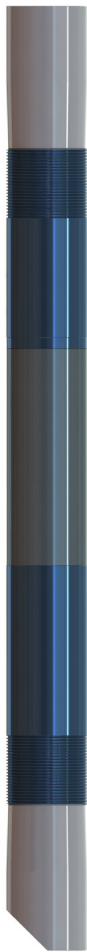


TECHNICAL INFORMATION:

PAT-4500-0126-1001, 4.5 INCH 11.6-12.6 PPF



CASING O.D. (in)	4.5
CASING WT. (lb/ft)	12.6
CASING I.D. (in)	3.958
PATCH MAX. RUNNING O.D. (in)	3.800
PATCH I.D. AFTER SETTING (in)	3.375
PATCH DRIFT I.D. (in)	3.250
BURST HYDRAULIC RATING (psi)	8000
COLLAPSE HYDRAULIC RATING (psi)	6600

QTY.	DESCRIPTION	PART NUMBER	MATERIAL
	X-SPAN SYSTEM	PAT-4500-0126-1001	NOTED
1	PIN ELEMENT	PAT-4500-0126-3210	13 Cr
1	BOX ELEMENT	PAT-4500-0126-3410	13 Cr
1	TOP SWAGE	PAT-4500-0126-1110	4140
1	BOTTOM SWAGE	PAT-4500-0126-1310	4140
1	O-RING	OOO-V569-152	VITON
1	O-RING	OOO-V569-153	VITON
1	50 K SHEAR RING	PAT-4500-049	4140
1	10 FT SECTION	PAT-4500-0135-1010	L-80
	5 FT SECTION	PAT-4500-0135-1005	L-80

MINIMUM EQUIPMENT REQUIRED FOR A FULL SYSTEM CONSISTS OF ONE SHORT ASSEMBLY AND ONE SECTION.

PRODUCT OFFERINGS:

The Owen X-SPAN® System is an economical, proven, durable and dependable sealing system for the isolation of perforations, splits, corrosion or leaks in all types of tubulars and conditions. This system can utilize a multitude of deployment methods in all types of well bores. The large bore assures easy passage of service tools including bridge plugs, drop balls, seal bore assemblies, logging tools and perforating systems. The minimal surface equipment required for deploying the patch and rig less intervention results in significant savings for the operator.

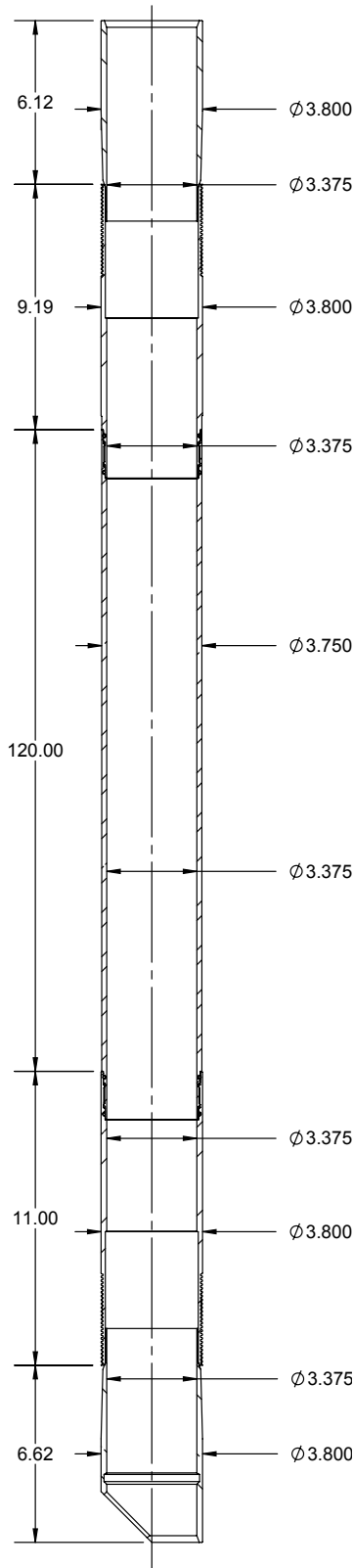
BENEFITS/CAPABILITIES:

The X-SPAN® System Offers:

- A proven, durable and dependable seal
- Deployment on electric wireline, tubing, drill pipe or coil tubing in vertical, deviated or horizontal or geothermal well bores
- An economical and reliable solution for a broad range of applications
- A large bore for easy passage of service tools
- Minimal surface equipment required for deployment

TECHNICAL INFORMATION:

