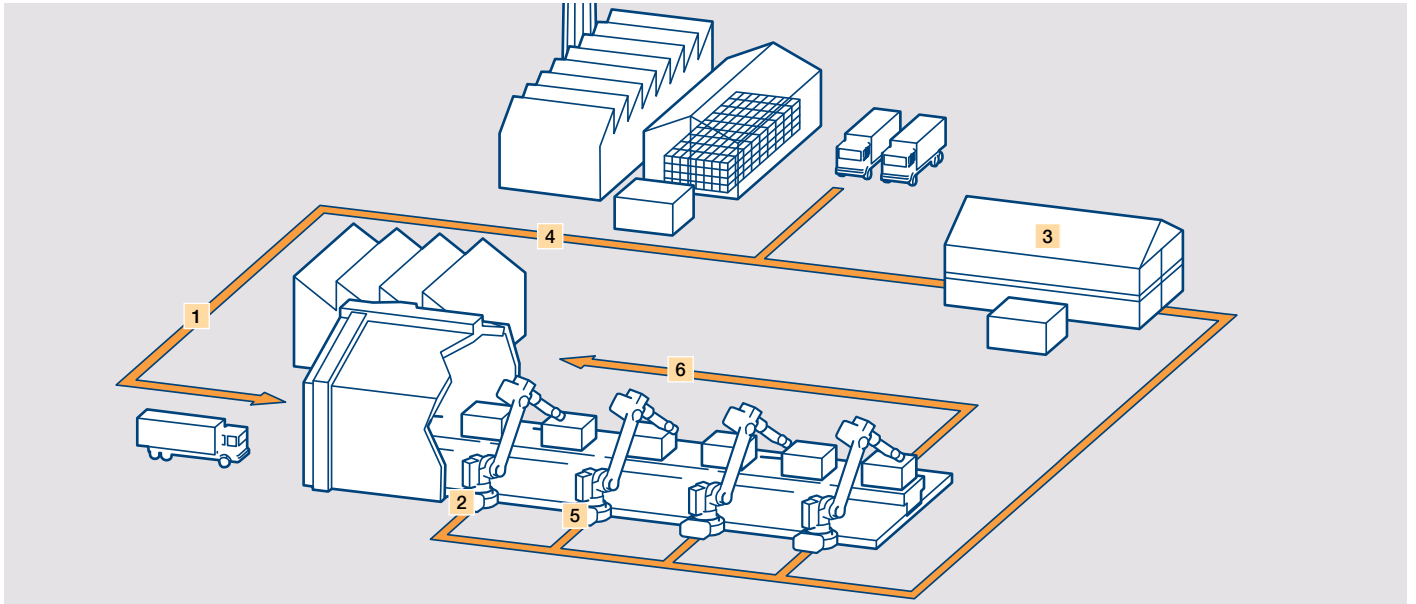


Elmo Motor Maintenance kits

Preventive care for ensured productivity



An advanced industrial robot usually contains six motors, and a failure of any of them means failure of the robot. Unexpected stoppages are a threat to productivity in any operation. To avoid this, regular motor maintenance is essential to secure production.

Preventive maintenance is a necessity to running an efficient operation. Our experience is that the expected life time of some wear components like brakes, bearings, seals etc is 6 to 7 years, depending on working condition and environment.

To avoid premature deterioration and failure, scheduled maintenance needs to be performed regularly and these planned stops must be as short as possible with maximum efficiency on site. This will not only secure production but also prolong robot life expectancy.

The Elmo motor replacement programme includes a full upgrade with all material needed, on site replacement by an ABB service engineer and repair of replaced motors. All replacements are done quickly with a minimum of stoppage time, and the maintenance cost is kept low, as the customers existing motors are used for the upgrade.

Maintenance kits are available for motor rotation replacement schedules including: IRB 2400, IRB 4400, IRB 5400, ELMO motors for minor axis, ELMO motors for major axis. All spare parts used are original ABB or ELMO. Drawings, technical data and full traceability is fully available from ABB.

