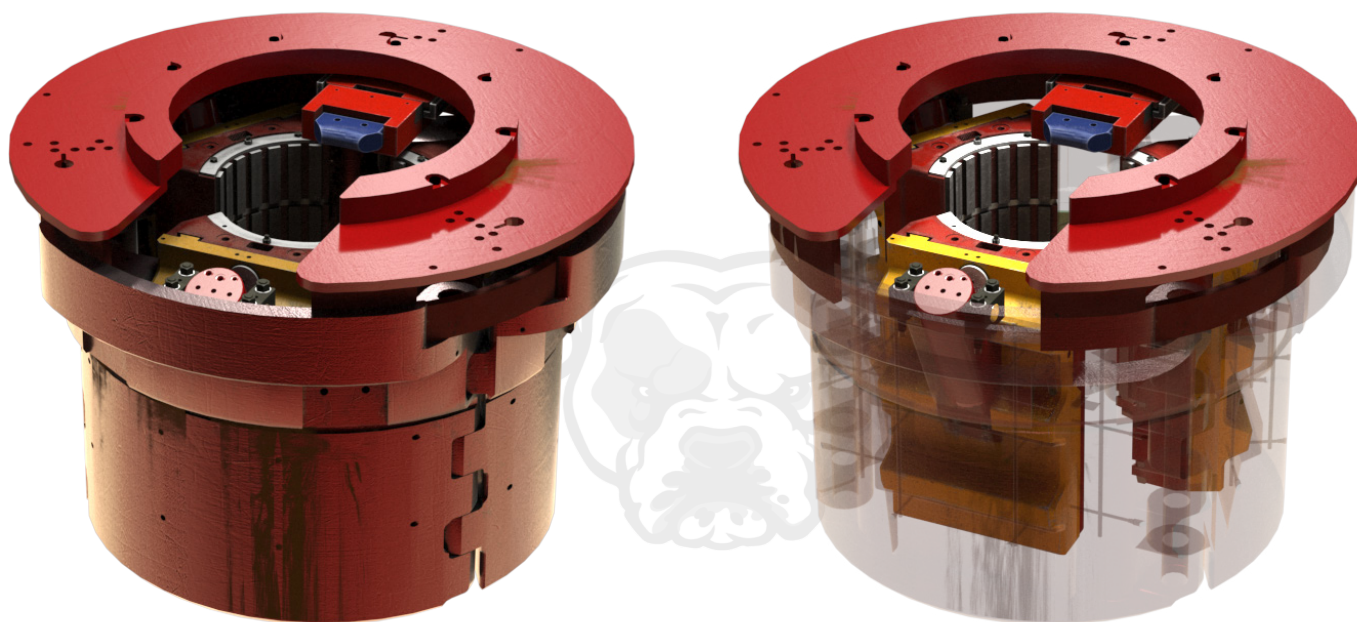


Bulldog APS

Automated Power Slips



Product Description

The Bulldog Automated Power Slips feature a flush floor design to eliminate tripping hazards, prevent lifting and remove pinch points.

Ease of maintenance is achieved through quick-change die blocks and symmetrical slip housing. HMH's Automated Power Slips are designed for easy integration with the ES Pipe Cleaning System. They feature quick-disconnect, self-energizing lower centralizers, which prevent pipe contact and contribute to the enhanced performance of the power slips.

Key Features

OPERATIONAL

- Quick change inserts, symmetrical slip housing
- Low profile reduces collision hazards
- Designed for integration with the ES Pipe Cleaning System

PERFORMANCE

- Self-energizing die blocks
- Optional built-in centralizer

- Die profiles designed for grip and applying torque 56 000 ft-lbs (75 926 Nm)
- Quick disconnect and rig-up/down