PAT-4500-0126-1001, 4.5 INCH 11.6-12.6 PPF



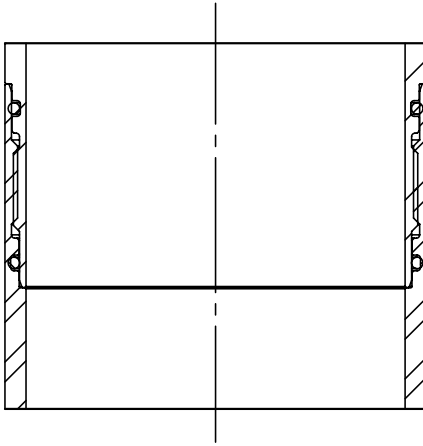
CASING O.D. (in)	4.5
CASING WT. (lb/ft)	12.6
CASING I.D. (in)	3.958
PATCH MAX. RUNNING O.D. (in)	3.800
PATCH I.D. AFTER SETTING (in)	3.375
PATCH DRIFT I.D. (in)	3.250
BURST HYDRAULIC RATING (psi)	8000
COLLAPSE HYDRAULIC RATING (psi)	6600

QTY.	DESCRIPTION	PART NUMBER	MATERIAL
1	PIN ELEMENT	PAT-4500-0126-3210	13 Cr
1	BOX ELEMENT	PAT-4500-0126-3410	13 Cr
1	TOP SWAGE	PAT-4500-0126-1110	4140
1	BOTTOM SWAGE	PAT-4500-0126-1310	4140
N+1	O-RING	OOO-V569-152	VITON
N+1	O-RING	OOO-V569-153	VITON
1	50 K SHEAR RING	PAT-4500-049	4140
1	SET SCREW 1/4 INCH X 20 TPI, 5/16 INCH	PUR-0501-030	ALLOY
1	10 FT SECTION	PAT-4500-0135-1010	L-80
1	SAFTEY RELEASE NUT	SET-3250-030	4142
1	BOTTOM ADAPTER	SET-3250-031	4140
1	SLEEVE NUT	SET-3250-120	4130 / 4140
1	SLEEVE LOCK NUT	SET-3250-121	4130 / 4140
1	SETTING SLEEVE ASSEMBLY	SET-3250-122	NOTED
1	QUICK CHANGE ROD	SET-3250-130	4130 / 4140
1	QUICK CHANGE NUT	SET-3250-131	4130 / 4140
1	LOCK NUT	SET-3500-025	1213 / 1215
1	TOP ADAPTER ROD	SET-3250-132	4130 / 4140
N+1	ROD TANDEM CONNECTOR	SET-3250-133	4130 / 4140
N	10 FT. ROD	SET-3250-134	4130 / 4140
OPT	5 FT. ROD	SET-3250-135	4130 / 4140
1	BOTTOM ROD	SET-3250-136	4130 / 4140
1	COLLET ASSEMBLY	SET-3250-137	NOTED
1	COLLET BODY	SET-3250-138	4140
1	END SUB	SET-3250-139	4140 / 4142
1	COLLET SUPPORT	SET-3250-140	4140
N	ROD SUPPORT	SET-3250-142	ALUMINIUM

MINIMUM EQUIPMENT REQUIRED FOR 10 FT. SYSTEM

EXTENSION SPECIFICATIONS:

PAT-4500-0126-1001, 4.5 INCH 11.6-12.6 PPF



PART NUMBER	LENGTH (INCHES)	OAL (INCHES)	WEIGHT (LBS.)	MATERIAL
PAT-4500-0135-1010	120	122.13	71.4	L-80
PAT-4500-0135-1005	60	62.13	35.7	L-80

PATCH TENSILE RATING	32,000 LBF.
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SYSTEM WEIGHTS:

	WEIGHT (LBS.)
PAT-4500-0126-1001	29.2
10 FT PATCH RUNNING WEIGHT	199.5
EA. ADDITIONAL 10 FT. LGTH ADD	133.4

SETTING TOOL OPTIONS:

HYDRAULIC			WEIGHT (LBS)
3-1/8 INCH HYDARULIC	SET-3125-010		300
3-1/4 INCH MULTISTAGE SETTING TOOL INTERNALLY STROKED (HYDRAULIC)	SET-3250-410		287
	SCREEN SUB	TT0798-288A	
	CIRCULATION SUB	SET-2875-010	
	DUMP SUB	OT0710-288B-000	

PYROTECHNIC			WEIGHT (LBS)
3-1/4 INCH MULTISTAGE SETTING TOOL	SET-3250-000		206
3-1/4 INCH MULTISTAGE SETTING TOOL INTERNALLY STROKED	SET-3250-400		200
	POWER CHARGE	OPC-3250-000-MS	
	IGNITER	DET-5306-074	
		DET-5306-008	