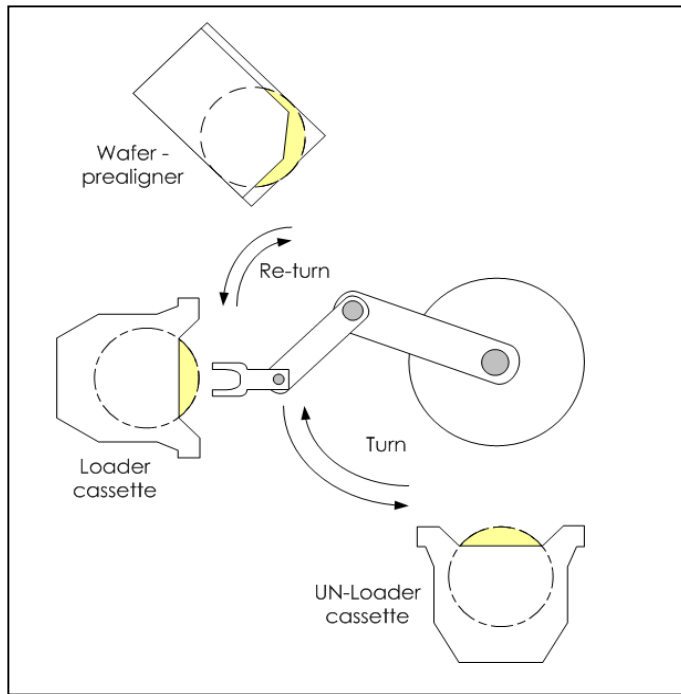




WHY SCARA?

A Comparison between 3-axis r-theta robot vs. 4-axis SCARA robot

The Reason



A radius layout, for wafer carrier(s) and aligner..... bigger footprint, is a compromise for r-theta robot

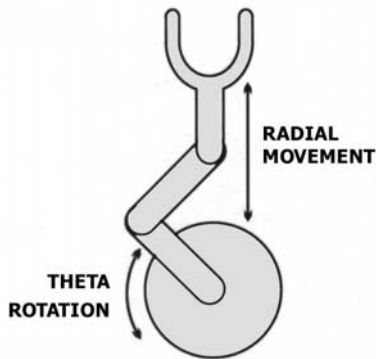
The 3-axis r-theta robot is the mostly adopted wafer handling robot for decades in semiconductor industry, people would wonder why shall they change to SCARA (Selective Compliance Articulated Robot Arm) type if current robot “didn’t break, why fix it?”

In addition to the 30~50% higher throughput with its motion blending feature, SCARA also provides reduced tool footprint for many applications.

R-Theta vs. SCARA

Competitors' R-Theta

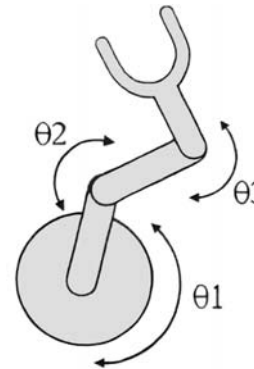
(Limited Range of movement, has dead zones)



Forearm and aftarm are mechanically coupled equating to less range of movement. R-Theta robots can not do a linear move in an arbitrary x/y direction.

IR-820 SCARA

(Selectively Compliant Articulated Robot Arm)



