
▶ Rhino	Solid Shank-200gr	.308	7.82	200	250 bar		0.494	0.000
▶ Rhino	Solid Shank-220gr	.308	7.82	220	250 bar		0.554	0.000
▶ 0.311								
▶ 0.323								
▶ 0.338								
▶ 0.358								
▶ 0.366								
▶ 0.375								
▶ 0.410								
▶ 0.416								
▶ 0.422								

Click on the bullet of your choice. The bullet file is now imported.



Press F1 or click here for help!

Cancel

Select values and apply

Apply to load data