





## DYX-A型液压尾管悬挂器

Model DYX-A Hydraulic Liner Hanger

#### 特点

- 1. 适用于浅井和中深井;
- 2. 液压坐挂,操作简便;
- 3. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 4. 密封补芯可随送入工具提出,无需钻除。

#### Features

- 1. Suitable for shallow and medium-depth wells.
- 2. The liner hanger is set hydraulically and the operation is simple.
- The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 4. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

## 技术参数 Specifications

规格 Size (Csg x Liner)	适用上层套管 Casing		最大外径 Max O.D.	
in.	kg/m	lb/ft	mm	in.
	75.90	51.00		
10-3/4 x 7	82.59	55.50	240	9.449
	90.33	60.70		
	59.53	40.00		8.465
9-5/8 x 7	64.74	43.50	215	
	69.94	47.00		
	44.20	29.70		
7-5/8 x 5-1/2	50.15	33.70	165	6.496
	58.04	39.00		
	38.69	26.00		
7 x 5	43.16	29.00	152	5.984
	47.62	32.00		

## DYX-C型液压尾管悬挂器

Model DYX-C Hydraulic Liner Hanger

## 特点

- 1. 无活塞液压坐挂机构;
- 2. 适合厚壁上层套管;
- 3. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 4. 密封补芯可随送入工具提出,无需钻除。

#### Features

- 1. No piston in the hydraulic cylinder.
- 2. Suitable for thick wall previous casing.
- The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 4. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

规格 Size (Csg x Liner)	适用上层套管 Casing		最大外径 Max O.D.		
in.	kg/m	lb/ft	mm	in.	
	59.53	40.00			
9-5/8 x 8-1/8	64.74	43.50	215	8.465	
	69.94	47.00			
9-5/8 x 7	79.62	53.50	212	8.346	
7	47.62	32.00	4.40	E 0.07	
7 x 5	52.09	35.00	148	5.827	
	25.30	17.00			
5-1/2 x 4	29.76	20.00	114	4.488	
	34.23	23.00			
	25.30	17.00			
5-1/2 x 3-1/2	29.76	20.00	117	4.606	
	34.23				









## SYX-A型双锥液压尾管悬挂器

Model SYX-A Dual-Cone Hydraulic Liner Hanger

## 特点

- 采用双锥体结构,适合于深井重负荷尾管固井,悬挂载荷分布更均匀:
- 2. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 3. 密封补芯可随送入工具提出,无需钻除。

#### Features

- The dual-cone structure is suitable for hanging long heavy liner in deep wells. Liner weight is distributed onto the internal wall of the previous casing more evenly.
- The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 3. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

## 技术参数 Specifications

规格 Size (Csg x Liner)	适用上层套管(公称质量) Casing Weight		最大外径 Max O.D.		
in.	kg/m	lb/ft	mm	in.	
	75.90	51.00			
10-3/4 x 7-5/8	82.59	55.50	242	9.528	
	90.33	60.70			
	59.53	40.00		8.465	
9-5/8 x 7	64.74	43.50	215		
	69.94	47.00			
	38.69	26.00			
7 x 5	43.16	29.00	152	5.984	
	47.62	32.00			

## SSX-A型双锥双液缸尾管悬挂器

Model SSX-A Dual-Cone & Dual-Cylinder Liner Hanger

#### 特点

- 1. 采用双锥体双液缸结构,悬挂能力更强,载荷分布更均匀,坐挂成功率更高;
- 2. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 3. 密封补芯可随送入工具提出,无需钻除。

#### Features

- The dual-cone & dual-cylinder structure allows higher hanging capacity and higher hanger setting success ratio. Liner weight is distributed onto the internal wall of the previous casing more evenly.
- The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 3. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

规格 Size (Csg x Liner)	适用上层套管(公称质量) Casing Weight		最大的 Max (	
in.	kg/m	lb/ft	mm	in.
16 x 11-3/4	125.01	84.00	373	14.685
42 2/0 40 2/4	90.78	61.00	200	10.100
13-3/8 x 10-3/4	101.20	68.00	308	12.126
11-3/4 x 8-5/8	96.73	65.00	265	10.433
	67.71	45.50		9.449
10-3/4 x 7-5/8	75.90	51.00	240	
	82.59	55.50		
10-3/4 x 7	75.90	51.00	0.40	0.520
10-3/4 X /	82.59	55.50	242	9.528
	59.53	40.00		
9-5/8 x 7	64.74	43.50	215	8.465
	69.94	47.00		
	44.20	29.70		
7-5/8 x 5-1/2	50.15	33.70	165	6.496
	58.04	39.00		









