Overview

The purpose of this document is to provide information on the correct installation of a console for appropriate height and arm length.

Correct Height

The correct height of the console is determined by putting the middle of the console at eye level. The average height user should be able to stand at the console and look directly into the middle of the console without having to bend their neck. It is important to take into account the shipping pallet if present. To adjust for the pallet, stand on an equal height pallet when checking the console height. For a knee mill, the bottom of the console should be no lower than the bottom of the spindle when it is fully retracted and a tool is not present.

Correct Arm Length

The arm must always put the console at a comfortable height and within easy reach. The arm should not place the console too far back or too far forward. An easy test to determine that the arm length is correct is whether or not the operator has to lean over the table to operate the console. The operator should not have to do this. If a table guard is to be mounted on the table later, this should be taken into consideration when testing the arm length.

The arm should not place the console too far in front of the machine. The arm length of the console should be such that the operator can stand close to the machine without hitting the table and not have to lean back or step away from the machine to operate the control. If the operator needs to lean back or step away from the machine, the arm is too long.

When an M15 is to be mounted on a knee mill, the best place to mount the arm is in the shipping eyebolt hole using the Centroid designed "L" bracket and bolt. This avoids drilling holes in the frame and results in quick installation. The arm can then be removed for shipping.

It is not always necessary to design a special arm in every case. An arm that is appropriate in length but is mounted too far back on the column appears too short. In this case, a longer arm may be fabricated. A longer arm will cause the keyboard to bounce when the operator types. The original shorter arm would not do this. The original arm would be the correct length if it were properly mounted as far forward on the column as possible.

Also, use a stop bolt to prevent the arm from swinging into the head or shop light. Mount the shop light on the left if an automatic tool changer (ATC) is not present.

Shipping the Console

The machine should never be shipped with the console mounted to the arm. Do not pad and shrink-wrap the console to the back to the head. Shipping damage will almost surely result if this is done. The correct method for shipping is to first remove the console from the table. Next, pad and box the console and finally shrink wrap it. The cables can even be left connected. This process is especially easy with the M15 console. It can also be
done with M400 PC Console, which can quickly be unbolted from the arm swivel. Leave the flexible conduit attached to the console.