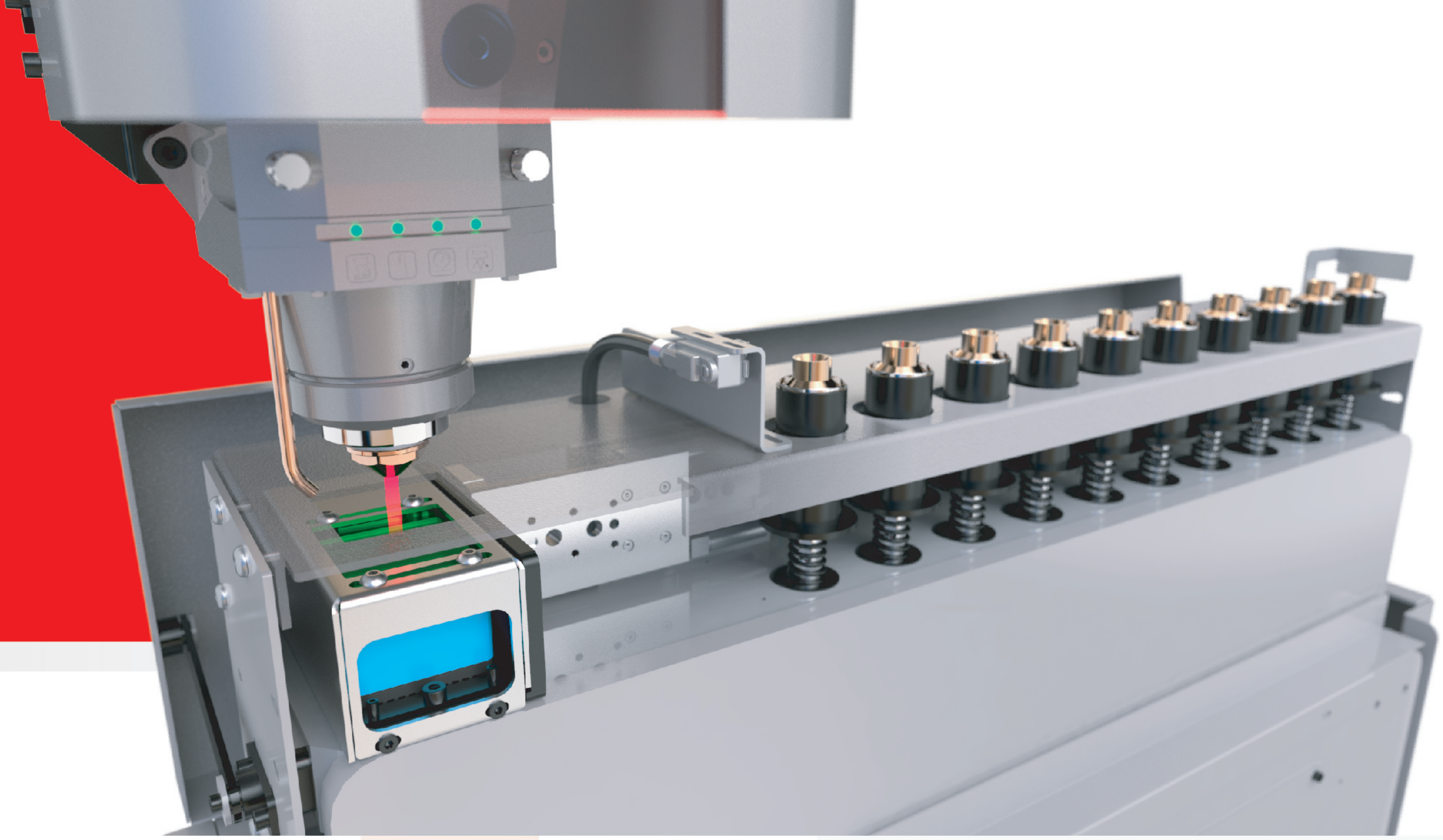
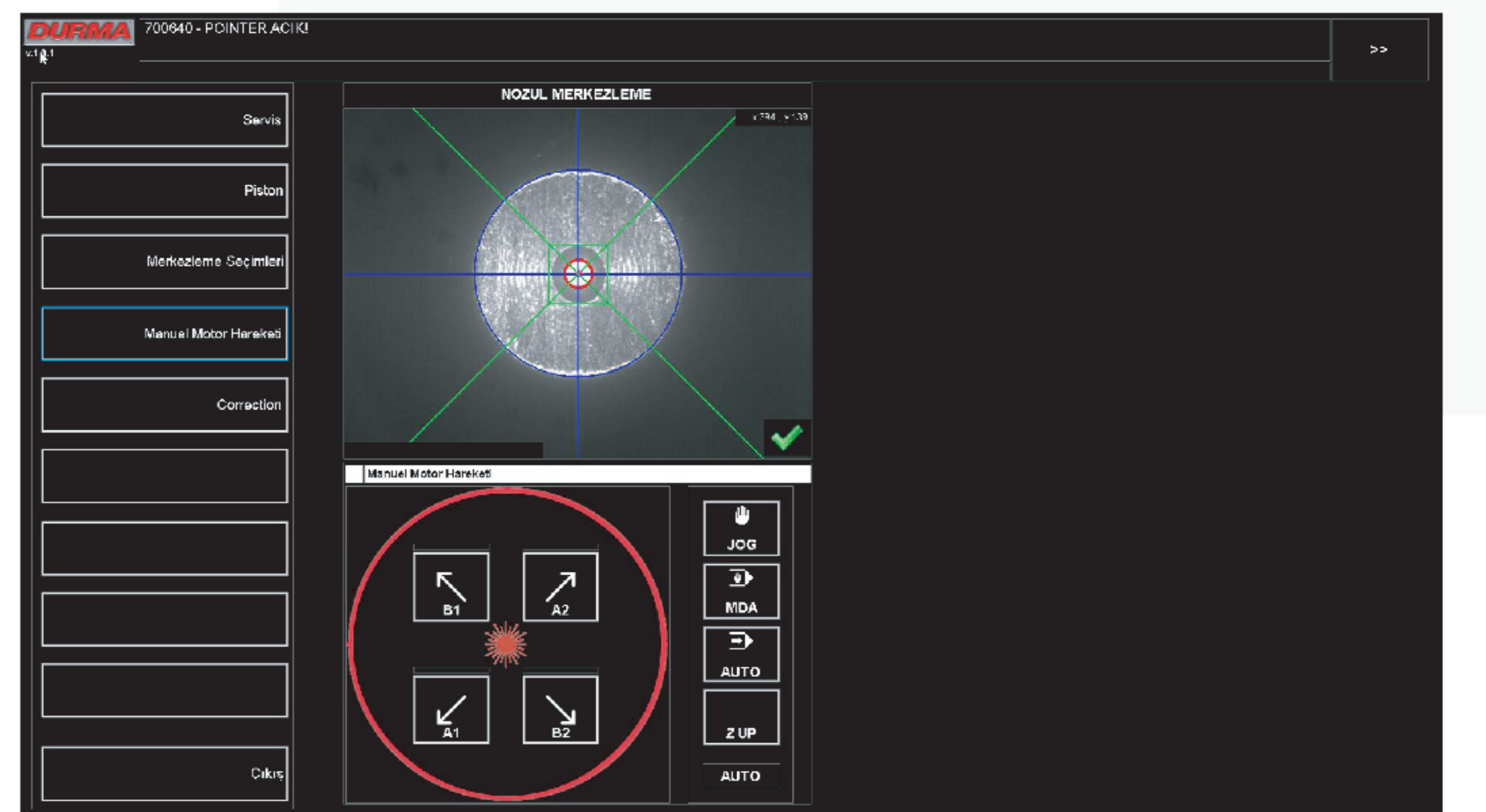
