



IOGS

ROCKTM

Drilling Jars



ROCK™ Drilling Jars –developed by a team of Industry professionals with proven combined track record of more than 100 years in Oil and Gas Industry.

The team's technical know-how for better understanding of the drilling challenges faced by the Industry helped develop Rock Drilling Jars with advanced features.

IOGS has the expertise to develop and supply equipments at the most competitive price and superior specifications to meet project requirements.

ROCK™ Drilling Jars are designed and manufactured to perform under severe drilling conditions including extreme wells such as deep, complex, extended reach, horizontal and harsh environments.

ROCK™ Drilling Jars provide secure, reliable and durable operations providing high impact as and when required regardless of whether it is run in tension or compression at any section of the hole.

ROCK™ Drilling Jars deliver variable hitting loads and extended periods of continuous jarring, providing reliability and long operating life in a wide range of drilling conditions and hostile environments.

ROCK™ Drilling Jar with its unique design combines both a hydraulic time delay release and mechanical latch which is simple to operate without the risk of unexpected jarring.

- ☛ **Most advanced hydraulic design provides maximum performance**
- ☛ **Robust body construction makes the Jar as strong as other BHA elements which increases the reliability.**
- ☛ **Advanced seal design permits extended field service cycle**
- ☛ **No unexpected jarring – Reducing damage to surface & downhole equipments**
- ☛ **Simple to operate – No safety clamps or special handling procedures**
- ☛ **Placement in BHA is less restricted. Jar can be used in tension or compression within the limits of the latch setting.**
- ☛ **Linear latch – Not affected by torque and hence can be used in high torque generated hole sections**
- ☛ **Separate spline, latch and hydraulic chambers: Prevents contamination of fluid in the hydraulic chamber**
- ☛ **Hydraulic delay timings relatively constant even after prolonged jarring**
- ☛ **Fully sealed – Lubricated for longer service life**



FEATURES

Our commitment is to exceed customers' expectations by providing

- **Timely delivery**
- **100% quality assurance**
- **Highly experienced field service team**
- **24 x 7 operational and Technical assistance**

Operation:

Jarring up:

- To jar up apply overpull at the jar as required and wait for the jar to fire, latch will automatically release when latch setting load is exceeded.
- To repeat jarring, reset jar into latched position by applying weight on the jar to return to latched position and be ready to be fired again Up or Down.
- Overpull in excess of Max-Pre-Jarring Load should not be applied as it may damage the hydraulics of the jar.

Jarring Down:

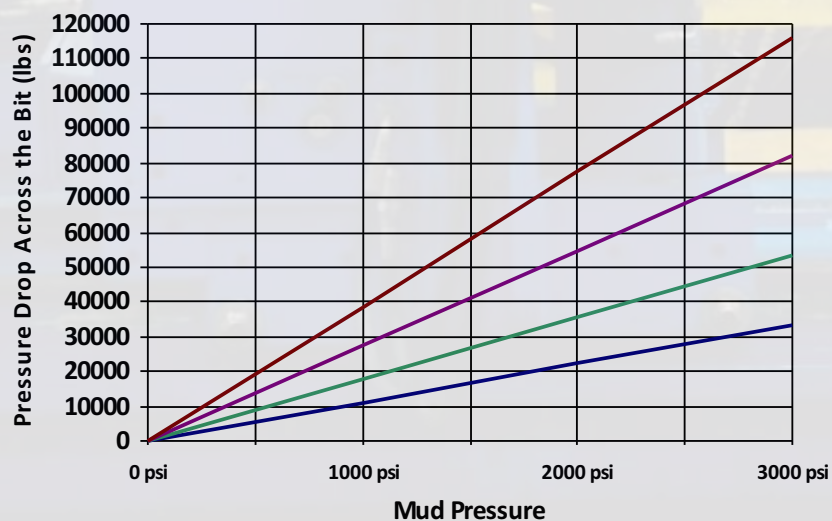
- To jar down, apply weight on the jar as required and wait for the jar to fire, the latch will automatically release when latch setting load is exceeded.
- To repeat jarring, reset jar into locked position by applying overpull at the jar to return to latched position and be ready to be fired again Up or Down.
- Jar load will have to be exceeded for latch to release and hydraulics to be engaged.

PUMP OPEN FORCE

- Pump pressure will generate a force, which will try to open the tool and thereby increase ease of opening jar latch and increase impact.
- If circulation is maintained while jarring, the pressure drop across the bit creates a force tending to extend the jar. The pump open force must be considered since it reduces the force required to jar up and increases the force required to jar down. The pump open force is calculated by multiplying the pressure drop across the bit by the pump open area.

Size	ROCK™ 475	ROCK™ 650	ROCK™ 675	ROCK™ 800	ROCK™ 950
Pump Open Area (POA)	11.16 Sq in.	17.89 Sq in.	17.89 Sq in.	27.31 Sq in.	38.73 Sq in.

