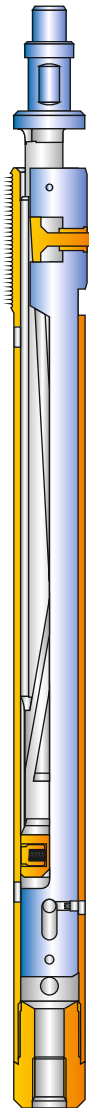


TUBING PERFORATOR PUNCH



The PARVEEN Tubing Perforator Punch is a mechanical device designed to perforate standard and heavy wall tubing under pressure. Deployed into the well by conventional means, the perforator punch requires no explosives, therefore the possibility of perforating the casing is eliminated.

The design benefits include:

- Greater tubing penetration
- Positive indication of perforation on tool removal
- Safety release mechanism, allowing the tool to be retrieved from the well without perforating
- The perforator is designed to withdraw the punch and release automatically after perforating
- Utilizes upward jarring impacts for perforation action

The perforator punch is used in conjunction with a tubing collar or slip type stop, which provides an anchor point to activate the tool.

TUBING PERFORATOR PUNCH					
Tubing Size (in)	Body O.D. (in)	Punch Size (in)	F/N.O.D. (in)	Connection Pin X Box	Part No.
1-1/2	1.470	0.370	1.187	15/16 - 10 UN	308-150
2-3/8	1.840	0.375	1.375	15/16 - 10 UN	308-237
2-7/8	2.190	0.375	1.375	15/16 - 10 UN	308-287
3-1/2	2.690	0.433	2.313	1-1/16 - 10 UN	308-350
4-1/2	3.650	0.500	2.313	1-1/16 - 10 UN	308-450

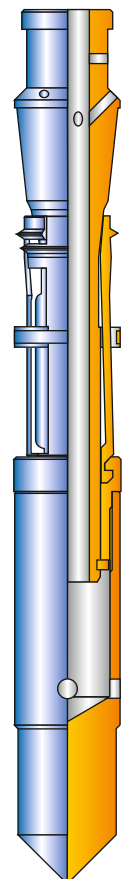
TUBING PERFORATOR PUNCH

SIDE WALL CUTTER

The purpose of the PARVEEN Side Wall Cutter is to cut the wireline at any desired point in the tubing string. It can also be run all the way to the rope socket of a toolstring which may be struck in the hole.

The Side Wall Cutter Running Tool is used to run the Side Wall Cutter to the desired depth.

SIDE WALL CUTTER			
Size (in)	2	2-1/2	3
Fishneck O.D. (in)	1.375	1.750	2.313
Max. O.D. (in)	1.745	2.000	2.688
Knives Retracted (in)	1.745	2.000	2.688
Knives Expanded (in)	2.063	2.500	3.000
Part No.	306-200	306-250	306-300



SIDE WALL CUTTER