

# Auto Sub Function Package for Bumper and Fascia Painting

Clear Coat:2K, Solvent Based

IRB 5400-02:ABB Robobell

## Plug and Spray

The ABB Function Packages provide cost-effective, standardised painting solutions with clearly specified functionality, performance and interfaces. It is the safest and easiest way to take your painting process closer to perfect precision.

## ABB Function Package advantages

- Optimised for high quality paint finishing operations on specified objects under predefined operating conditions
- Saving valuable installation and configuration time
- Thoroughly proven solutions and quality components
- Top reliability, high up-time
- Minimised paint and solvent consumption.

## Pre-configured and optimised IPS

All Function Packages include IPS, ABB's unique Integrated Process System with all IPS parameters fully tuned and tested for maximum finish quality and up-time.

Pre-configured are also the Teach Pendant (TPU) with special Operator interface functions, and two utility programs: The Colour Change program and the Pot-life program

## Characteristics

IRB 5400 robot with pumps and ABB's Robobell, complete with integrated hose routing and all paint handling equipment. The cabinets are pre-mounted in a frame and all interconnections are done and tested, ready to put into the factory. Everything is fully documented, including process-, circuit- and interconnection diagrams.

## Paint Handling equipment

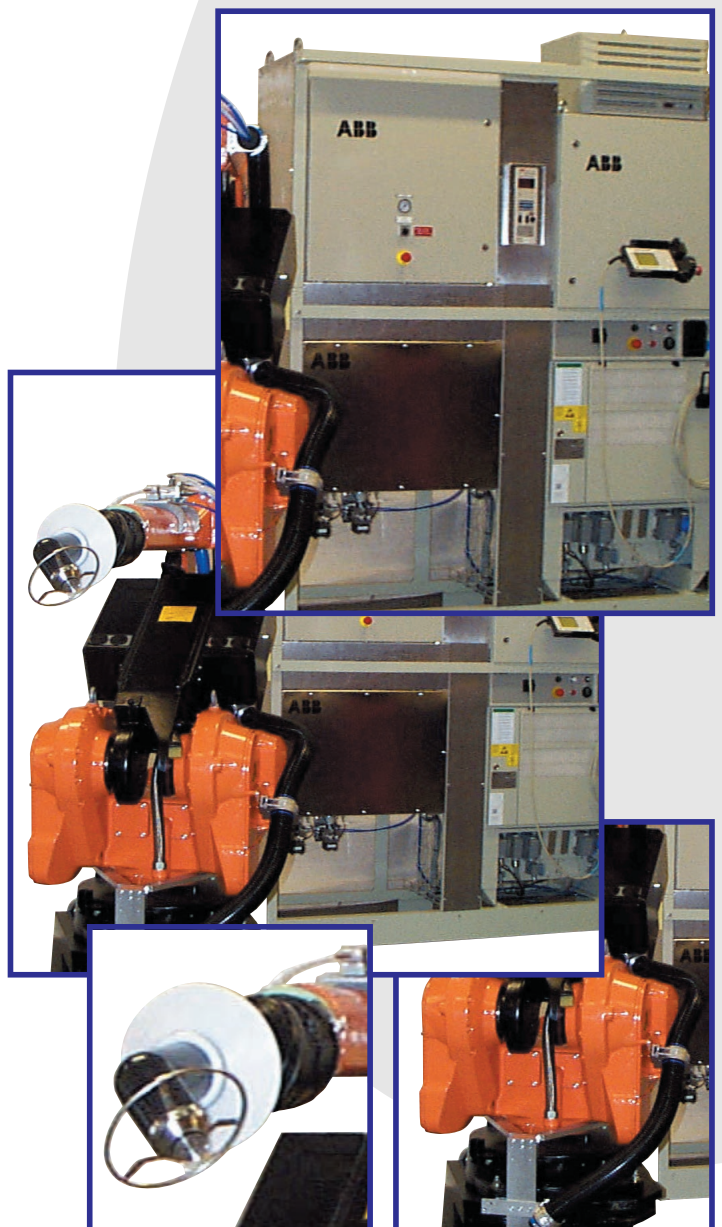
Applicator Type: ABB's Robobel 30 T

Pump: ABB's non flushable stainless steel pump. Alternatives: 2, 3 or 4 pumps and three different pump combinations depending on flow and mixing ratio.

Mixer: ABB's with plastic tube (easy to change).

Prepared for up to 2 materials and 2 hardeners.

Bell purging box (option) integrated on the raiser.



## Interface

Electricity: same as the robot.

Air dynamic pressure: min: 6 bar; max: 8 bar, filtered at 5µm. Connection: by flexible hose 15mm ID.

Air consumption, maximum: 1000 NI/m.

Paint supply pressure: min: 3 bar, max: 7 bar.

Connection: 6x8 nylon for base, PTFE for hardener.

Solvent supply pressure: min: 5 bar, max: 7 bar.

Connection: 6x8 nylon.

## Performance

Max shaping air: 720 NI/min at 6 bar

Air regulation accuracy:  $\pm 2,5\%$

Shaping air response time: 60 ms

Pump system response time: 40ms

Pump alternatives: 6ccm/3ccm, 6ccm/1.2ccm, 3ccm/1.2ccm

Max paint flow <sup>2)</sup>: 500cc/min

Colour change time: 11 sec <sup>3)</sup>

Paint Waste: 40 cc <sup>3)</sup>

Solvent waste: 90 cc <sup>3)</sup>

Typical installation time: 2 days  
(out of box till start programming).

<sup>2)</sup> Max paint flow is dependent on mixing ratio.

Measured under the following conditions:

Air pressure: 6 bar

Solvent pressure: 6 bar

Paint pressure: 6 bar

50mm shaping air ring

Paint: Herberts, viscosity 20 sec DIN-cup4 (20°C).

<sup>3)</sup> Measured when changing from Red to White colour.

## Dimensions

Axis Movement: same as for robot apart from axis 1 with 200 working range.