## YJS-A型液压机械双作用尾管悬挂器

Model YJS-A Hydraulic/Mechanical Liner Hanger

#### 特点

- 1. 集机械、液压两种坐挂机构于一体, 坐挂成功率更高;
- 2. 采用内藏式卡瓦,下套管过程中卡瓦不会受到损伤;
- 3. 设有内部循环通道, 过流面积大;
- 4. 坐挂机构设计在送入工具上,可重复使用。
- 5. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 6. 密封补芯可随送入工具提出, 无需钻除;

#### Features

- The liner hanger can be set either hydraulically or mechanically, providing higher hanger setting success ratio.
- 2. The slips are recessed within the hanger body, eliminating the possibility of getting damaged when running in.
- 3. Designed with internal circulation channel to provide larger flow area.
- 4. Setting mechanism is deployed on the setting tool and can be reused on other liner hangers.
- The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 6. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

## 技术参数 Specifications

规格 Size (Csg x Liner)	适用上层套管 Casing V		最大: Max	
in.	kg/m lb/ft		mm	in.
	59.53	40.00		
9-5/8 x 7	64.74	43.50	215	8.465
	69.94	47.00		

## RNDYX-C型旋转尾管悬挂器

Model RNDYX-C Rotating Liner Hanger

#### 特点

- 1. 允许尾管在座挂前和座挂后旋转;
- 2. 特殊的轴承系统可满足长时间旋转要求:
- 3. 采用内嵌卡瓦坐挂机构,坐挂后过流面积较常规悬挂器增大34%,承载能力增加25%:
- 4. 具备液压和机械两种丢手方式;
- 5. 密封补芯可随送入工具提出, 无需钻除。

#### Features

- 1. Allows liner rotation before and after setting the hanger.
- 2. A special bearing system allows long time liner rotation.
- Compared with conventional slip design, the recessed slip design offers 34% more bypass area and 25% more hanging capability after hanger setting.
- 4. Primary hydraulic release and secondary mechanical release available.
- Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.



高载荷轴承系统 Heavy Duty Bearing System

规格 Size (Csg x Liner)	适用上层套管(公称质量) Casing Weight		最大外径 Max O.D.	
in.	kg/m	lb/ft	mm	in.
	67.71	45.50		
10-3/4 x 7-5/8	75.90	51.00	240	9.449
	82.59	55.50		
	59.53	40.00		8.465
9-5/8 x 7	64.74	43.50	215	
	69.94	47.00		
	38.69	26.00		
7 x 5	43.16	29.00	152	5.984
	47.62	32.00		









## XGJ-A型J形槽式机械尾管悬挂器

Model XGJ-A J-slot Mechanical Liner Hanger

#### 特点

- 1. J形槽引导坐挂导向钉换向,坐挂方式简单,只需上提正传半圈、下放,即可实现坐挂;
- 2. 没有液缸,不需投球,特别适合多压力系统管串;
- 3. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 4. 密封补芯可随送入工具提出, 无需钻除。

#### **Features**

- A J-slot guides the guiding pin for hanger setting. The liner hanger can be set simply by picking up the drill string, using right hand rotation to achieve 1/2 turn at the hanger position and lowering the drill string.
- The liner hanger system does not require a cylinder or a setting ball. Therefore, it is suitable for a liner string with several hydraulically activated tools.
- 3. The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 4. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

## 技术参数 Specifications

规格 Size (Csg x Liner)	适用上层套管(公称质量) Casing Weight		最大外径 Max O.D.		
in.	kg/m	lb/ft	mm	in.	
	67.71	45.50			
10-3/4 x 7-5/8	75.90	51.00	240	9.449	
	82.59	55.50			
	59.53	40.00		8.465	
9-5/8 x 7	64.74	43.50	215		
	69.94	47.00			
8-5/8 x 6-5/8	65.48	44.00	185	7.283	
	44.20	29.70			
7-5/8 x 5-1/2	50.15	33.70	165 6.496	6.496	
	58.04	39.00			
	38.69	26.00			
7 x 5	43.16	29.00	152	5.984	
	47.62	32.00			
6-5/8 x 4-3/4	47.62	32.00	137	5.394	

