



FUGRO

SUBSEA CUTTING & GRINDING TOOL

The subsea hydraulic rotary tool is a remotely operated vehicle (ROV) deployed tool capable of cutting or grinding (depending on the type of disc). The tool consists of a hydraulic motor, a cutting/grinding disc, a frame and guard to house the components and a ROV handle.

The subsea hydraulic rotary cutter is designed to be used by a work class ROV and interchangeable rotary discs enable the tool to cut or grind metal, wire ropes or plastics.

The cutting disc is not guided and hence the tool is controlled by the ROV manipulator via the tool handle. The handle can be swapped with different types and angles depending on client or project specification.

A separate manifold block can be fitted to the tool that controls the input flow and pressure to the motor and allows the tool to free spin to a stop (when the hydraulic supply is stopped) without an increase in internal pressure of the motor that could cause seals to fail.

Two sizes are available: 200 mm and 400 mm.

BENEFITS

- Multi-purpose design - single tool supports cutting/grinding of metal, wire rope and plastic
- Safe input flow and pressure management, controlled by manifold block
- Installable on ROV of choice via low-weight, simple installation design

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Technical Specifications

Tool supply (from ROV)

| | |
|---------------------------------------|--------------------------------------|
| Size | 336 mm x 300 mm x 294 mm (l x w x h) |
| Weight in air | 10.3 kg/22.7 lb |
| Maximum storage temperature | -30°C to +60°C |
| Maximum working temperature (surface) | -20°C to +60°C |
| Design life | 10 years (with regular maintenance) |
| Design depth | 3000 MSW |

Tool Supply

| | |
|--------------------------------|--|
| Maximum design supply pressure | Continuous – 100 barg (1450 psig) Intermediate – 140 barg (2030 psig) |
| Maximum design supply flow | Maximum design supply flow |

Tool output/Interfaces

| | |
|---------------------------|--|
| Maximum output power | Continuous – 2.4 kW Intermediate – 3.2 kW |
| Maximum torque | Continuous – 16 Nm Intermediate – 23 Nm |
| Maximum speed | Continuous – 1550 rpm Intermediate – 1940 rpm |
| Maximum cut depth | ~65 mm |
| Permissible disc diameter | 230 mm/410 mm |
| Disc type | Grinding disks/cutting disks/barnacle buster |

Key Features

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| Interchangeable ROV handle and rotary disc |
| Blade guard |
| 2 sizes – 200 mm and 400 mm available |
| High torque and speed |
| ROV manipulator operable |



Rear view right



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