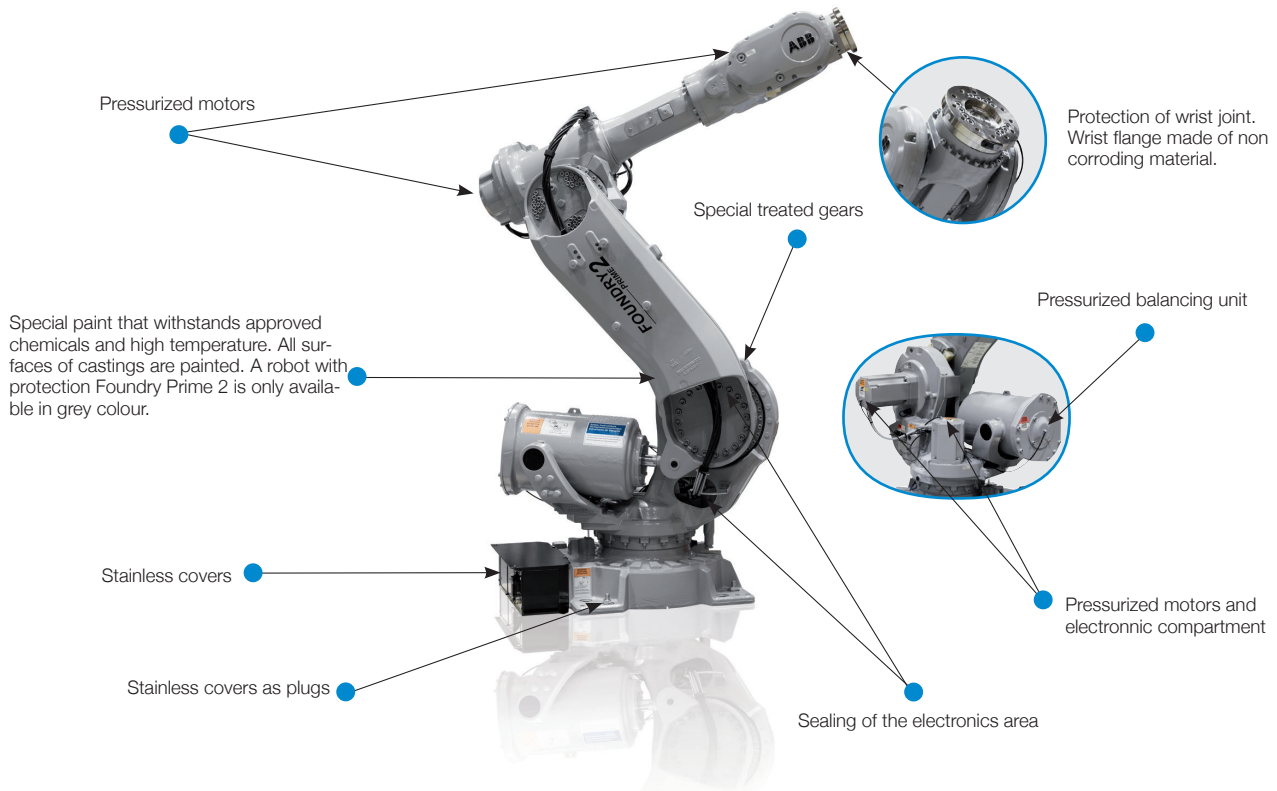


Foundry Prime 2 Waterjet cleaning robot protection



Technology, which holds out against all odds

The Foundry Prime protection, designed for washing or cleaning of casts and machined parts, and similar very harsh environments, is a unique innovation from ABB that has revolutionized high-pressure waterjet cleaning by robots. With Foundry Prime 2 the level of protection has been further improved to meet customer demands in this difficult environment. It is the first protective system that works effectively without a complex protective covering against heat, wet and dirt and which constitutes a substantial progress for production.

The grey paint is specially developed to withstand chemicals and high temperature. The parts are painted separately in several steps to ensure the protection against corrosion. The final painting is done when the robot has been completely assembled. A robot with Foundry Prime 2 protection can only be used with selected and approved detergents. The robot itself consists to a large extent of anticorrosive parts and works with pressurized motors purpose-built against permeation of humidity. Even the electronics are certainly protected against wetness.

Robots protected with Foundry Prime 2 withstand 100% humidity and water vapor of a typical cleaning application and ensure a long-life cycle yet in the aggressive environment of a cleaning cell.

Foundry Prime 2 enables a brand new production concept whereby different parts can be cleaned by a cell-integrated robot.

Optimized cleaning cycle

The idea is as well ingenious as efficient: Without a special protection cover the Foundry Prime 2 robot is as flexible as a standard robot. This flexibility simplifies programming and enables the construction of significant smaller production cells.

High-pressure treatments can be carried out in different applications. The high-pressure cleaning can be used for removing cooling and cutting oils after machine tool operations as well as for chip and flash removal after machining.

Foundry Prime 2

In case of part changes only the programming of the robot has to be adjusted to the modified geometry of the work-piece. So different parts can be cleaned in incoherent order by only one robot in the same cell. Process optimizations and adjustments are finished in shortest time and with smallest effort.

The Foundry Prime 2 protection enables the combination of proved cleaning-processes with the flexibility of a complete integrated 6-axes-robot in one production unit without additional protection covers, foils or shields.

Operation and Maintenance

To ensure that the protection offers the best reliability, special measures are required during installation and throughout the life of the robot. Foundry Prime 2 robots comes with an extended operational and maintenance program compared to standard robots. ABB has an extensive customer service offering for different maintenance solutions based on long experience of using robots in demanding washing applications.

The special features at one sight:

- Pressurized motors, SMB electronic compartment and balancing cylinder
- Protection against rust on wrist and wrist flange
- Corrosion protection with special rust preventive on unpainted surfaces
- Motors sealed with sealing compound
- Stainless covers
- Special treated gears
- Special developed 3-layer paint system
- Stainless screws
- IP67
- Inspection and maintenance required
- Comprehensive service offering*

* Scope of service may vary from country to country

Foundry Prime 2 is available for the ABB-robots:



IRB 4600 60/2.05



IRB 6640-235/2.55
IRB 6640-180/2.8