## GDG-A型轨道管式机械尾管悬挂器

Model GDG-A Mechanical Liner Hanger

## 特点

- 长短槽引导卡瓦套换向,坐挂操作简便,只需上提,下放即可坐挂:
- 2. 没有液缸,不需投球,特别适合多压力系统管柱;
- 3. 送入工具丢手方便,只需下压一定吨位,即可轻松正转倒扣;
- 4. 密封补芯可随送入工具提出,无需钻除。

#### **Features**

- Unique guiding channel design ensures that the hanger can be set simply by picking up and then lowering the drill string.
- The liner hanger system does not require a cylinder or a setting ball. Therefore, it is suitable for a liner string with several hydraulically activated tools.
- 3. The setting tool can be easily released just by slacking off certain weight and using right hand rotation.
- 4. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

规格 Size (Csg x Liner)	适用上层套管 Casing		最大外径 Max O.D.	
in.	kg/m	lb/ft	mm	in.
	67.71	45.50		
10-3/4 x 7-5/8	75.90	51.00	240	9.449
	82.59	55.50		
	59.53	40.00		8.465
9-5/8 x 7	64.74	43.50	215	
	69.94	47.00		
	38.69	26.00		
7 × 5	43.16	29.00	152	5.984
	47.62	32.00		









FGQ-A型尾管顶部封隔器 Model FGQ-A Liner Top Packer

## DYX-AF型封隔式尾管悬挂器

Model DYX-AF Liner Hanger with Packer

#### 特点

- 1. 具有封隔和悬挂尾管双重功能;
- 2. 封隔器靠重力坐封;
- 3. 封隔胶筒具有良好的抗酸、碱、油和高温性能;
- 4. 承受压差35MPa压差。

#### Features

- 1. A liner top packer is incorporated into a liner hanger to seal liner/casing overlap after setting the liner.
- 2. The packer is set by compression.
- 3. Packer element has superior capacity to resist acid, alkali, oil and high temperature.
- 4. The packer is capable of holding 5,000 psi differential pressure.

## 技术参数 Specifications

上层套管规格 Casing Size	尾管规格 Liner Size	适用上层套管(公称质量) Casing Weight		最大外径 Max O.D.	
in.	in.	kg/m	lb/ft	mm	in.
10-3/4	8-1/8 7-5/8 7	82.59-90.33	55.50-60.70	238	9.370
		53.57-59.53	36.00-40.00	218	8.583
9-5/8	7 5–1/2	59.53-69.94	40.00-47.00	215	8.465
3 0,0		69.94-79.62	47.00-53.50	210	8.268
		86.91	58.40	208	8.189
7 5/0	5-3/4	39.29-44.20	26.40-29.70	170	6.693
7-5/8	5-1/2 5	50.15-58.04	33.70-39.00	163	6.417
		34.23-38.69	23.00-26.00	156	6.142
7	5 4-1/2	38.69-47.62	26.00-32.00	152	5.984
	. 1/2	47.62-52.09	32.00-35.00	148	5.827

## SSX-CFC型封隔式尾管悬挂器

Model SSX-CFC Liner Hanger with Packer

#### 特点

- 1. 具有封隔和悬挂尾管双重功能;
- 2. 采用实体膨胀机构, 能承受70MPa压差;
- 3. 过流面积大,允许更大的循环排量,降低了封隔器在入井 和循环过程中提前坐封的机率;
- 4. 封隔胶筒具有良好的抗酸、碱、油和高温性能。

#### Features

- A liner top packer is incorporated into a liner hanger to seal liner/casing overlap after setting the liner.
- A solid expandable mechanism is incorporated into the packer system to hold 10,000 psi differential pressure.
- Increased flow area allows larger flow rate and reduces the possibility of pre-matured packer setting during RIH and circulation.
- 4. Packer element has superior capacity to resist acid, alkali, oil and high temperature.

