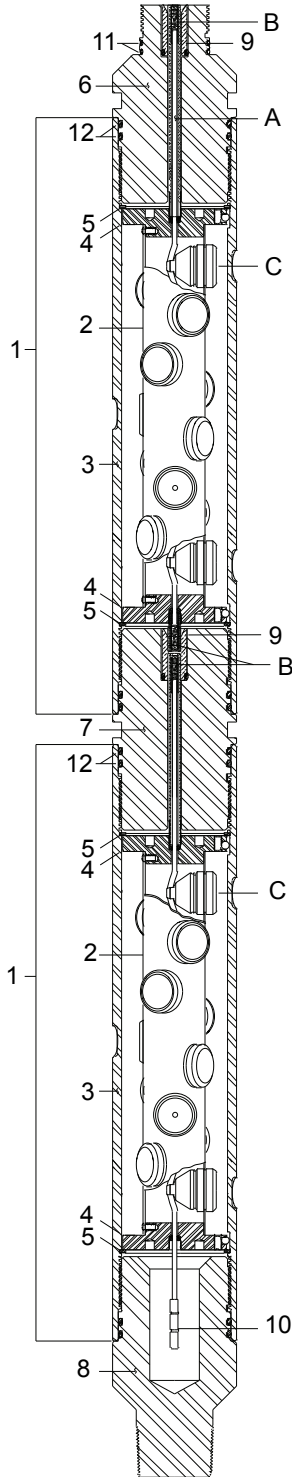


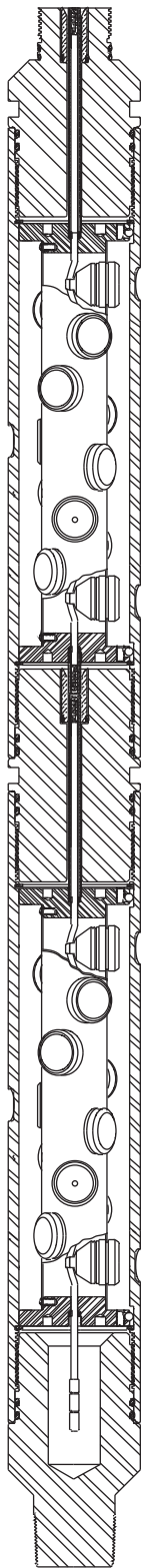
BILL OF MATERIALS:



ITEM	PART NO.	DESCRIPTION
1	S45-1614-C21A	Shipping Assembly, 4-1/2" x 21', 16 spf, 135° Spiral
	S45-1614-C15A	Shipping Assembly, 4-1/2" x 15', 16 spf, 135° Spiral
	S45-1614-C11A	Shipping Assembly, 4-1/2" x 11', 16 spf, 135° Spiral
	S45-1614-C07A	Shipping Assembly, 4-1/2" x 7', 16 spf, 135° Spiral
	S45-1614-C04A	Shipping Assembly, 4-1/2" x 4', 16 spf, 135° Spiral
2	TAG-4500-287	Tube Strip, 21', 16 spf, 135° Spiral
	TAG-4500-286	Tube Strip, 15', 16 spf, 135° Spiral
	TAG-4500-285	Tube Strip, 11', 16 spf, 135° Spiral
	TAG-4500-284	Tube Strip, 7', 16 spf, 135° Spiral
	TAG-4500-283	Tube Strip, 4', 16 spf, 135° Spiral
3	TAG-4500-293	Carrier 4-1/2" x 21', 16 spf, 135° Spiral
	TAG-4500-292	Carrier 4-1/2" x 15', 16 spf, 135° Spiral
	TAG-4500-291	Carrier 4-1/2" x 11', 16 spf, 135° Spiral
	TAG-4500-290	Carrier 4-1/2" x 7', 16 spf, 135° Spiral
	TAG-4500-289	Carrier 4-1/2" x 4', 16 spf, 135° Spiral
4	TAG-4500-199	End Plate (1)
	TAG-4500-199P	End Plate w/pin (1)
5	TAG-4500-081	Carrier Snap Ring (N-5000-375) (2)
6	TAG-4500-280L	Top Sub 4-1/2" Adapts to TCP or Wireline Systems
7	TAG-4500-281L	Tandem Sub 4-1/2"
8	TAG-4500-060	Bull Plug 4-1/2"
	TAG-4500-060S	Bull Plug 4-1/2" w/2-7/8" EUE pin on bottom
9	TCP-0100-275L	Booster Transfer Kit
10	DET-0010-001	Detonating Cord End Cover
11	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile - see ref. section
	OOO-V569-230	O-Ring, #230, 90 Duro Viton - see ref. section
12	OOO-N569-342	O-Ring, #342, 90 Duro Nitrile - see ref. section
	OOO-V569-342	O-Ring, #342, 90 Duro Viton - see ref. section
A	A570010	Detonating Cord - XHV, 80 gr., RDX - see ref. section
	A572010	Detonating Cord - XHV, 80 gr., HMX - see ref. section
B	DET-3050-429	Bi-Directional Booster
C	TAG-5000-406ZF	Charge, HMX, BH - Phantom
	TAG-5000-306KF	Charge, RDX, BH - Kiss
	TAG-5000-306ZF	Charge, RDX, BH - Phantom
--	TAG-4500-118	Blank Charge Case (non-explosive)