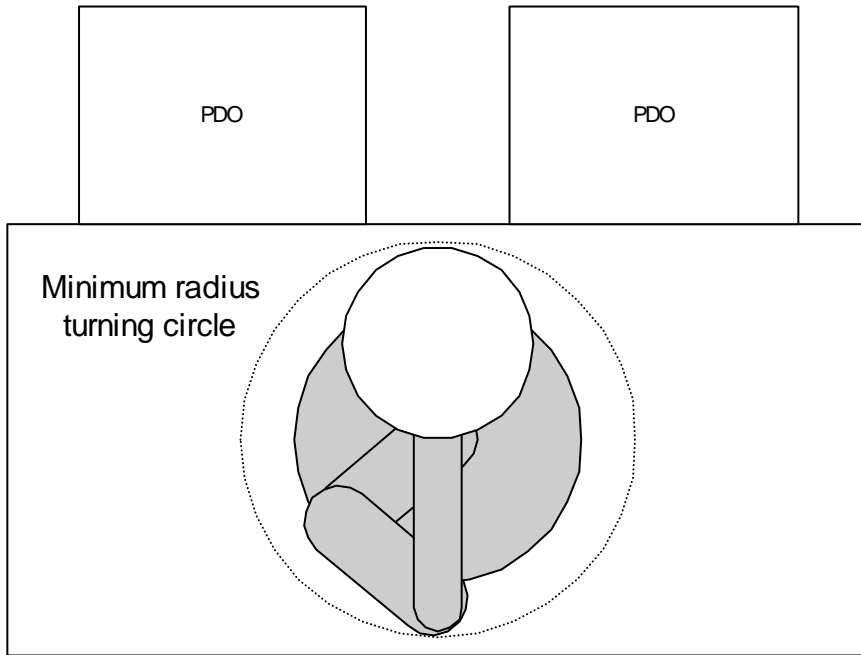
Each of IR-820's three independent Theta axes rotates 640° eliminating "dead zones, requiring smallest footprint

EFEM Footprint

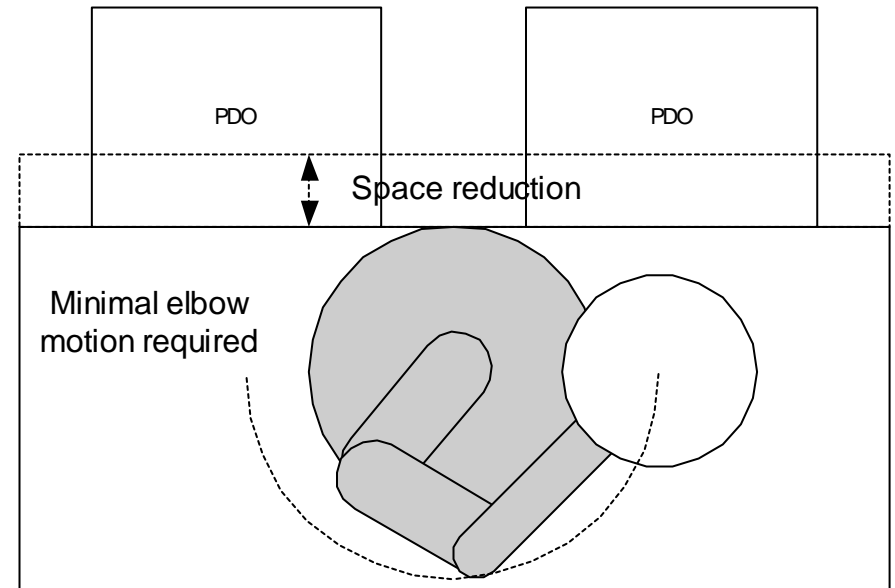
■ R-Theta

vs.

