

## Spindle Package FlexFinishing Products

The spindle package is an add-on product for robots used in machining applications in order to save up to 80 % of engineering costs by using standardized packages instead of customized solutions.



### Compatible & ready to use

Spindle packages are used in robotized mechanical finishing applications and are obtainable in different models fitting the respective type of robot.

A spindle package consists of all necessary components for the integration, such as the spindle, the frequency converter, the brake resistor and the standard spindle interface (S<sup>2</sup>IF).

The spindle itself can be easily mounted via a standardized mechanical interface alternatively on the mounting flange of the robot or stationary in the workcell.

### Plug & Play solution

The electrical integration in the system is done with the S<sup>2</sup>IF, which is a standardized interface (plug & play solution). The parameterization of the spindle package happens via a licensed Human Machine Interface (HMI).

### HMI for simplified handling

The Human Machine Interface (HMI) in combination with the S<sup>2</sup>IF enables the parameterization and operation of the spindle and supports technical personnel on site during start-up. All parameters can be set up with this supporting software so that the handling is simplified. The software contains all relevant program modules for production.

### Adapted to the application

Whether the spindle package is needed for a small or a big robot, there are different sizes of spindles available to adapt the system to the application. Furthermore users can choose between single or double shaft spindle types respectively spindles equipped with an automatic tool changer system. Weight, power and rotation speed of the spindle is thereby optimized for the used robot manipulator model.

# Spindle Package

## Technical requirements

ABB Robot

IRC5 controller equipped with following options:

617-1 FlexPendant Interface

709-x DeviceNet

RobotWare 5.11 or higher

## Spindle package components

Spindle

Frequency converter

Brake resistor

Mounting flange for the spindle flange

Mounting material

Connecting cable between robot and controller in following lengths:

3m (only for IRB 140), 7m, 15m, 22m, 30m

Documentation on CD

Optional:

Standard Spindle Interface (S<sup>2</sup>IF)

Hose package and valve plate for the robot

Stationary mounting possibility for the spindle  
or the S<sup>2</sup>IF (Tool Stand)

## Technical data of the available spindle types

IRB 140

single shaft: 0,4kW; 48000/60000Rpm; ER15; 2,5kg

double shaft: 0,6kW; 48000/60000Rpm; ER15; 3kg

IRB 2400

single shaft: 2,2kW; 18000/24000Rpm; ER20; 10kg

double shaft: 2,2kW; 18000/24000Rpm; ER20; 10kg

automatic tool changer ISO20:

2,2kW; 18000/24000Rpm; ISO20; 10kg

IRB 4400

single shaft: 5,5kW; 18000/24000Rpm; ER25; 18kg

double shaft: 5,5kW; 18000Rpm; ER25; 18kg

automatic tool changer ISO30:

5,5kW; 24000Rpm; ISO30; 28kg

IRB 66x0

single shaft: 7,5kW; 18000/24000Rpm; ER32; 26kg

double shaft: 7,5kW; 18000/24000Rpm; ER32; 26kg

automatic tool changer ISO30:

7,5kW; 24000Rpm; ISO30; 28kg

IRB 6660PreMa/ IRB 7600

single shaft: 11,8kW; 18000Rpm; ER40; 35kg

double shaft: 11,8kW; 18000Rpm; ER40; 35kg

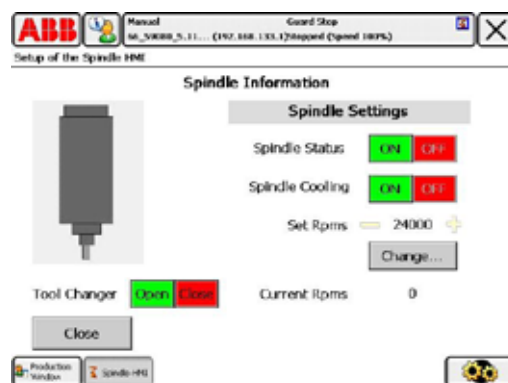
automatic tool changer ISO40:

11,8kW; 18000Rpm; ISO40; 54kg

automatic tool changer HSK-F63:

11,8kW; 18000Rpm; HSK-F63; 54kg

## Human Machine Interface (HMI)



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