PRODUCT INFORMATION:

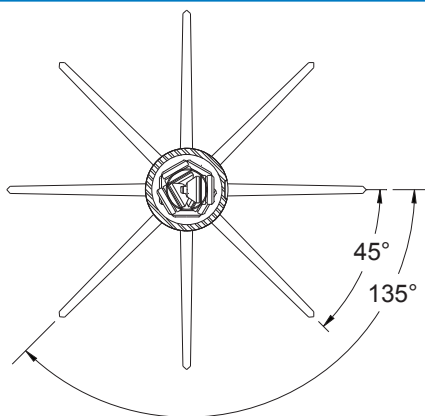
4-1/2" O.D. 16 spf, 135°/45° Spiral, Ultra HSD System BH, BH-Kiss™ & BH-Phantom™



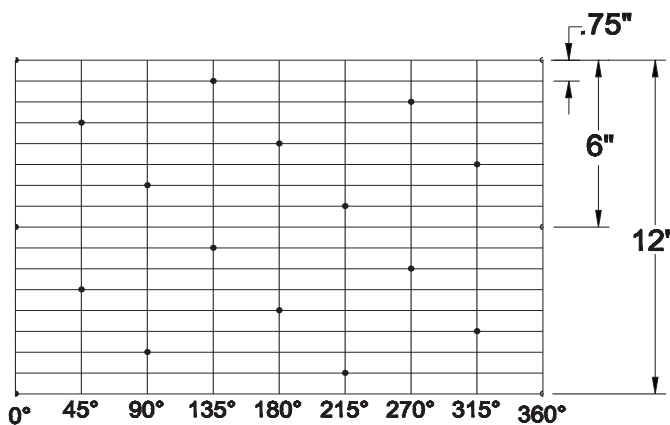
SPECIFICATIONS:

PRESSURE RATING	117.2 Mpa	17,000 psi
TEMPERATURE	UP TO 206°C	UP TO 500°F
TENSILE STRENGTH	165 000 daN	370,000lbs
CARRIER THREAD	3-15/16" - 6 ACME	
TANDEM SHOT SPACING	0.37 m	1.22 ft
GUN WEIGHT LOADED	32.7 kg/m	22 lb/ft
TORSIONAL YIELD	14 400 N•m	10,650 lb-ft

PHASE:



SHOT PLOT:



NOTES:

Do not partially load gun. If partial loading is required, a blank charge case must be used for each charge hole in the tube strip that is skipped. Charges and ancillary components for higher temperature applications are available by Special Order.