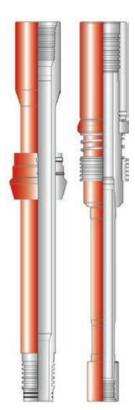


FGQ-B型尾管顶部封隔器 Model FGQ-B Liner Top Packer

•						
上层套管规格 Casing Size	尾管规格 Liner Size	适用上层套管(公称质量) Casing Weight				
in.	in.	kg/m	lb/ft	mm	in.	
9-5/8	7 5-1/2	64.74-69.94	43.50-47.00	215	9.370	
9-5/8		79.62	53.50	210	8.268	
_	5 4-1/2	43.16-47.62	29.00-32.00	152	5.984	
/		52.09	35.00	147	5.787	







## ST-A型尾管悬挂器送入工具

Model ST-A Liner Hanger Setting Tool

#### 特点

- 1. 将尾管悬挂器和尾管送到井内预定位置,实现悬挂器坐挂 动作,注替水泥浆,施工结束后提出井口;
- 2. 与DYX型、SYX型、SSX型、XGJ型、GDG型尾管悬挂器配套使用:
- 3. 盘式结构,可下压更大的载荷;
- 4. 倒扣不需找中和点,只需将钻具重量下压数吨,便可轻松 正转倒扣:
- 5. 密封补芯可随送入工具提出,无需钻除。

#### Features

- Used for running liner hanger and liner to the designed depth and setting the liner hanger. The setting tool is POOH after cementation.
- 2. Used with Model DYX, SYX, SSX, XGJ, and GDG liner hangers.
- 3. Tapered bearing plate allows higher slack-off weight.
- 4. Heavy duty thrust bearing eliminates the need to find the neutral point while releasing the setting tool. The setting tool can be easily released by slacking off certain weight and using right hand rotation.
- 5. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

# 技术参数 Specifications

尾管规格	连接扣型	额定	负荷	密封	能力
Liner Size	Connection		tated Load Sealing Capacity		
	,			-	· .
in.	/	KN	Klb.	MPa	psi
4	210 (2-7/8 IF)	600	135		
5	310 (3-1/2 IF)	800	180		
7	410 (4-1/2 IF)		450	450 35	5,000
7-5/8		2,000			
9-5/8					
10-3/4	520 (5-1/2 FH)	2,400	540		

## ST-B型尾管悬挂器送入工具

Model ST-B Liner Hanger Setting Tool

#### 特点

- 1. YJS型液压机械双作用悬挂器专用送入工具:
- 2. 液压装置设计在送入工具上, 可重复使用;
- 3. 倒扣不需找中和点,只需将钻具重量下压数吨,便可轻松 正转倒扣:
- 4. 密封补芯可随送入工具提出,无需钻除。

#### Features

- 1. Specially designed for Model YJS Mechanical/ Hydraulic Liner Hanger.
- 2. Setting mechanism is deployed on the setting tool and can be reused on other liner hangers.
- Heavy duty thrust bearing eliminates the need to find the neutral point while releasing the setting tool. The setting tool can be easily released by slacking off certain weight and using right hand rotation.
- 4. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.



<b></b>							
尾管规格 Liner Size	连接扣型 Connection	额定负荷 Rated Load		密封能力 Sealing Capacity			
in.	/	KN	Klb.	MPa	psi		
5-1/2	410 (4-1/2 IF)	2,000	450	35	5,000		
7							
7-5/8							
9-5/8							









## ST-C型尾管悬挂器送入工具

Model ST-C Liner Hanger Setting Tool

## 特点

- 1. 与封隔式尾管悬挂器配套的专用送入工具;
- 注完水泥后,将送入工具上的涨封挡块上提到回接筒上,下压一定吨位即可完成坐封;
- 3. 盘式结构,可下压更大的载荷;
- 4. 倒扣不需找中和点,只需将钻具重量下压数吨,便可轻松正转 倒扣:
- 5. 密封补芯可随送入工具提出,无需钻除。

#### Features

- 1. Specially designed for liner hanger with packer.
- After the completion of cementation, the setting dogs are pulled out of the PBR and slack-off weight sets the packer.
- 3. Tapered bearing plate allows higher slack-off weight.
- 4. Heavy duty thrust bearing eliminates the need to find the neutral point while releasing the setting tool. The setting tool can be easily released by slacking off certain weight and using right hand rotation.
- 5. Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

## STY-A型液压丢手工具

Model STY-A Hydraulic Release Tool

## 特点

- 1. 采用弹性爪机构承载尾管负荷;
- 2. 在丟手前后均能够传递扭矩,实现尾管旋转;
- 3. 液压丢手,如果液压丢手失效,可通过机械机构实现 丢手。

#### Features

- 1. The hydraulic release tool carries the liner weight with a collet system.
- 2. Torque can be transmitted to liner string for rotation before and after releasing the tool.
- Can be hydraulically released. In case hydraulic release fails, secondary mechanical release is available.