This is how it works

- 1 The first kit of refurbished motors, all with complete guarantees and warranty, are brought to the customer site.
- 2 Authorized ABB service technicians use the refurbished motors to start the on-site replacement cycle.
- 3 The old, replaced motors from the robot are brought to an ABB certified repair and conditioning centre.
- 4 The motors are refurbished and upgraded to the latest standard, and brought back to the customer site.
- 5 The motors are then used as replacement kits for the subsequent robot in line, starting the next rotation cycle. The cycle continues until all robots have received a set of refurbished motors.
- 6 At the end of the cycle, the customer receives a complete set of refurbished motors to keep in stock for emergency replacement.

Kit	Article	Axis	Robot
1	3HAC043685-001	1/2/3	2400/L/10/16
2	3HAC043688-001	4/5/6	2400/L
3	3HAC043686-001	4/5/6	2400/10
4	3HAC043687-001	4/5/6	2400/16
5	3HAC043689-001	1/2/3	4400/45/60/L30/L10
6	3HAC043690-001	4/5/6	4400/45/60/L30/FS
7	3HAC043691-001	4/5/6	4400/L10

IRB 2400 Elmo	L	10	16	Wall
Axis 1				
3HAC 4789-1	1	1	1	
3HAC 14271-1				X
Axis 2				
3HAC 4790-1	1	1	1	
Axis 3				
3HAC 4789-1	1	1	1	
Axis 4				
3HAC 10602-1		3	4	
3HAC 11864-1	2			
Axis 5				
3HAC 10600-1		3		
3HAC 10601-1			4	
3HAC 11865-1	2			
Axis 6				
3HAC 10602-2		3	4	
3HAC 11865-1	2			

IRB 54XX Elmo	5400-02 Slim Arm	5400-02 Process Arm	5400-03 Slim Arm	5400-03 Process Arm	5400-04 Slim Arm	5400-04 Process Arm	5402-03 Steel Arm	540-02	580-02
Axis 1									
3HNP 01724-1	1	3	1	3	1	3	1		
3HNP 00871-1								4	4
3HNM 02118-1									
Axis 2									
3HNP 03397-1	2 (S4P+)		2 (S4P+)		2 (S4P+)				
3HNP 03903-1		3		3		3			
3HNP 01724-1	1 (S4P)		1 (S4P)		1 (S4P)		1		
3HNP 00871-1								4	4
3HNP 02183-1									
Axis 3									
3HNP 01724-1	1	3	1	3	1	3	1		
3HNP 00871-1								4	4
3HNP 02183-1									
Axis 4									
3HNP 00043-1	6	6 (S4P)	6	6 (S4P)	6	6 (S4P)	6		6
3HNP 02660-1		7 (S4P+)		7 (S4P+)		7 (S4P+)			
3HNM 03161-1								x	
Axis 5									
3HNP 00043-1	6	6 (S4P)	6	6 (S4P)	6	6 (S4P)	6		6
3HNP 02660-1		7 (S4P+)		7 (S4P+)		7 (S4P+)			
3HNM 03161-1								x	
Axis 6									
3HNP 00043-1	6	6 (S4P)	6	6 (S4P)	6	6 (S4P)	6	x	6
3HNP 02660-1		7 (S4P+)		7 (S4P+)		7 (S4P+)			
3HNM 03161-1									

Kit	Article	Axis	Robot
1	3HAC043694-001*	1/2/3	5400-02/03/04 Slim arm (S4P) & 5402-03 Steel arm
2	3HAC043695-001*	1/2/3	5400-02/03/04 Slim arm (S4P+)
3	3HAC043696-001	1/2/3	5400-02/03/04 Process arm
4	3HAC043697-001	1/2/3	540-02 & 580-02
6	3HAC043692-001	4/5/6	5400-02/03/04 Slim and Process (S4P) and Steel arm & 580-02
7	3HAC043693-001	4/5/6	5400-02/03/04 Process arm (S4P+)

* Axis 2 motor of the IRB 5400 Slim arm is different between S4P and S4P +

IRB 4400 Elmo	45	60	L30	L10	FS
Axis 1					
3HAC 5952-1	5	5	5	5	
3HAC 9841-1					X
Axis 2					
3HAC 5954-1	5	5	5	5	X
Axis 3					
3HAC 5954-1	5	5	5	5	X
Axis 4					
3HAC 10603	6	6	6	7	6
Axis 5					
3HAC 10603-1	6	6	6		6
3HAC 10605-1				7	
Axis 6					
3HAC 10604-1	6	6	6		6
3HAC 10605-1				7	

For more information please contact:

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