

YFZ 型双级注水泥器

YFZ 型双级注水泥器为内关闭结构，通过投重力塞或顶替型打开塞使循环孔打开，关闭塞带动关闭套下行关闭循环孔。

特点：

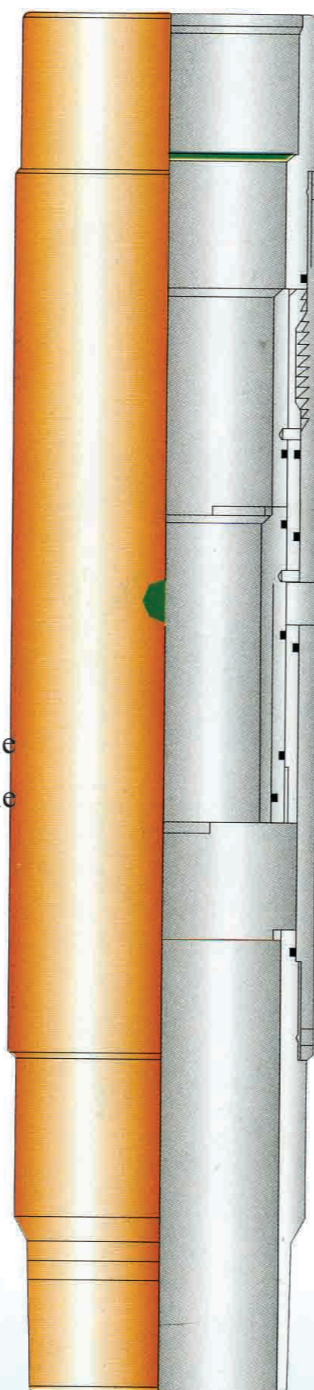
1. 采用内关闭式结构，关闭后可实现永久性自锁；
2. 打开、关闭动作时均不存在小腔液体压缩问题；
3. 上下接头内径与套管内径一致，但小于关闭套内径，起下钻及钻除作业时可有效保护关闭套，使其免受损伤；
4. 全部附件均由可钻性好的橡胶 / 铝制材料制成，且具有防转机构，钻除方便；
5. 配有顶替型打开塞，可用于连续式双级注水泥作业。

YFZ Double Stage Cementer:

The YFZ double stage cementer is inner-closing configuration, in which the circulation holes are opened with free-fall or pumping-down opening plug. The closing plug drives the closing sleeve to shut off the circulation holes.

Features:

1. With inner-closing structure, the YFZ double stage cementer can bring self-locking after closing.
2. The compressure-relief design prevents fluid trapping and compression between the opening device and the closing plug during the closing phase of the tool's operation.
3. The I.D. of upper/lower sub is the same as that of casing, but smaller than that of closing sleeve, which can minimize chances of damages to the closing sleeve.
4. The inner spares are made of an easily drillable rubber/aluminum material. Both the opening and closing sparts have against rotation for easy drillout.
5. Fixing the replaced type opening plug, it is used in the operation of continuous cementing.



CFZ 型液压式双级注水泥器

CFZ 型液压式双级注水泥器为关闭结构，通过液体的压差打开循环孔，关闭塞带动关闭套下行关闭循环孔。

特点：

1. 打开压力可以调节，且打开动作不受井斜的影响；
2. 碰压后即可打开循环孔、打开、关闭动作时均不存在小腔液体压缩问题；
3. 上下接头内径与套管内径一致，但小于关闭套内径，起下钻及钻除作业时可有效保护关闭套，使其免受损伤；
4. 全部附件均由可钻性好的橡胶 / 铝制材料制成，且具有防转机构，钻除方便；

CFZ Hydraulic Opening Stage Cementer:

The CFZ hydraulic opening stage cementer is inner-closing configuration, opening through pressure difference. The closing plug drives the closing sleeve to shut the circulation holes.

Features:

1. Opening pressure can be adjusted and it is not effected by hole angle or mud properties for operation.
2. The pressure-relief design prevents fluid trapping and compression during the opening phase of the tool's operation.
3. The I.D. of upper/lower sub is the same as that of casing, but smaller than that of closing sleeve, which can minimize chances of damages to the closing sleeve.
4. The inner spares are made of an easily drillable rubber/aluminum material. Both the opening and closing sparts have against rotation for easy drillout.

YFZ、CFZ 型技术参数 Specifications Parameters

规格 (mm) Specifications (mm)	Φ139.7	Φ177.8	Φ244.5
最大外径 (mm) MAX O. D. (mm)	170	208	285
通径 (mm) Drill-out . D. (mm)	122	155	220
额定负荷 (t) Rated Load (t)	140	170	210
密封能力 (Mpa) Sealing Capacity (Mpa)	25	25	25
打开压力 (Mpa) Opening Pressure (Mpa)	7-8	7-8	7-8
关闭压力 (Mpa) Closing Pressure (Mpa)	5-6	5-6	5-6
下滑套内径 (mm) Lower Sliding Sleeve . D (mm)	85	115	176
上滑套内径 (mm) Upperr Sliding Sleeve . D (mm)	95	125	197

