AKGEC-KUKA
INDUSTRIAL ROBOTICS TRAINING CENTRE

Robotic TPSi MIG Welding Application Cell

A basic robotic arc welding system is formed by two subsystems: the welding equipment delivering the energy from the welding power source to the work-piece, and the robot providing relative positioning of the heat source and the work-piece.

In theory, automated series production delivers defined quality, defined process times and defined costs. In reality however, there is a multitude of influencing factors that can impact on the overall profitability of the production operation. Operating faults, variations in the quality of the material or the effects of thermal deformation during the welding process. If a fault is not rectified immediately, the robot will reproduce it all along the assembly line.

Robotics TPS/i welding cell, we not only make the welding process considerably quicker than ever before, but also enhances the weld seam quality. One of the visible improvements is the minimal amount of spatter produced. As a result, robotic welding processes offer unsurpassed quality, highest efficiency, maximum reliability, attractive alternative solutions to traditional manual operation and hard automation.

Robot Specification

Model	:	KUKA KR 5 Arc
Rated Payload	:	5 Kg
Maximum reach	:	1400 mm
Repeatability	:	± 0.10 mm
Controller	:	C4

Machine Specification

Make	:	Fronius
Model		TPSi 400i LSC Adv
Supply	:	3-Phase
Current Range	:	3-400 A
Operation Voltage	:	14.2-34.0 V
Open-Circuit Voltage	:	73 V