尾管规格 Liner Size	连接扣型 Connection	额定负荷 Rated Load		密封 Sealing (	
in.	/	KN	Klb.	MPa	psi
5	310 (3-1/2 IF)	800	180		
5-1/2	310 (3-1/217)	800	100	35	5,000
7		IF) 2,000	450		
7-5/8	410 (4-1/2 IF)				
8-1/8					
10-3/4	520 (5-1/2 FH)	2,400	540		



尾管规格 Liner Size	额定负荷 Rated Load		抗扭能力 Torsional Strength		轴向抗压能力 Compression Strength	
in.	KN Klb.		N.m	lb.ft	KN	Klb.
5	800	176	15,000	11,060	500	110
7	2,000	450	36,000	26,550	1,000	225
7-5/8	2,400	540	36,000	26,550	1,000	225









## MFH型密封总成

Model MFH Setting Collar

#### 特点

- 1. 上部与回接筒联接,内部反扣与送入工具相连;
- 2. 内部凹槽与密封补芯配合, 限制密封补芯上下活动;
- 3. 可与各种形式悬挂器配套使用;
- 4. 密封补芯可随送入工具提出,无需钻除。

#### Features

- The pin up is connected with the PBR and the internal left–handed thread is connected with the releasing nut of a setting tool.

  The pin up is connected with the releasing nut of a setting tool.

  The pin up is connected with the PBR and the internal left–handed thread is connected with the PBR and the internal left–handed thread is connected with the PBR and the internal left–handed thread is connected with the PBR and the internal left–handed thread is connected with the PBR and the internal left–handed thread is connected with the releasing nut of a setting tool.

  The pin up is connected with the releasing nut of a setting tool.
- 2. The internal groove limits the movement of Retrievable Packoff Bushing.
- 3. Can be used with all types of liner hangers.
- Retrievable Pack-off Bushing can be retrieved with setting tool, eliminating drill-out.

## 技术参数 Specifications

规格 Liner Size	最大外径 Max O.D.			
in.	mm	in.		
3-1/2	112	4.409		
4	112	4.409		
5	152	5.984		
5-1/2				
7	215	8.465		
7-5/8				
9-5/8	270	10.630		
10-3/4	285	11.220		

## QZ型球座

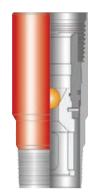
Model QZ Landing Collar

## 特点

- 1. 可与各种液压尾管悬挂器配套使用:
- 2. 复合胶塞与球座中锁紧座结合后可形成密封并防回压;
- 3. 内套均由可钻材料制成, 钻除方便。

#### Features

- 1. May be used with all hydraulic liner hangers.
- The latch seat latches and seals the combination of liner wiper plug and pump down plug, holding back pressure.
- 3. All internal parts are made of easily-drillable materials.



## SZJ型锁紧座

Model SJZ Landing Collar

## 特点

- 1. 可与各种机械式尾管悬挂器配套使用;
- 2. 复合胶塞与锁紧座结合后可形成密封并防回压;
- 3. 内套均由可钻材料制成,钻除方便。

## Features

- 1. Can be used with all mechanical liner hangers.
- The latch seat latches and seals the combination of liner wiper plug and pump down plug, holding back pressure.
- All internal parts are made of easily-drillable materials.









**QZ-T型可提出式球座**Model QZ-T Landing Collar with Retrievable Ball Seat

#### 特点

- 1. 与液压尾管悬挂器配合使用, 悬挂筛管;
- 2. 球座在悬挂器坐挂和送入工具丢手后可随送入工具一起提 出,无需钻除。

## Features

- 1. Used with a hydraulic liner hanger to run and set slotted liner.
- 2. The ball seat can be retrieved with setting tool after setting the liner hanger and releasing the setting tool, eliminating drill-out.



## XJS型钻杆胶塞

Model XJS Pump Down Plug

#### 特点

- 1. 由不同尺寸的胶碗和导向头组成,用于刮拭钻杆和送入工 具。与尾管胶塞复合后锁紧在一起,刮拭尾管,实现碰压。
- 2. 有组合式、整体硫化式两种结构供选择。

#### Features

- 1. The pump down plug includes a guide nose and several fins of different sizes. After wiping the drill pipe string and liner hanger setting tool, the pump down plug latches in and shears off a liner wiper plug which is designed to wipe the liner and bump in the landing
- 2. The wiper fins can be either strung or bonded on a mandrel.



