

## SIDES DRILLING CONTRACTORS PTY LTD

# R77 Rotomec 2202

## Drilling Rig SPECIFICATIONS

BUILD:	Built in 2002 for Wallaroo Wharf rehabilitation work.
DRILL HEAD:	Twin motor drive with thrust bearing heavy duty integral dual pipe swivel. Speed 0 - 50 RPM, Torque 25,000 ft/lbs @ 2500 psi pressure Motors Danfoss OMV 800 generator design hydraulic geared together by 1 ¼" triplex chain with 3:1 reduction drive. Main spindle 6" ID with top mounted reverse circulation swivel 6" ID and side entry air swivel below with 2 ½" air passages. Bearing capacity in excess of 60 tonnes dynamic. Spindle thread special heavy dual pipe tapered 4 tpi, joint 11" OD with 6" inner tube and O ring coupling.
FEED SYSTEM	Two double acting 5" lift/pull down rams. Nominal capacity 50,000 lbs 8.5 metre head stroke. Chains are a pair of high capacity 2 1/2" pitch ASA chains 60,000 lbs rated. Rams set in back of mast, The drill head runs on flanges on mast legs. Speed 50 ft/min. Infinitely variable speed and pressure on both feed and holdback.
MAST:	Mild steel angle iron construction rated at 100,000 lb capacity. On crown are winch pulleys and a pull down chain equalising shaft. Inbuilt runners for drill head and pull down chain runners run down the inside of the rear legs. Mast is raised hydraulically and may be locked at any angle up to 1:3 rake. It is fitted with lifting eyes and used when in the vertical position as the lifting point for the mast and base when moving hole to hole.
BREAKOUT:	Breakout spanners engage machined spanner flats on the drill pipe, one spanner is swinging and one mounted in the base of the mast. Both are hydraulically operated. Make and break capacity 75,000 ft/lbs of torque.
POWER PACK	Separate skid mounted with integral fuel and oil tanks. A 240 Kw air cooled Dorman diesel drives a 3520V Vickers pump which powers all rig functions. It is connected to the rig by 6 metre long umbilical hoses and may be placed anywhere in the vicinity of the rig. Its weight is 3 tonnes.
OIL INJECTION:	Tecalomit air operated pump with variable oil injection rate.
AIR MANIFOLD	Manifold/mast standpipe and kelly hose minimum 3" ID rated 500 psi working pressure. 10 psi pressure drop at 2000 cfm at drill head spindle.
SERVICE WINCH:	Gearmatic 40,000 lb single line pull with automatic brake for rod and hammer handling service work etc.
CONTROLS:	All hydraulic controls are situated in a remote mounted console located behind the mast and facing the drill stem.
ERECTION:	The rig is moved to site in two basic assemblies, mast and power pack. These can be left joined together for most moves. It is moved by crane hole to hole. Rig weight approximately 9 tonnes bare
DRILL PIPE	Pipe is 9 5/8" tube with 11" OD tool joints. Inner pipe is 6" ID with double O ring sealed slip in couplings. Threads are tapered 3 1/2 tpi spanner flats are fitted to each tool joint. Pipe lengths are 6 metres nominal. Weight of each pipe is 3/4 tonne



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25 Garden Road, Clayton, Victoria, 3168, AUSTRALIA

TEL: +61 3 9546 8655 FAX: +61 3 9546 8599

Website: [www.sides.com.au](http://www.sides.com.au)

e-mail: [Drilling@sides.com.au](mailto:Drilling@sides.com.au)