

1-11/16" and 2-1/8" Strip System (Circulation Charge)

1. The Oiltech steel encapsulated circulation charge mounted on a retrievable steel strip carrier is a high performance semi-expendable carrier system for through-tubing applications.

The system provides a more powerful explosive load than equivalent diameter retrievable hollow carriers (scaloped carrier). The strips are recovered after firing with the charge front caps in place, leaving a small amount of steel chips from the charge case in the well as debris.

2. The charges are loaded with HMX.

3. The strength and flexibility of the steel carrier strip allows the carrier to pass through crooked tubing.

4. The carrier strip is retrieved intact, together with the charge front caps providing a tell-tale indication that the charges have functioned correctly.

5. The debris is characterized by small steel chips that gravitate rapidly to bottom in conditions where aluminum case debris tend to float and bridge.

6. Top down firing is recommended.

7. In-line positioned firing assures maximum penetration of all charges and casing damage is minimized by the protection afforded by the strip.

8. Gun assembly is fast and convenient using detonating cord clips rather than threading cord as in competitive equipment.

9. The charges may be run up to four or six shots per foot on a Mono-Phased universal strip having zero° configuration.

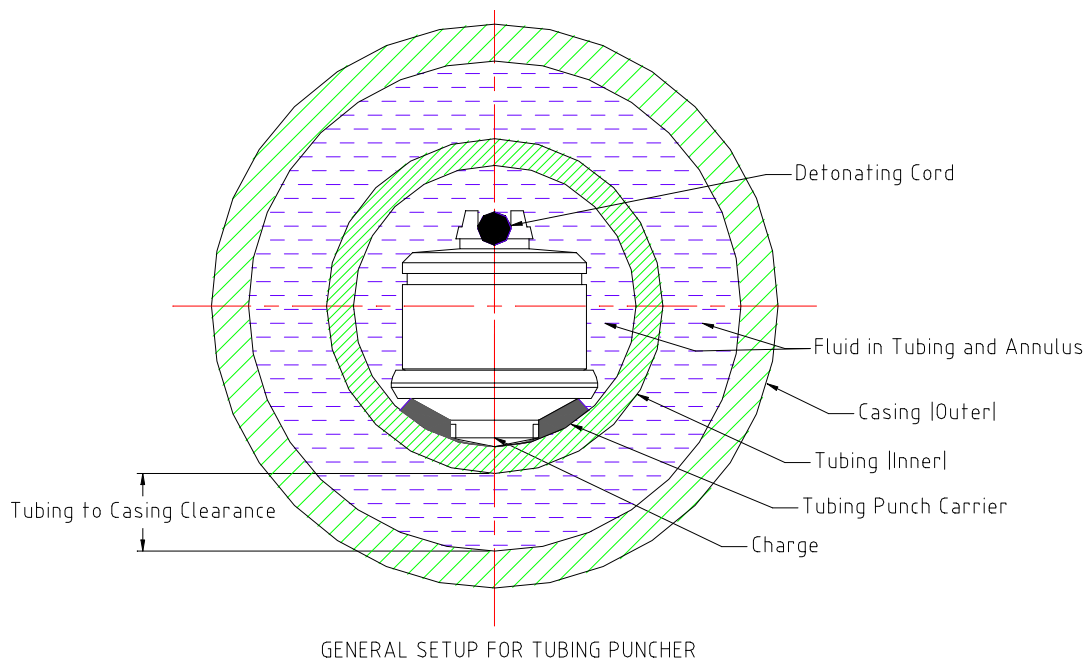
1-11/16" and 2-1/8" Strip System (Circulation Charge)

SPECIFICATIONS

1	Carrier size / charge	1-11/16" Puncher HMX	2-1/8" Puncher HMX
		Equivalent to 1- 9/16" RTG Tubing Puncher	Equivalent to 2" RTG Tubing Puncher
2	Standard shot density	4 Shots/ft	4 Shots/ft
3	Mono Phased	0°	0°
4	Minimum passage	1.78"	2.25"
5	Gun bend radius	6'	6'
6	Pressure Rating	20,000 psi	20,000 psi
7	Temperature Rating : HMX Charges	400 deg F for 1 Hr	
8	Positioning	Gravity assisted magnetic orientation.	

COMPATIBILITY

Strip carrier charges are supplied with a standard 5/8" - 24 UNEF thread identical to the Enerjet (equivalent) Charge thread.