## 技术参数 Specifications

钻杆规格 DP Size, in.	2-7/8	3-1/2	5	5-1/2	5-7/8
导向头最大外径 Max Solid O.D. mm (in.)	44 (1.732)	47 (1.850)	63 (2.480)	71 (2.795)	59 (2.323)
长度 Length, mm (in.)	244 (9.606)	293 (11.535)	355 (13.976)	347 (13.661)	395 (15.551)



## DJS型尾管胶塞

Model DJS Liner Wiper Plug

#### 特点

连接在送入工具上,与钻杆胶塞复合后刮拭尾管。碰压后与球座锁紧 在一起, 可防回压。

#### Features

The liner wiper plug is shear-pinned on the lower end of setting tool. After sheared by a pump down plug, it wipes the liner, bumps and latches in the landing collar and holds back pressure.







## 分体式钻杆胶塞

Combination Pump Down Plug

#### 特点

用于复合钻具尾管顶替作业,采用两级结构将适合不同钻具内经的皮碗组合在一起。当胶塞到达钻具的变径接头时,上下部胶塞分离,下部胶塞继续下行直至碰压。该胶塞具有良好的液体隔离能力和顶替效果。

#### Features

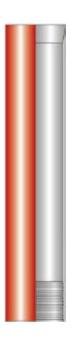
The two-stage pump down plug is used to displace in combination drillpipe string during liner cementing. It combines several different-sized wiper fins on a two-stage structure. After the plug lands on a specially designed cross-over, the lower section shears off, wipes the smaller drill pipe string, latches in and shears off the liner wiper plug and finally bumps in the landing collar.



特殊变径接头 Special Cross-over

## 技术参数 Specifications

钻杆规格 DP Size, in.	5-1/2 x 4	5-1/2 x 3-1/2	5 x 3-1/2
胶塞总长 Overall Length, mm (in.)	425 (16.732)	365 (14.370)	340 (13.386)
剪切压力 Shear Pressure, MPa (psi)	10~12 (1,450~1,750)		



## HJT型回接筒

Model HJT Polished Bore Receptacle

#### 特点

- 1. 内孔光洁度高,密封可靠;
- 2. 顶部喇叭口便于回接插头插入;
- 3. 有不同长度供选择。

#### Features

- 1. Honed bore provides reliable sealing.
- 2. Tapered guide on the top of PBR allows smooth stab-in for a tie back seal nipple.
- 3. Various lengths are available.

## JFG型节流浮箍

Model JFG Orifice Float Collar

#### 特点

- 1. 用于尾管回接固井;
- 2. 节流机构可确保回接插头顺利插入回接筒;
- 3. 可实现固井胶塞碰压;
- 4. PDC钻头可钻。

#### **Features**

- 1. Used for liner tie back cementing operation.
- 2. The orifice design ensures that a tie back seal nipple can be stabbed into the PBR successfully.
- 3. Also serves as a bump for a cementing plug.
- 4. PDC drillable.









## HXX型铣鞋

Model HXX Tie Back Mill

#### 特点

- 钢体上切削翼既能有效清除回接筒内的水泥等杂质,又不会损伤回接筒内表面;
- 2. 采用锥形结构,可保证顺利进入回接筒内部。

#### Features

- The cutting blades can effectively remove residual cement and other debris in PBR without damaging the inner hore.
- 2. Tapered profile allows easy entry into the PBR.

## 技术参数 Specifications

尾管规格 Liner Size		铣鞋外径 Max O.D.		钻压 VOB	转速 Rotation Speed		排量 w Rate
in.	mm	in.	t	Klb	RPM	l/s	bbl/min
11-3/4	309	12.165					
10-3/4	274	10.787					
9-5/8	260	10.236					
8-5/8	223	8.780				30~70 6~8 2.3~3	
8-1/8	209	8.228					2.3 ~ 3.0
7-5/8	201	7.913					
7	177 182 184	6.969 7.165 7.244	2~5	4.5 ~ 11	30~70		
6-5/8	164	6.457					
5-3/4	153 144	6.024 5.669					
5-1/2	144	5.669					
5	132	5.197					
4-3/4	121	4.764					

