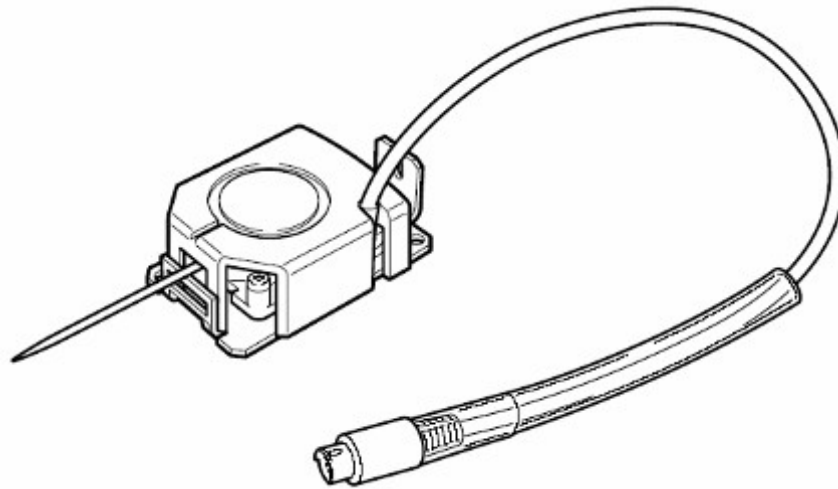
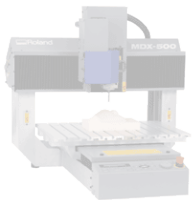


MDX-40 optional scanning unit model ZSC-1 Product Information



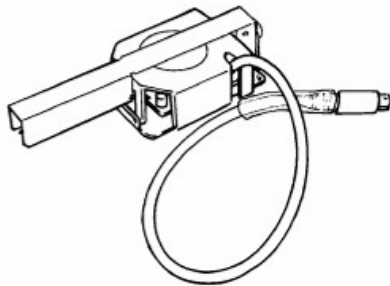
11/30/2005



Overview

- **ZSC-1 is an optional touch sensor scanning unit for the MDX-40 SRP mill.**
- **In scanning mode the ZSC-1 replaces the spindle unit.**
- **Scanning is supported in X,Y and Z axis.**
- **The sensor unit is based on Roland's proven active Piezo technology**
- **The software, Dr. PICZA3 and 3D Editor are included with the ZCS-1.**

Contents



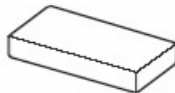
Sensor unit



Cap screws (black)



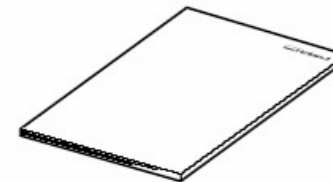
Hexagonal wrench (3 mm)*



Clay



Roland Software Package
CD-ROM

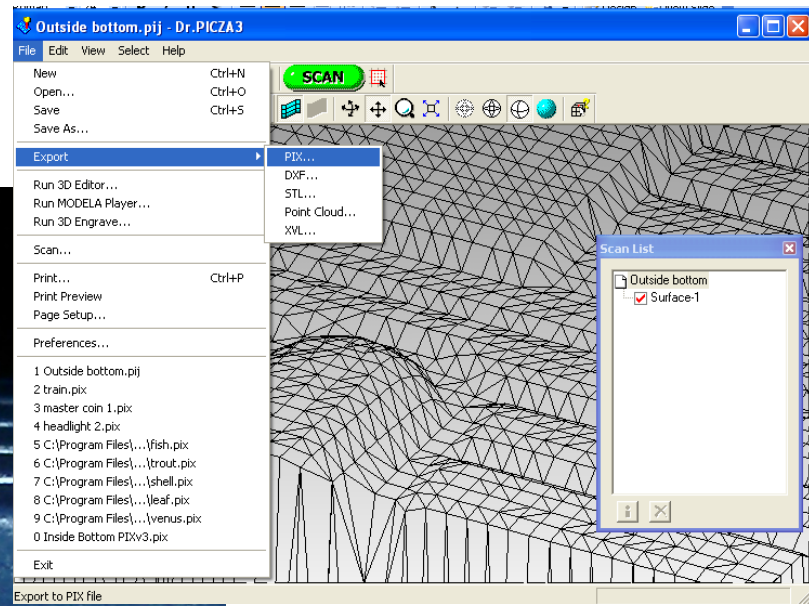


User's Manual

* A 2.5-mm hexagonal wrench is included with the modeling machine.

