



MULTI ROLLER WHEEL SUB - SWIVEL TYPE

The **LiMAR**[®] Multi Roller Wheel Sub – Swivel Type can be positioned at various points along the length of a toolstring to effectively lift the string from off of the tubing wall and onto the roller wheels.

An integral Swivel Sub situated either above or below the rollers prevents any lateral friction occurring from rotational torque generated between the Roller Subs as they are conveyed into and out of a well. The **LiMAR**[®] design is short and compact with six roller wheels per assembly - each offset at 60 degrees to each other.

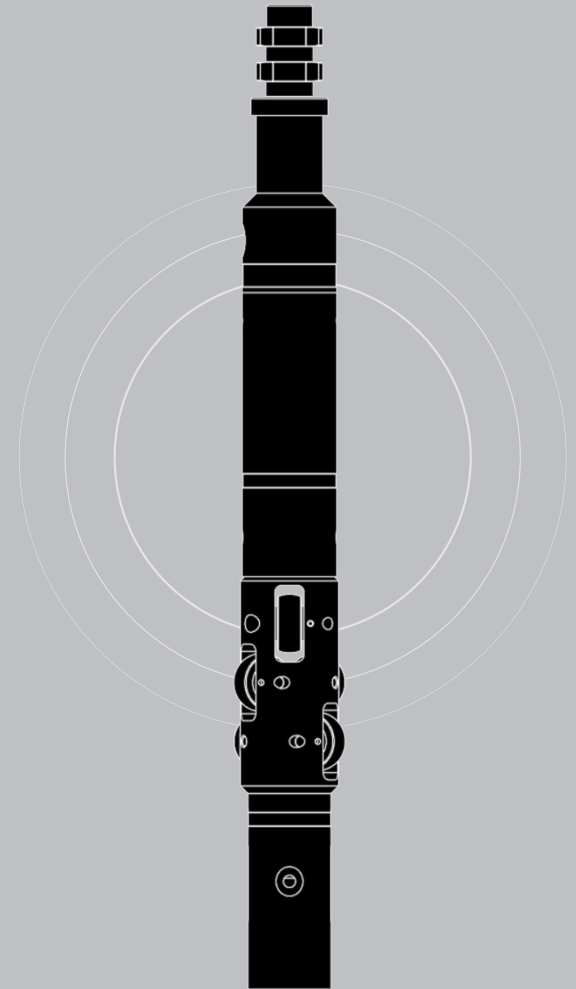
Particularly in highly deviated wells friction occurs between the full contact area of the toolstring and the tubing wall. The roller wheels rotate freely on hardened axles to reduce friction.

TOOL APPLICATIONS:

- For use in high angle, deviated wells with integral swivel function to enable a toolstring to rotate freely under load to prevent torque build-up in the wireline
- Ideal for tool centralisation within larger ID tubing

DESIGN FEATURES & BENEFITS:

- Short, compact design
- Integral upper and lower swivel section options
- Contingent fish necks on lower components to enable recovery
- Available in a range of sizes to suit all completion designs
- Hardened axles and wheels with replaceable bushings
- Connection options to suit customer requirements
- Selected components QPQ treated
- Hexagonal flats for safe make-up & break-out



TECHNICAL DATA

| Assembly Part No. | Nominal OD | Effective Roller OD | Fish Neck | Connection |
|-------------------------|------------|---------------------|-----------|------------|
| 1027-1250-XXXX-X-XXX-RX | 1.250" | Optional | 1.187" | Optional |
| 1027-1500-XXXX-X-XXX-RX | 1.500" | Optional | 1.375" | Optional |
| 1027-1875-XXXX-X-XXX-RX | 1.875" | Optional | 1.750" | Optional |
| 1027-2500-XXXX-X-XXX-RX | 2.500" | Optional | 2.313" | Optional |

XXXX - Denotes effective roller OD
 X - Denotes Upper (U) or Lower (L) Swivel position
 XXX- Last 3 digits of part number denotes connection type
 For additional sizes or further information please contact sales@limaroiltools.com