

# Casing Oscillator for Pile Construction

This casing oscillator is used to twist and manipulate casings during pile construction. It allows for efficient and safe placement of casings in various drilling and construction applications.



## Overview

### High-Efficiency Casing Twister for Pile Construction

The Casing Twister is a specialized tool designed for rotary drilling rigs to facilitate the installation and manipulation of casings in challenging geological conditions. It eliminates the need for mud wall protection by allowing the casing to descend directly to stable formations, ensuring a cleaner and more efficient piling process. This robust component is essential for rock drilling and piling operations where precision and durability are paramount.

## Process & Application

### Construction Process

- Rotary drilling rig + driver + flower tube setup
- Lowering casing to stable formation
- Direct drilling with rotary rig after reaching stability
- Mud-free wall protection process
- Steel cage placement and concrete pouring
- Casing extraction via rotary rig, puller, or crawler crane

## Technical Specifications

Specification	Outer diameter (D1) mm	Inner diameter (D2) mm	Joint thickness (t2) mm	Tube thickness (t1) mm	Height (mm)	Weight (kg)
620/540	620	540	20	16	1200	985
750/670	750	670	20	16	1200	1150
880/800	880	800	20	16	1200	1380
1000/920	1000	920	20	16	1200	1560
1180/1100	1180	1100	20	20	1200	1790
1200/1120	1200	1120	20	20	1200	2090
1300/1220	1300	1220	20	20	1200	2270
1500/1400	1500	1400	25	20	1200	2480
1800/1700	1800	1700	25	25	1000	2890
2000/1880	2000	1880	30	25	1000	3250
2200/2080	2200	2080	30	25	1000	3480
2500/2380	2500	2380	30	25	1000	3790

Comprehensive dimension and weight chart for various Casing Twister specifications ranging from 620mm to 2500mm outer diameter.

### Detailed Model Dimensions

Model Spec	Outer Dia (D1) mm	Inner Dia (D2) mm	Joint Thick (t2) mm	Tube Thick (t1) mm	Height (mm)	Weight (kg)
620/540	620	540	20	16	1200	985
1000/920	1000	920	20	16	1200	1560
1500/1400	1500	1400	25	20	1200	2480
2000/1880	2000	1880	30	25	1000	3250
2500/2380	2500	2380	30	25	1000	3790

### Available Models

620/540, 750/670, 880/800, 1000/920, 1180/1100, 1200/1120, 1300/1220, 1500/1400, 1800/1700, 2000/1880, 2200/2080, 2500/2380

## Key Features

### Design Highlights

- Robust cylindrical body for heavy-duty drilling
- Integrated lifting lugs for easy handling and positioning
- Multiple ports for hydraulic or pneumatic operation
- Durable construction for demanding rock drilling environments

### Maximum Unit Weight

**3790 kg**  
Max Weight

### Maximum Outer Diameter

**2500 mm**  
Max Diameter