



## **MULTI-ACTION SHEAR SUB**

The LiMAR® Multi-Action Shear (MAS) Sub incorporates the unique Arm-Align® feature and is designed to be run in conjunction with the LiMAR® GS type Pulling Tool.

The MAS Sub increases operational flexibility by providing multiple, sequential shear-direction options.

The primary function of the Multi-Action Shear Sub is to reduce the likelihood of a miss-run during operations such as the retrieval of flow control devices including downhole safety valves & blanking plugs.



## **TOOL APPLICATIONS:**

 Primarily used for the successful, one-trip retrieval of downhole flow control devices

## **DESIGN FEATURES & BENEFITS:**

- Retrofittable to standard GS type Pulling Tools
- Supplied in industry standard GS OD's
- The MAS Sub and GS combination can be easily configured for multiple shear direction options;
  - Shear Down
  - Shear Up
  - Jar-down indefinitely, jar-up indefinitely, Shear Down
- LiMAR Arm-Align feature for integral re-arming and shear pin alignment
- Simplistic, ergonomic design for rapid redress including quickrelease locking segments resulting in no requirement to disassemble between runs
- Connection options to suit customer requirements
- Simple, robust design ensuring ease of operation for the end user
- Selected components QPQ treated
- Hexagonal flats for safe make-up & break-out



## TECHNICAL DATA

Assembly Part No.	Nominal OD (to suit GS)	Actual OD	Fish Neck	Connection
7162-2000-XXX-RX	2"	1.780"	Optional	Optional
7162-2500-XXX-RX	2-1/2"	2.220"	Optional	Optional
7162-3000-XXX-RX	3, 3-1/2 & 4"	2.720"	Optional	Optional
7162-5000-XXX-RX	5, 6 & 7"	4.500"	Optional	Optional