

# MAR

## How to apply MAR

We have found that MAR works well on thin soft tissue image and reformatted soft tissue images. Our physicians do not like the changes caused by MAR near metal. Artifactual changes sometimes occur that mimic pathology or hardware breaks (i.e. cracked screws) when MARS is applied and used for metal interpretation.

If your scanner has MARS, we recommend using it for soft tissue reconstructions only. If you create a MARS image, we recommend also reconstructing a non MAR image to allow radiologist to better discern MAR induced artifacts. If your scanner doesn't have MAR, we do not recommend increasing mAs or using GSI-MARS.

Here is an overview of our current guidance.

	Axial thin soft tissue	Axial thin bone	Axial thick bone	Thin soft tissue MAR	Bone reformats	Soft tissue reformats MAR
Spines	1.25 mm	0.625 mm	1.25 mm	1.25 mm	yes, see protocol	yes, see protocol
MSK Shoulder/Knee	1.25 mm	1.25 mm		1.25 mm	yes, see protocol	yes, see protocol
MSK Ankle/Wrist/Elbow	0.625 mm	0.625 mm		0.625 mm	yes, see protocol	yes, see protocol

## Coverage when metal is present

Follow the scan ranges prescribed in the protocol or ordered by the radiologist. You **do not need to cover the entire metal prosthesis** unless ordered by the radiologist for MAR to work. Please just be generous (add a few cm) above and below the area of interest when using MAR.