

ATS BIGMOUTH CHUCK

*Models BP and BT Installation,
Operation and Maintenance Manual*

Complete Your Investment

- **Self-contained Pneumatic Power Chucks**
- **Big Through-hole**
- **Easy-mount Design**



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WARNING

Do not attempt to install, operate or perform maintenance on this product until you have read and completely understood the contents of this manual.

PRECAUTIONS:

SAFETY

Many sections in this manual deal with the issue of safety. Safe operation of CNC lathes and workholding is the responsibility of the user. The manufacturer of the BigMouth chuck has used the latest technology in the design and manufacturing of this product. Careful consideration has been given to safety, and the authors of this manual make many recommendations regarding safe operation and safe chucking practices. The user of the lathe and chuck are responsible to understand these safe practices and precautions and to implement them into the operation and maintenance of the equipment.

All who use or maintain this equipment must have read, understand, and follow all instructions in this manual and other normal safe shop practices.

Maintenance and repair work must be done only by personnel who have been properly trained. It is the responsibility of the buyer/user of this equipment to ensure all appropriate training is received.

1.1 Safety Precautions

This power operated chuck complies with all specific and general safety regulations valid at the time of delivery. Safe operation requires it be used only in proper applications with all necessary user precautions including but not limited to those specified below.



WARNING

1.1.1 Unique safety points relative to self-contained pneumatic chucks

Self-contained pneumatic chucks like the BigMouth have unique characteristics and benefits and also have some unique maintenance requirements and safety precautions that must be understood by the user. The principles of operation of self-contained chucks are described later in this manual section 4.1. Understanding how the chuck operates will help you understand the special requirements and precautions. The unique maintenance and safety points are also described later in this manual but are previewed here

because they are quite different from most power chucks.

- Self contained chucks rely on pressure retention Pressure test the chuck every 160 hours of operation.
- Set air control timers 2-3 seconds longer than the time required to fill the chuck to ensure a full charge of pressure.
- Do not use the chuck to grip fixtures or for other applications that don't actuate the chuck at least once per hour.
- Self-contained chucks have no stroke monitoring system and are not recommended for use in fully automatic systems such as with barfeeds or robot loaders.
- Before disassembling the chuck, remove the two small plugs (.60" diameter, 5 mm allen wrench) in the chuck face to bleed off all air pressure. Failure to do this would allow the trapped air to "explode" as the chuck backplate is removed and could result in serious injury.
- All BT__ES chucks are intended for use only in tandem installations with both chucks gripping tubular workpieces extending through both chuck bores.
- All BT__ES models - the first 75% of the jaw closing stroke is rapid advance and must never be used for clamping. Only the final 25% of jaw stroke is the clamping stroke and you want to grip in the middle of this final 25%.

1.1.2 Use for Intended Purpose

The safe function of the power chuck is, as far as can be foreseen, guaranteed when being used for its intended purpose in accordance with appropriate safety regulations.

Improper use of the power chuck can result in

- Danger to life and limb of the operator
- Danger to the power chuck and to the machine tool

Unintended and improper use of the power chuck includes, for example:

- Workpieces that are not clamped properly
- Safety regulations that are disregarded

