Best Practices – RFID Tagging:

Correct RFID tagging practices are essential in every type of inventory. RFID tags are not cheap and incorrect tagging can impact your investment into RFID tags by decreasing efficiency, increasing cost with tag replacement and not utilizing the full functionality of the technology.

There are a few things to consider with RFID tags and tagging.

1) Where is the best place to tag assets?
2) Why are there preferred tagging spots on an asset?
3) Where is the antenna on this tag?
4) How does the signal emit in the tag?

*It is a common misconception that RFID tags will emit a signal no matter the environment, so tags are sometimes incorrectly placed behind the asset. Doing so will nullify the signal when scanning from the front, because most items tracked are made of metal, and RFID signal does not read through metal. It is important to place the RFID tag in the FRONT of the asset.*

**Best place for an RFID tag for a standard moveable asset** – On the front of the asset with the tag being 4 to 6’ off the ground (waist up) facing outwards. The antenna emits a umbrella like signal like the WiFi logo on your cell phone. You will want the tag pointing towards a scannable area, so please avoid placing the tag where the tag will face the wall or the ground (low percentage read areas)

**Best place for RFID tags on server equipment** – On the front, above or below the face plate, with only the adhesive attached to the metal while the folded barcode sticks outward – with the ability to move up and down.

1) It is imperative that the adhesive portion of the tag is applied to the metal part of the server as much as possible, and not just the face plate. Face plates are removable, so the tags can easily fall off.
2) It is also important to use a flat slim surface like a badge or credit card to apply pressure on the adhesive, and do not attempt to pull on the tag right after it is applied. The adhesive takes about 24 hours to fully adhere to the asset.
3) It is essential for the server tags to be folded so that the barcode is exposed on both sides and the antenna is enclosed in the tag. If they are placed open on the server, they will not scan with the RFID scanner.

For additional information on tag placement, you can visit. https://www.idplate.com/rfid-tags/rfid-tags-for-metal-surface/rfid-server-rack-tags

Below are some examples of tag placement recommended and not recommended.

Picture #1 Not recommended - low to the ground and behind the machine
Picture # 2 Not recommended – on the back of the machine – machine is a countertop analyzer and the back faces the wall

Picture # 3 Not Recommended – Server tag completely open with the antenna touching metal, causing the tag to not work.

Picture # 4 – Recommended – tag is in the top right corner above the model number and is forward facing on the asset.
Picture #5 – **Recommended** – server tag is folded correctly and is forward facing on the asset, allowing the adhesive to go on the metal and the tag to flop up and down.

Picture #6 – **Recommended** – Server tag is folded correctly, forward facing and applied in a position to allow it to stick out and away from the servers.
Picture # 7 – **Recommended** – Tag is forward facing on the front of the unit, and it is at least waist high and easy to see and scan during a walkthrough.

As shown above – differences in tag placement may affect tag readability and overall performance of the tag and software, which could potentially impact field time and overall efficiency of the inventory process. Replacement of poorly placed tags is an added expense that is not needed if the steps are followed correctly during the initial tagging.