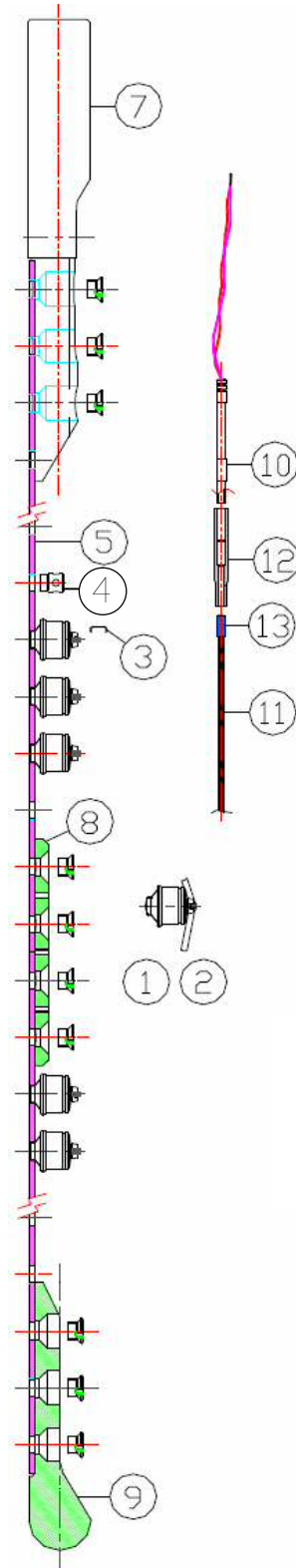


PERFORMANCE

Type		1-11/16" Puncher HMX	2-1/8" Puncher HMX
		Equivalent to 1-9/16" RTG Tubing Puncher	Equivalent to 2" RTG Tubing Puncher
Tubing Puncher "1/4 inch steel"	Part Number	OT60498	OT60502
	Diam. Thru 1/4" wall L-80 tubing	>0.20"	>0.32"
	Brown Dot Penetration in secondary string	0.03"	0.05"
Tubing Puncher "3/8 inch steel"	Part Number	OT60499	OT60503
	Diam. Thru 3/8" wall L-80 tubing	>0.23"	>0.33"
	Orange Dot Penetration in secondary string	0.02"	0.07"
Tubing Puncher "1/2 inch steel"	Part Number	OT60500	OT60504
	Diam. Thru 1/2" wall L-80 tubing	>0.20"	>0.31"
	Green Dot Penetration in secondary string	0.05"	0.08"
Tubing Puncher "5/8 inch steel"	Part Number	OT60501	OT60505
	Diam. Thru 5/8" wall L-80 tubing	>0.14"	>0.30"
	Blue Dot Penetration in secondary string	0.03"	0.06"

* Colour Code marking on the charge is used to distinguish charge specification.
Manufactured in HMX explosive only.

1-11/16" and 2-1/8" Strip System (Circulation Charges) Drawings



1-11/16" and 2-1/8" Strip System Parts

ITEMS	DESCRIPTION
CHARGES	
1	1-11/16" Tubing Puncher HMX, Brown Dot
	1-11/16" Tubing Puncher HMX, Orange Dot
	1-11/16" Tubing Puncher HMX, Green Dot
	1-11/16" Tubing Puncher HMX, Blue Dot
2	2-1/8" Tubing Puncher HMX, Brown Dot
	2-1/8" Tubing Puncher HMX, Orange Dot
	2-1/8" Tubing Puncher HMX, Green Dot
	2-1/8" Tubing Puncher HMX, Blue Dot
HARDWARE	
3	Charge Clip for Encapsulated Charge (Supplied with Charge)
4	Retainer Clip, Detcord to Strip
5	1-11/16" & 2-1/8" Universal Strip, 4spf, 10ft
	1-11/16" & 2-1/8" Universal Strip, 4spf, 15ft
	1-11/16" & 2-1/8" Universal Strip, 6spf, 10ft
	1-11/16" & 2-1/8" Universal Strip, 6spf, 15ft
7	1-11/16" Universal Adaptor Head to CCLL (Feed Thru), 6spf
	2-1/8" Universal Adaptor Head to CCLL (Feed Thru) 6spf

1-11/16" and 2-1/8" Strip System Parts

ITEMS	DESCRIPTION
8	1-11/16" Tandem Sub, Universal, 6spf
	2-1/8" Tandem Sub, Universal, 6spf
9	1-11/16" Bottom Nose, Universal, 6spf
	2-1/8" Bottom Nose, Universal
10	Temperature and Pressure Resistant Detonator
11	Detonating Cord
12	Rubber Boot for Nobel Z480 Detonator
13	Detonating Cord End Seal
	Splice Screw
	10-32 Ground Screw
	Round HD Screw, 1/4" 20UNC - 3/8" L
	Fixing Strap for Detonating Cord
	1/2" Nylon Clip

TOOLS and ACCESSORIES

-	Mounting Pliers for Detcord Clip
-	Torque Gripping Head for 1-11/16" charge
-	Torque Gripping Head for 2-1/8" charge
-	Allen Key Set
-	Detcord / Booster Crimper
-	Detcord Cutter, Heavy Duty
-	Alignment Wrench for 1-11/16" Charge
-	Alignment Wrench for 2-1/8" Charge
-	Feed Through (Short, for WL Adtr. Head
-	Kemlon Style Boot and Female Contact
-	Feed Thru Asst (Spring , Feed Thru., boot , contact, insul.)

1-11/16" and 2-1/8" Strip System (Circulation Charges) Parts

1-11/16" & 2-1/8" Magnetic Decentralizer	
ITEM	DESCRIPTION
	1-11/16" Magnetic Decentralizer Assembly
	2-1/8" Magnetic Decentralizer Assembly
1	Box Protector
2	O-ring 2-211 Viton 90
3	1-11/16" Magnetic Decentralizer (Body)
	2-1/8" Magnetic Decentralizer (Body)
4	Electrical Contact Spring Plunger Assembly
5	1-11/16" Retaining Ring
	2-1/8" Retaining Ring
6	Pin Protector