■ IR-820 SCARA



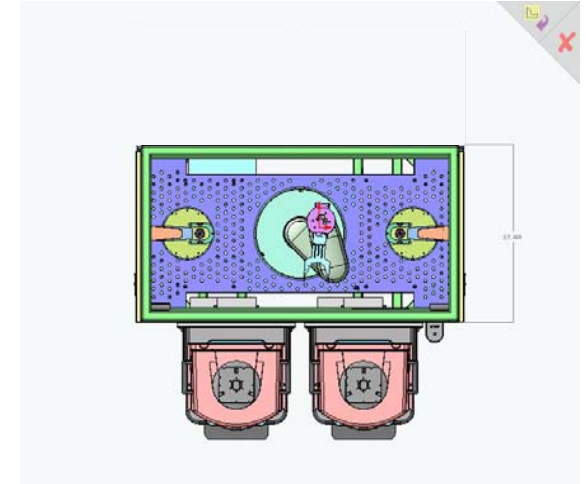
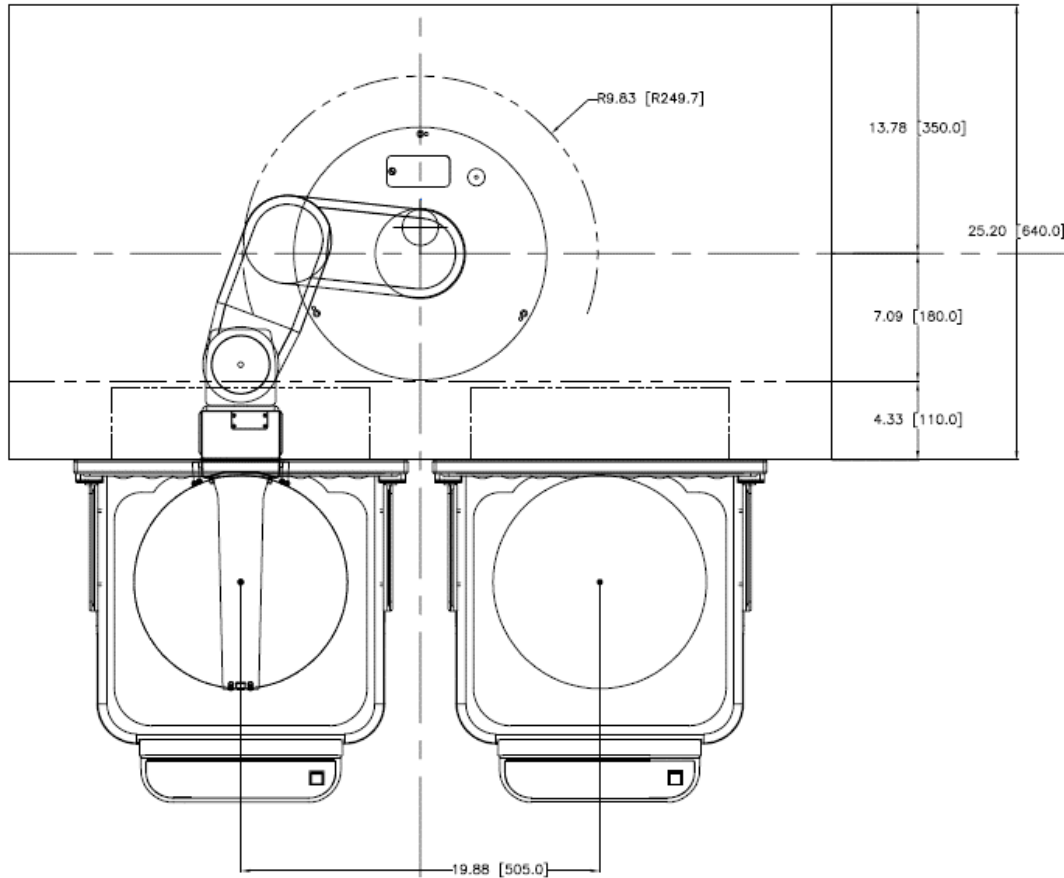
EFEM with traditional R-theta Robot



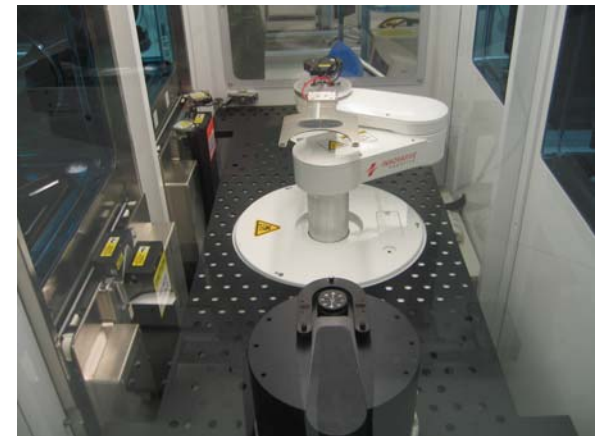
EFEM with SCARA Robot

~ 10% footprint shrinkage!

