

TrueJet uniform-hole perforating charges

Improve fracture distribution and reservoir communication

TrueJet™ perforating charges from Baker Hughes create uniform entry holes, helping customers to improve fracture distribution and reservoir communication in unconventional wells. Developed through extensive testing and modeling, the charges deliver perforations with a consistent entry-hole diameter and shape, regardless of gun configuration, orientation, or position within the casing.

Unlike many conventional charges that can create rugose, multi-sized perforations that adversely affect flow efficiency and treatment delivery, the uniform holes generated by TrueJet charges help to optimize the efficiency of the perforation clusters, ensuring even distribution of fracture fluids and/or proppant.

The uniform holes also enable reliable diversion rates and designed treatment pressures, ensuring stimulation programs can be executed to plan.

TrueJet perforating charges come in two charge cases, one fully compatible with industry-standard perforating hardware and another in a Baker Hughes gun system case. All charges undergo comprehensive testing and qualification using API RP 19B practices. The charges have also been qualified under stressed rock conditions and are available in both RDX and HMX versions.

Contact your local Baker Hughes representative today to learn more about how TrueJet perforating charges can help you improve fracturing treatments and reservoir access in your next unconventional well.

Applications

- Unconventional reservoirs
- Vertical and horizontal wells
- Wireline, slickline, and tubing-conveyed operations

Benefits

- Generates uniformly sized and shaped entry holes
- Improves flow efficiency of perforation clusters
- Enables uniform stimulation treatment distribution
- Enables reliable diversion rates and designed treatment pressures
- Offers full compatibility with industry-standard perforating hardware
- Meets API RP 19B qualification

TrueJet Charges							RDX	HMX	
Carrier O.D. inches (mm)	Casing specifications	Average hole size	Hole size variance	Net explosive weight	Stressed sandstone penetration*	API concrete penetration data	Charge Name	Charge part number	Charge part number
2-3/4 (70)	4½ in., 11.6# P110	0.36 in.	7.40%	16 gm	8.6 in.	14.8	2716 TrueJet 30	A1013242300	A1013242304
		0.34 in.	5.84%	23 gm	.	12	3123 TrueJet 30	A1013243300	A1013243304
	0.42 in.	4.89%	23 gm	.	14.5	3123 TrueJet 40	A1013243400	A1013243404	
3-1/8 (79)	5 in., 18# P110	0.32 in.	4.54%	23 gm	.	12	3123 TrueJet 30	A1013243300	A1013243304
		0.43 in.	4.82%	23 gm	.	14.5	3123 TrueJet 40	A1013243400	A1013243404
	5½ in., 23# P110	0.32 in.	6.70%	23 gm	.	12	3123 TrueJet 30	A1013243300	A1013243304
		0.40 in.	4.34%	23 gm	.	14.5	3123 TrueJet 40	A1013243400	A1013243404
	5½ in., 20# P110	0.38 in.	6.04%	23 gm	.	12.7	3123 TrueJet 38	A1013243380	A1013243384
	5½ in., 23# P110	0.42 in.	4.76%	23 gm	.	10.8	3123 TrueJet 42	A1013243420	A1013243424
3-3/8 (86)	5½ in., 20# P110	0.41 in.	8.90%	23 gm	8.0 in.	11.5	3323 TrueJet 40	A1013245400	A1013245404

TrueJet Extremely Consistent Hole Charges (ECH)							RDX	HMX	
3-1/8 (79)	4½ in., 11.6# P110	0.40 in.	2.50%	23 gm	.	24.5	3123 TrueJet 40 ECH	A1013243450	A1013243454

*Penetration test performed in Berea Sandstone at 6,500 psi (448 bar) unconfined compressive strength with 9,500 psi (655 bar) overburden pressure



0 deg 60 deg 120 deg 180 deg 240 deg 300 deg

TrueJet perforating charges create uniform entry hole sizes with less than 10% deviation, helping to improve flow efficiency and reservoir access