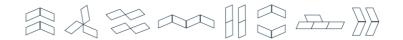


# RETROFIT ANODE PIRANHA® M CLAMP



"The Piranha® M is intended for mounting to plates and round bar/pipe on subsea structures. It can be equipped with a range of different jaw sizes, suitable for plate thicknesses and bar diameters from 35mm up to 55mm."





#### Intelligence built in

The main benefits of choosing an Imenco Piranha® Clamp are ease of installation, flexible sizing, and proven long-term integrity.

The clamp is guided into place by ROV and tensioned with an Imenco Clamp Installation Tool (ICIT) to ensure a good connection.

Most subsea structures and components have some sort of plate as part of its design. This makes the Piranha® M Plate Clamp the most versatile IMENCO Retrofit Anode Clamp. Anodes may be attached directly to the clamp, or by a bonding cable to an anode sled.

Piranha® M is typically used for the placement of sacrificial anodes, electrical continuity between different entities or to connect instrument packages to a structure. Anodes may be attached directly to the clamp, or by a bonding cable to an anode sled/anode bank.

#### **Features**

- Field proven with more than 3000 clamps installed
- Simple and robust design
- Durable and compact design dimensions
- Excellent mechanical grip
- Quickly diver-less ROV installation
- Anode attachment flexibility, clamping on plate, edges or ends of rods
- Designed for variety of plate/rod thicknesses
- Standardized installation tool and ROV interface

### **Advantages**

- Quick installation, typically takes 15min to install a clamp
- Provides excellent mechanical attachment,
   Typically, > 10 ton
- Provides excellent electrical contact / grounding, Typically, <100  $\mu\Omega$  connection resistance
- Mechanical grip (tension)
  - · Will not loosen by vibration
  - Fatigue resistant against expected loads
- Electrical Resistance house to connected structure
  - Can be used on coated or uncoated structures.
  - Will bite through existing rust layers on structures

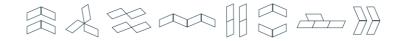
## **Applications and options**

The Piranha® Clamps has a proven track record of being easy to install and providing a very strong hold and an effective electrical connection. By use of a hydraulic torque tool, the clamps are installed onto plates or rods, consistently and without any unnecessary strain on the ROVs.



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# RETROFIT ANODE PIRANHA® M CLAMP

The Piranha® M clamp is primarily composed of the housing, and the jaw. The housing design is suitable across the entire 35-55mm range. The jaw size is selected on a project-specific basis as per the below table.

Clamp Type	Plate/Round Bar Dim (mm)	Clamp Dimensions (mm)							
		Α	В	С	øD	E	F	G	Weight
Piranha® M	35-40 mm	75	20	125	115	34-39	37	46	8,9 kg
Piranha® M	40-45 mm	75	20	125	115	39-44	37	46	8,8 kg
Piranha® M	45-50 mm	75	20	125	115	44-49	37	46	8,8 kg
Piranha® M	50-55 mm	75	20	125	115	49-54	37	46	8,7 kg