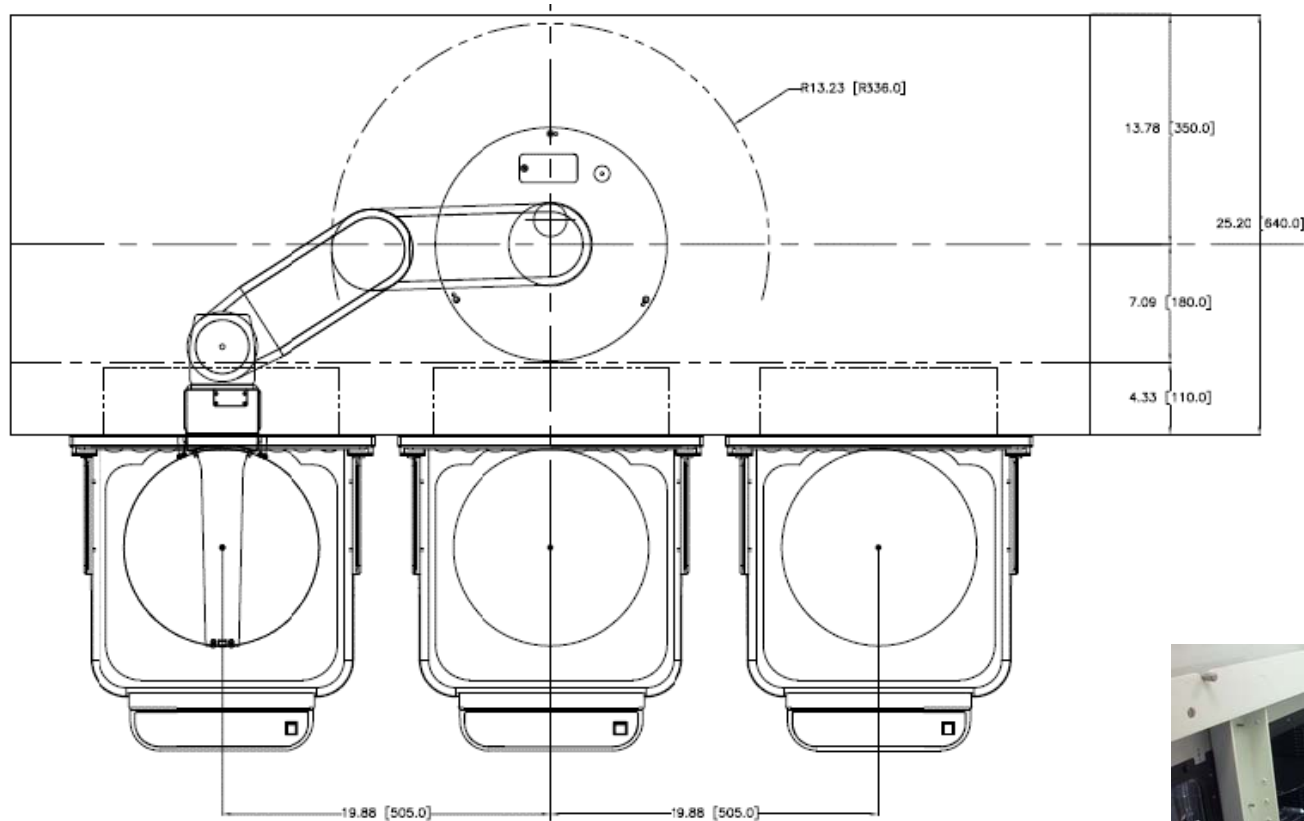
Sample 2-FOUP Layout



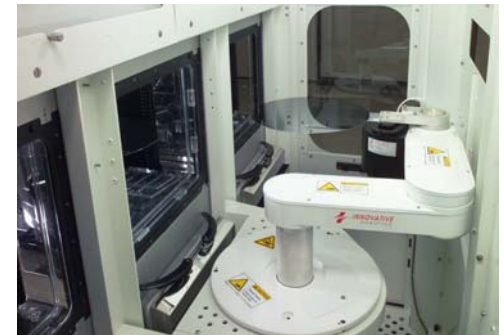
 **IR-820 CAN IMPROVE YOUR FOOTPRINT AND REACH HIGHER THROUGHPUT**



Sample 3-FOUP Layout



IR-820 FITS IN THE SMALLEST SPACE POSSIBLE AND DOESN'T REQUIRE A TRACK FOR 3-FOUP REACH



NOTE: End-effector length: 12"