Novagrip 50/60 , Nose Piece and bushings





Follow the warning signs in this manual and other manuals referred in this manual.

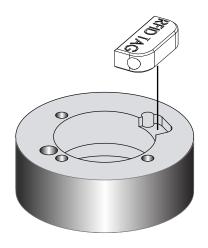
## **Template**

The template contains a slot for the RFID-tag.

The RFID system consists of a data tag and an antenna for ID reading. When the data tag is mounted on an object, it can be identified over and over again.

The data tags are mounted on the template. The antenna is mounted on the Nose Piece. The hole ID is red by the antenna when the ODU is clamped to the template. To mount the data tags:

Place the data tag in the slot on the template and glue in place the tag using an adequate type of glue adapted to the production environment.



### **Bushings**

The bushings are mounted on the template using 4 screws (E). A color marking ring (D) mounted on the bushing is used for preventing the possibility of drilling incorrect hole and can easily be changed for different hole setup.

#### **Nose Piece**

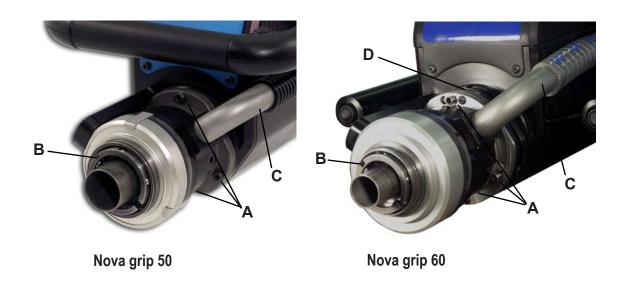
**Product data** Weight: 2.3 kg

Clamping force: Min 800 N

Nova grip 50/60 are used to fix the drilling unit to the drilling template. Clamping / unclamping is pneumatically operated by pushing two buttons simultaneously on the drilling unit. The steel tube protects the cutting tool and guides the debris to the vacuum outlet. The motor stays locked at pressure lost. Pressure sensor alarms at incorrect locking or pressure lost. The alarm is shown on the ODU display.

The nosepiece has a RFID reader (B) to read the smart chip located in the drill plate at each hole location.

The Nose Piece is mounted to the drilling unit with three screws (A). On the PM60, the Nose Piece is attached on an adapter (D)



#### **Mounting the Nose Piece**

To mount the Nose Piece:

- 1. Attach the Nose piece to the ODU, a guiding pin determines the position.
- 2. Slip on the vacuum hose on the vacuum tube (C)
- 3. Tighten the three mounting screws (A)



Warning!

the cutting tool is exposed.

Disconnect the air supply and power supply before making any adjustments to the ODU where

*Note!* Cutting tools used with this unit are sharp. Handle them carefully to avoid injury.

NEVER touch a tool while it is still running.

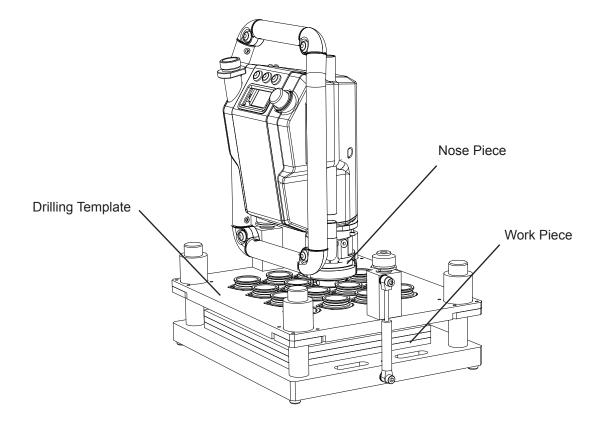
# Dimensions (mm)

Nova Grip 60 Nova Grip 50 149 Ø21,6 149 Ø21,6 92 158 139 123 Ø 25,5 Ø **34**,5 1/50 91 91

## **Drilling template**

The machine is mounted to a drilling template using a suitable Nose Piece, e.g. Nova grip. A Novator Drilling Template is available and can be used for tests and calibration. The drilling Template is not supplied with the ODU but can be ordered as an extra accessory.

The picture below shows a typical set up for machining of holes where the Nose Piece Nova grip and the Novator Drilling Template are used.



Novator is a high-tech engineering company that helps customers to optimize their hole-drilling processes, improve productivity, and cut production costs by using its expertise in sophisticated drilling technologies that deliver state-of-the-art drilling solutions.

Novator serves the aerospace industry and other industries in which hole-drilling precision in advanced, complex materials is a critical success factor. Companies that now use orbital drilling products include Airbus, Boeing, and Lockheed Martin.

R&D for orbital drilling technology and the products are done in Stockholm, Sweden.

Novator was launched in 1992. It owns 29 patents and has 16 additional patents pending in the EU, Japan, and the US. These patents are directly related to orbital drilling and hole production. The patents cover methodology, equipment, and accessories.

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