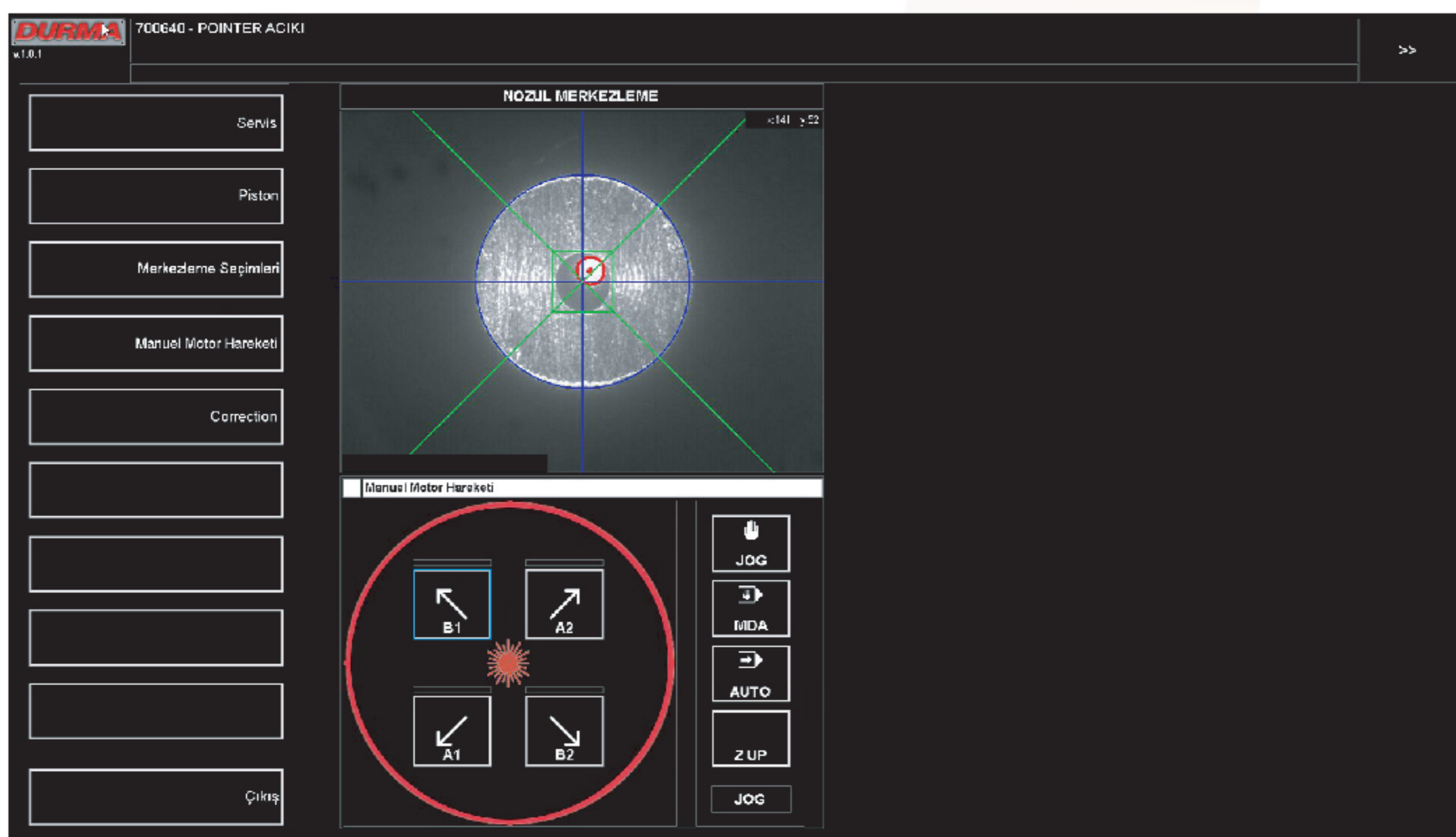