Benefits

SAVES COSTS

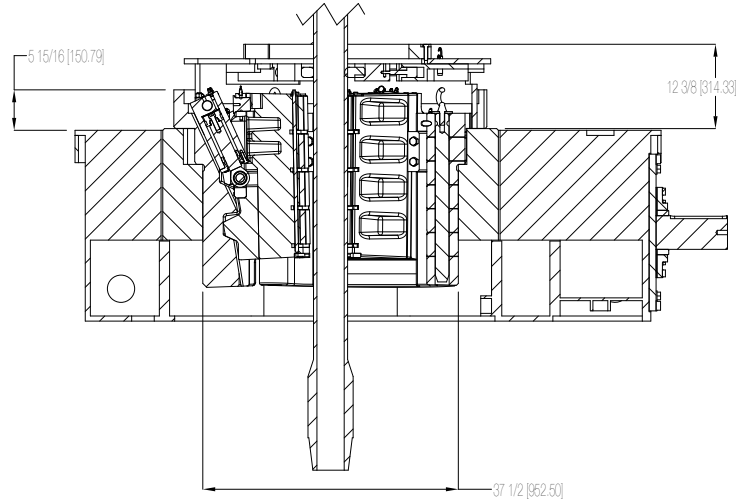
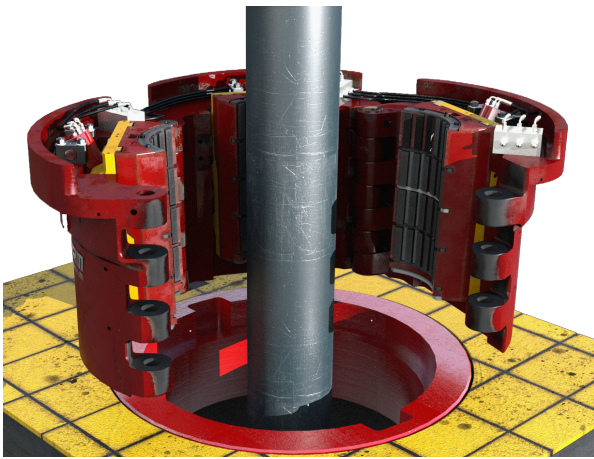
- Optional upper centralizer stabilizes the pipe whip during drilling
- Lower centralizer prevents pipe impact with dies, extending life of dies
- Easy removal and separation for bit pass-through
- Quick change die holder blocks saves time on well and reduces perceived NPT
- Off the shelf slip die inserts

SAFER

- Eliminates manual pipe handling and personnel around the rotating zone
- Interlocks for open / close / set to prevent pipe drop
- Low profile design helps to reduce tripping hazards



Bulldog APS Automated Power Slips



Technical Specifications

Bulldog APS Automated Power Slips		
	APS 275	APS 275
Slip Sizes - Rotary Table	27 ½ in / 698 mm	37 ½ in / 953 mm
Slip Rating	Up to 500T / 453.6 mT	Up to 500T / 453.6 mT
Slip Length	22 ¾ in / 457 mm	22 ¾ in / 457 mm
Pipe Inserts Min	2 ⅞ in / 73 mm	2 ⅞ in / 73 mm
Pipe Inserts Max	10 ⅞ in / 276 mm	14 ½ in / 368 mm
Die Inserts	Varco	Varco
Hydraulic Feedback	Position and Pressure	Position and Pressure
Controls	Hydraulic/Electric	Hydraulic/Electric
RIG INTERFACE		
Input Command	Slips Open / Close	Slips Open / Close
Feedback	Slips Open	Slips Open
Feedback	Slips Closed	Slips Closed
Feedback	Slips Set	Slips Set
OPERATIONAL		
Height Overall	30 ¼ in / 770 mm	30 ¼ in / 770 mm
Height Above Floor	5 15/16 in / 150.8 mm	5 15/16 in / 150.8 mm
With Centralizer	12 ¾ in / 314.3 mm	12 ¾ in / 314.3 mm
Weight With Centralizer	~ 4 800 lbs / 2 200 kg (dependent on insert size)	~ 6 200 lbs / 2 800 kg (dependent on insert size)
Max Backup Torque	56 000 ft*lbs / 75 000 Nm	56 000 ft*lbs / 75 000 Nm
Req. Hydraulic Pressure	3 000 PSI / 206 Bar	3 000 PSI / 206 Bar
Max Return line Press	100 psi / 7 bar	100 psi / 7 bar
Req. Hydraulic Flow	12 gpm / 45 lpm	12 gpm / 45 lpm
CERTIFICATION		
Design Certification	API 7K	API 7K
Electrical Rating	Flame Proof Ex db Zone 1, 2G ATEX IECEx - Europe International	Flame Proof Ex db Zone 1, 2G ATEX IECEx - Europe International

DRILL PIPE PERFORMANCE	MAX VERTICAL DEPTH BASED ON API CRUSH
4 in / 102 mm	24 400 ft / 7 440 m
5 in / 127 mm	22 400 ft / 6 830 m
5.5 in / 140 mm	21 000 ft / 6 400 m

CASING PERFORMANCE	MAX VERTICAL DEPTH BASED ON API CRUSH
7 in / 178 mm (Q-125)	21 000 ft / 6 400 m
9 ⅝ in / 245 mm (Q-125)	18 000 ft / 5 500 m
13 ⅝ in / 346 mm (Q-125)	15 000 ft / 4 570 m