Scanning process

- Position object on scanning bed. Irregular shaped objects can be supported with clay (included in kit)
- Launch Roland scanning software and begin scan, Roland active Piezo sensor probes the object and creates a scan point at each contact point with the object.

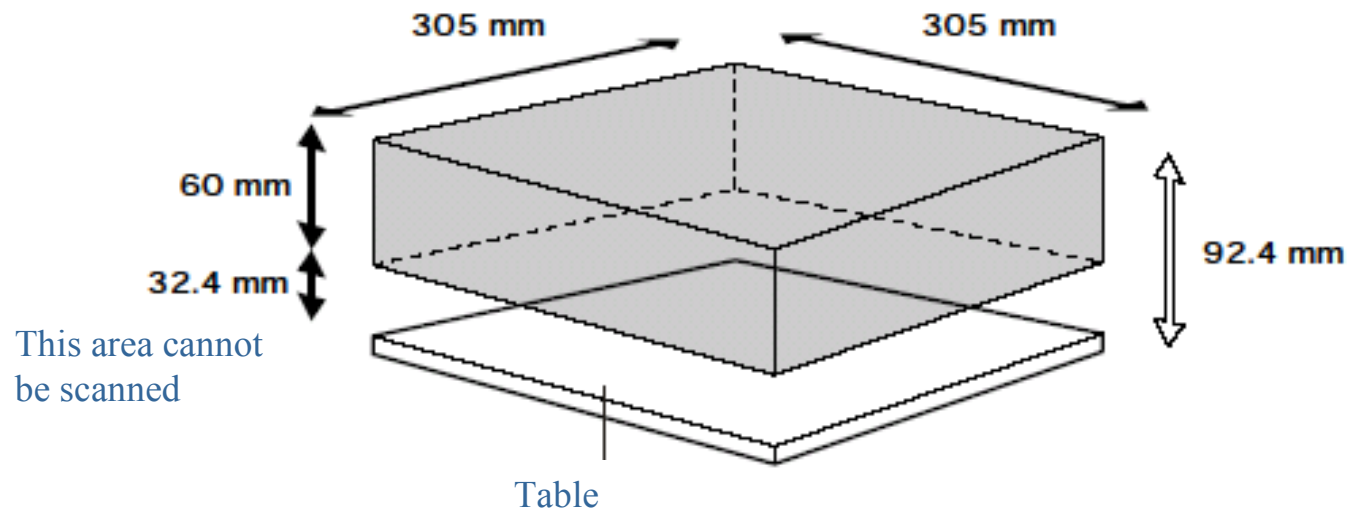


Scanning area

- Scanning area is 12"x12"x2.36" (305x305x60mm)
- ZSC-1 does not support rotary scanning with the 4th axis.
- Scanning is supported in the X,Y Z axis only

Scanning area

The figure shows the scanning area.



Scan samples



Plane scan
X pitch : .003" (.08mm)
Y pitch : .003" (.08mm)
Width (X) : 1.57" (40 mm)
Height (Y) : 1.18" (30mm)
Z0 bottom : 1.77" 45mm
Scan time : 82487 sec. (22:54:47)



Plane scan
X pitch : .018" (.48mm)
Y pitch : .018" (.48mm)
Width (X) : 4.72" (120.00 mm)
Height (Y) : 3.54" (90.00 mm)
Z0 bottom : 2.16 (55.00 mm)
Scan time : 65614 sec. (18:13:34)



Plane scan
X pitch : .039" (1 mm)
Y pitch : .039" (1 mm)
Width (X) : 7" (180) mm
Height (Y) : 3.54" (90 mm)
Z0 bottom : 1.27" (32.40 mm)
Scan time : 59676 sec. (16:34:36)

Conclusion

- **Scan unit designed to mount on the Roland MDX-40 SRP mill**
- **Based on Roland's industry proven active Piezo scanning technology**
- **Scan area 12" x 12" x 2.36"**
- **Min scan pitch .002"**
- **Includes mounting hardware and Dr. Picza 3 scanning software**