Pump Open Force

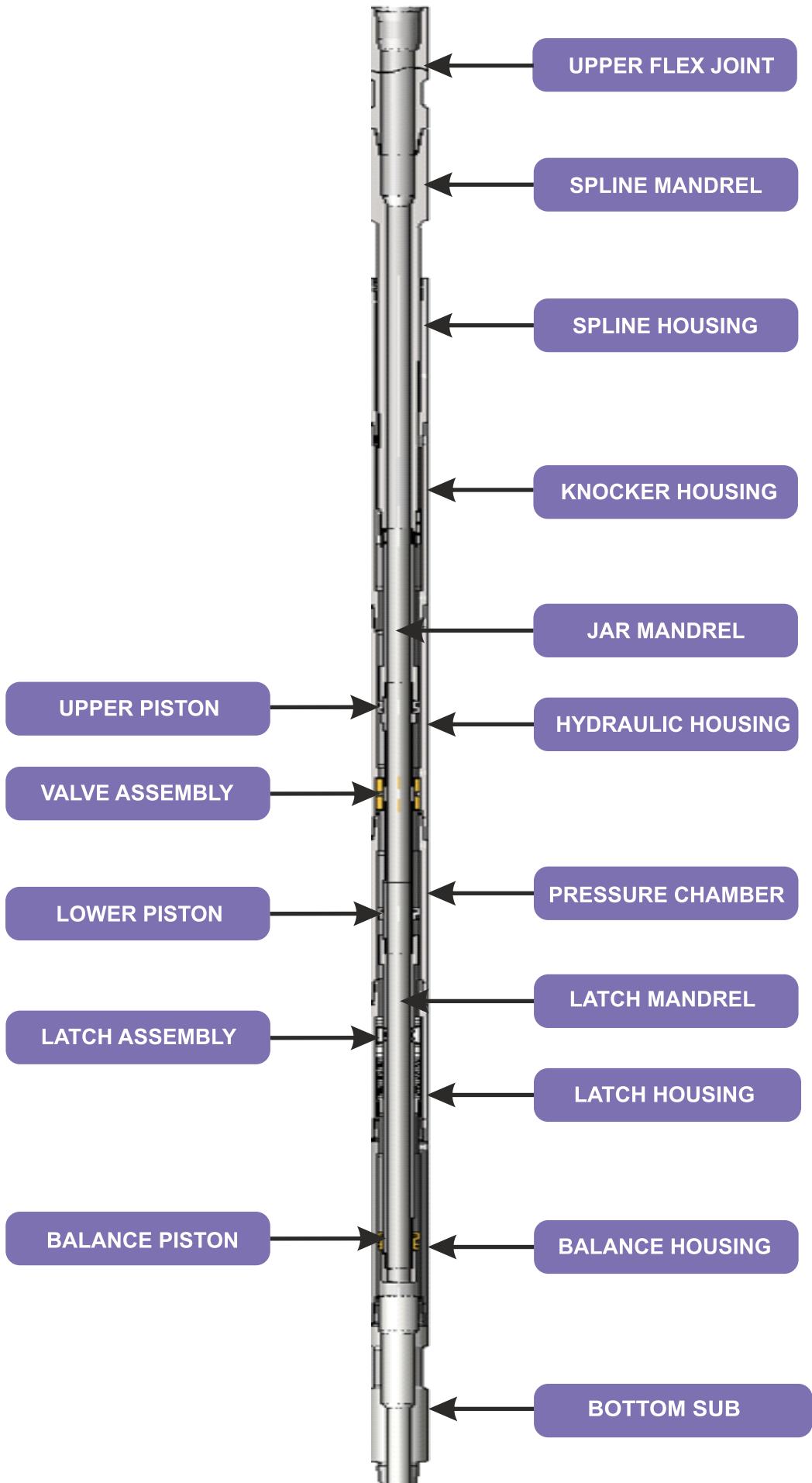


Tool Size — 4 3/4" — 6 1/2" & 6-3/4" — 8" — 9 1/2"

SPECIFICATION OF DRILLING JARS

ROCK™ (Series)		ROCK™(475)	ROCK™(650)	ROCK™(675)	ROCK™(800)	ROCK™(950)	
Nominal Size	Inches	4¾	6½	6¾	8	9½	
Bore ID	Inches	2.25	2.50	2.75	3.00	3.125	
Overpull Maximum	lbs	90000	175000	180000	300000	465000	
Tensile Load	lbs	456500	954100	1004500	1478900	2065600	
Yeild Torque	Ft-lb	20000	56400	60800	106000	174200	
Overall Stoke	Inches	22	22	22	22	22	
Up Stroke	Inches	12.5	12.5	12.5	12.5	12.5	
Down Stroke	Inches	9.5	9.5	9.5	9.5	9.5	
Nominal Latch Setting	UP	lbs	30-40,000	60-80,000	60-80,000	70-90,000	80-100,000
	DOWN	lbs	15-25,000	30-50,000	30-50,000	30-55,000	45-65,000
Max Working Temperature	°F / °C	450/232	450/232	450/232	450/232	450/232	
Max Drilling Hours (Normal Drilling Conditions)	hrs	400	400	400	400	400	
Max Drilling Hours (HP / HT Wells)	hrs	200	200	200	200	200	
Length	ft	31	31	31	31	31	
Standard End Connection*		NC 38	NC 50	NC 50	6-5/8"REG	7-5/8"REG	
Weight	kg/lbs	650/1430	1250/2750	1325/2915	1800/3960	2650/5830	

* Jars can be supplied with End connections as per customer requirement, if design permits
 Specifications are based on as new condition and are subject to change without notice





IOGS

Integrated Oil and Gas Services Pvt Ltd

**Plot No. E-93/94/ 95, MIDC,
Additional Patalganga Industrial Area,
Taluka – Panvel, District – Raigad,
Maharashtra, India – 410**

Tel : +91-7745 83 83 83

Email : sales@iogs.biz

www.iogs.biz