REAL - TIME POSITION OF THE LASER BEAM



✓ AUTO NOZZLE CENTERING



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Durma Auto Nozzle Centering is the process of bringing the off-center laser beam to the nozzle center in order to obtain smooth and quality cuts. For this purpose, a camera is placed on the Nozzle Changer Unit. With this camera, the real-time position of the laser beam is detected. If the beam is not on the nozzle center then it is automatically adjusted to the center with the 'Durma Auto Nozzle Centering' application.

Automatic Mode:

Users can select which nozzle centering process will be used. When the machine is in AUTO mode, the centering operation is automatically activated after 'nozzle change' (on machines with nozzle changer unit) or 'nozzle clean' depending on the selected option type. In addition, users can activate the centering process at any time to check whether the beam is in the center or not. In the centering process, the real-time position of the laser beam is determined by the image processing methods. With using the servo motors on the cutting head, the beam is moved to the nozzle center position automatically.

Nozzle Centering with Nozzle Clean:

When the 'Nozzle Centering with Nozzle Clean' option is selected, each time the cutting head goes to nozzle cleaning, it then automatically goes to the centering system. Checks whether the laser beam is in the center of the nozzle. If necessary, it activates the automatic centering process. After centering process is completed, cutting operation continues from where it left off.

Nozzle Centering with Automatic Nozzle Changer (ANC):

The 'Nozzle Centering with Automatic Nozzle Changer' option is only active on machines with nozzle changer unit (ANC). If this option is selected, each time the cutting head goes to the ANC unit to change the nozzle, it automatically goes to the centering system. Checks whether the laser beam is in the center of the nozzle. If necessary, it activates the automatic centering process. After centering process is completed, cutting operation continues from where it left off.

Manual Mode:

The real-time position of the laser beam is detected instantly. Users should move the laser beam to the center by using the arrow signs from the 'Manual Motor Movement' menu. The auxiliary line (+) shown in blue color on the application is the target center point. The laser beam must be moved to this target center point. When the centering process is done successfully, a green check mark appears on the application.

