

DS-58 & DS-90 Electric Encoder™ **Surgical Robotics**



CASE STUDY

Application

TransEnterix Senhance $^{\text{TM}}$ Digital Laparoscopic surgical System . Digital laparoscopy provides surgeons improved control, comfort, clinical intelligence, and confidence when performing a wide variety of procedures.

Requirements

- Hollow shaft
- High precision
- Low profile
- Resistance to magnetic field

Position Sensor

- Netzer DS-58 & DS-90 Absolute Position Electric Encoders™ are incorporated in the robotic arm with frameless motor.
- Compact, low profile, lightweight & wide bore: Allowing high level integration for a low profile arm joint design.
- Frameless & contactless with a negligible rotor weight: No mechanical parts operating, resulting in a long-lasting operational time, introducing no extra weight & inertia (load) to the system.
- Immune to magnetic interference: Can be very close to the frameless motor magnets.
- High resolution 18 bit & accuracy < 0.015deg for smooth and high accuracy rotation with high repitability of 1 count.
- Standard digital Serial interfaces, SSi, BiSS.

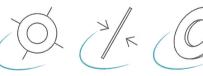
Special safety algorithms with real time BIT (Built In Test) over SSI or BiSS.







Product Features







RESISTANCE TO MAGNETIC FIELD

