

# Zeromag Bobbins

Bobbin coils for Zeromag ZMBOB

**DIVERSE**  
www.diverse-technologies.net

## Applications using Zeromag

- High speed deployment of Zeromag in production scenarios
- Pipe-end degauss
- Component degauss
- Pipe capping
- Use with TIG, MIG, MMA and Sub-arc processes



## Features

- Compatible with Zeromag ZM100A
- 2 metre connection cables supplied
- Repeatabe and rapid deployment of turns for pipe-end degauss
- Bobbins can be supplied for any user defined pipe size
- Standard bobbin has 100m of cable
- Optionally, bobbins can be supplied with 200m of cable for use with ZM100A-30
- Maximum number of turns (related to demagnetising field) depends on pipe size e.g. a standard 12 inch bobbin has 78 turns
- Compact and robust design
- Bobbin has handles for ease of transport
- During use or storage cables exit through feature in lid.

## Overview

The Diverse Zeromag ZM100A is used world wide by leading welding companies to overcome arc blow. The ZM150 degausser in conjunction with the Zeromag ZM100A is used to demagnetize pipe-ends prior to fit-up, or joints post fit up. Successful degaussing of pipe-ends requires the application of fields large enough to magnetically saturate the steel, note that saturation fields depend on the type of steel. The magnetic field is applied using coils with the demagnetising field being dependent on the number of turns and the current applied.

Turns can be applied to the pipe end by manually winding the cable supplied with the standard Zeromag. This is time consuming and not always convenient. The Zeromag bobbin applies 100m of cable turns repeatedly and rapidly to the pipe-end. Connection cables are supplied to connect bobbin to the Zeromag. Bobbins can be supplied for any user defined pipe-size.

For steels with particularly high saturation fields, or pipes of diameter greater than 2 metres, bobbins with 200 metres of cable should be used. This will require the high power version of Zeromag (ZM100A-30) and ZM150 degausser.

Bobbins are robust and compact for ease of transport and storage.



## ZMBOB: Performance Specification

Construction	Wood, screw and glue. Rope handles
Cable length	Standard 100m, high field 200m
Demagnetizing field	Bobbin size dependent. Typically 35kA/m for a standard 12 inch bobbin with ZM100A
Deployment	Usually one clam coil each side of the weld prep operating in series
Bobbin bore size	User defines pipe size,
Cables to Zeromag	Supplied with 2 metre extension cables to Zeromag
Weight	Depends on pipe diameter Typically 25kg for standard 100m bobbin and 50kg for 200m bobbin
Size	Depends on pipe diameter - see pictures e.g. for 12" bobbin 50 x 33 x 15cm
Operating temperature	Up to 85C. Extended temperature by using thermal blankets to keep cable insulation below 85C
Construction and material	Wood, screw and glue. Rope handles
Storage	Supplied with wooden shipping and storage case
Working current	100A on 25 connectors - total 2500A
Operational storage	It is important to keep the connector contacts clean. So after use close the clam and store in its storage box.
Packaging	Bobbin designed to be transported as it is. No packaging is required. On receipt, remove the top of the case to retrieve the Zeromag connection cables
Environmental	Temperature -20C to 50C Humidity 0-90% non condensing Not water proof so do not operate or store in a wet environment
Support	Warranty 12 months. Call/email Diverse for support for use of bobbins for different pipe degauss scenarios