## HC-A型回接插头

Model HC-A Tie Back Seal Nipple

## 特点

- 设计有导向头和注水泥循环孔,可先将导向头插入回接筒 再注水泥,克服了常规插头注水泥后不易插入回接筒的 散泄。
- 2. 导向头为流线型, 可确保顺利插入回接筒;
- 3. 密封件由多组密封圈组成,可确保密封效果,且耐温、抗腐蚀性强。

## Features

- The design of rounded guide nose and side ports allows cementation when the nipple is partially stabbed into the PBR. This has solved the problem that a conventional tie back seal nipple is difficult to stab into the PBR after cementation.
- 2. Streamline guide nose allows easy entry into the
- 3. Groups of high temperature—and corrosion—resistant seals provide effective sealing.



规格 Liner Size	密封能力 Sealing Capacity		耐温 Rated Temperature	有效密 Sealing	
in.	MPa	psi	℃	mm	in.
11-3/4				1184	46.614
10-3/4				1199	47.205
10-1/4				1174	46.220
9-7/8				1199	47.205
9-5/8				1023	40.276
8-5/8		5,000		1077	42.404
8-1/8				1127	44.370
7-5/8	35		−35 ~ 170	1144	45.039
7				1185	46.654
6-5/8				1238	48.740
5-3/4				1133	44.606
5-1/2				1133	44.606
5				1133	44.606
4-3/4				1133	44.606
4-1/2				1133	44.606







## HC-D型封隔式回接插头

Model HC-D Tie Back Seal Nipple with Packer

#### 特点

- 1. 通过套管或套管加钻杆送入,将尾管回接至井口或井内某一位 置,注水泥后再坐封;
- 2. 靠重力坐封, 并实现永久封隔;
- 3. "V"形密封组件和封隔胶筒密封,环空封隔能力达35MPa;
- 4. 设计有锁紧机构,坐封后无论上提或下放均不会解封。

#### Features

- Run with casing or casing plus drill pipe. Used for the tie-back of a liner string to surface or to any position above the liner top. The packer is set after cementation.
- 2. Permanent pack-off is achieved after the packer is weight set.
- 3. Both the packer elements and groups of V-rings provide 5,000 psi sealing capacity.
- 4. Once the packer is set, the hold-down slips and the internal locking mechanism hold the packer tight. Neither picking up nor slacking off the drill string can retrieve the packer.

## 技术参数 Specifications

尾管规格 Liner Size	启动力 Shear-pin Shear Weight		坐封力 Packer Compression Weight		密封能力 Sealing Capacity		封隔器胶筒直径 Packing Element O.D.	
in.	t	Klb	t	Klb	MPa	psi	mm	in.
7-5/8							233	9.173
7							208	8.189
5-1/2	12	26	20~40	44~88	35	5,000	200	0.109
5							146	5.748
4-1/2							146	3.748

## HC-E型封隔式回接插头

Model HC-E Tie Back Seal Nipple with Packer

#### 特点

- 通过套管或套管加钻杆送入,将尾管回接至井口或井内某一位置,注水泥后再坐封;
- 2. 金属实体膨胀,环空封隔能力达70MPa;
- 3. 设计有锁紧机构和防退卡瓦,胶筒一旦胀封,无论管柱上 提或下放,均不会解封;
- 4. 特殊弹簧套可防止封隔器提前坐封。

#### Features

- Run with casing or casing plus drill pipe. Used for the tie-back of a liner string to surface or to any position above the liner top. The packer is set after cementation.
- A solid expandable mechanism is incorporated into the packer system to hold 10,000 psi differential pressure.
- Once the packer is set, the hold-down slips and the internal locking mechanism hold the packer tight.
   Neither picking up nor slacking off the drill string can retrieve the packer.
- Specially designed spring sleeve prevents prematured setting of the packer.



尾管规格 Liner Size	启动力 Shear-pin Shear Weight		坐封力 Packer Compression Weight		密封能力 Sealing Capacity		封隔器胶筒直径 Packing Element O.D.	
in.	t	Klb	t	Klb	MPa	psi	mm	in.
10-3/4							308	12.126
7-5/8							233	9.173
7	15	33	30~40	66~88	70	10,000	210	8.268
5-1/2							160	6.299
5							152	5.984