

Robotics

IRB 6700 Lean ID Dressed for productivity



Give your productivity an upswing Shorten your downtime with IRB 6700 LeanID

Six-axis robots are designed to move with total flexibility, however external DressPacks are not. Swinging cables not only wear faster, but also severely limit the free movement of the robot.

The IRB 6700 LeanID secures a flexible operation and minimizes downtime, (due to cable wear), providing better process economy and less manual handling. In short, IRB 6700 LeanID delivers a strong return on investment! That's robot productivity. ABB has in partnership with customers analyzed production needs. The IRB 6700 LeanID meets customers' requests for a solution to the problem of movable external cables, causing costly robot stoppages.

Release the productivity of your robots

When listening to the robot users, it was clear that swinging and jamming external cables is a problem which causes unnecessary stoppages. The swinging also causes wear of cables, and replacement of cables was considered a major hassle with the need of reprogramming the robot. In short, external cables affect robot and plant productivity. The IRB 6700 LeanID "hides" the cables via unique integrated design so that the problem can be avoided.

The integration in combination with longterm lifetime testing means that you can exploit the full versatility and flexibility of the robot – without being limited by swinging cables.

Few and fast DressPack replacements

Firmly positioned in the upper arm, cables wear less which helps extend the lifetime of the DressPack. And on the few occasions it needs to be replaced, it only takes a few minutes thanks to easily accessible cables and clever quick-locks. Original DressPack from ABB are fully integrated with the ABB robot technology, which means that you do not have to run additional simulations after replacement. It's all plug and play productivity!

Fit for flexible production

Today, a robot must be flexible enough to cope with short series production and rapid changeovers. Stoppages, planned or unplanned, must be shortened as much as possible to reduce downtime and maintain productivity. Reprogramming of stopped robots due to change of cables is obviously unnecessary downtime. With IRB 6700 LeanID, programming of advanced production schemes can be done offline, enabling maximized uptime, and you do not need to consider uncontrolled external cabling movement. The robot will behave as programmed, sparing you unpleasant and nasty surprises.





1 Overview. | 2 A lean and compact wrist allows the robot arm to enter narrow passages. Beside compactness the wrist is also designed with high handling capacity. | 3-4 During replacement, the upper arm DressPack is loosened at the back of the arm and easily pulled through to the front. Quick-locks simplify rapid DressPack replacement. | 5. The lower and upper arm DressPack is well engineered and completely integrated.

Lower total cost of ownership

Looking at total cost of ownership, the IRB 6700 LeanID is truly a sound investment. In fact, it may pay off to replace fully functional robots with external DressPacks – from cost savings alone.

Uptime, parts costs and reliable simulations are examples of important factors – and they all depend directly on the performance of the DressPack. Also considering the second-hand value of your existing robot park, the pay back time for new IRB 6700 LeanID may be really fast.

The combined value of increased production uptime, reduced repair and spare parts cost, and reliable 3D simulations may amount to more than 6,000 euros per robot per year.

Cost saving Lean ID	Increased production uptime	Reduced repair and spare part cost	Reliable 3D simulations
vs. external DressPack			
Assumed scenario	Line stopping cost excluding	Each change takes 1 hour and invol-	Reliable simulation saves
	production loss = 250 €/min.	ves 2 service engineers at 50 €/hour.	investment cost and redu-
	Each stop is assumed to last	Average lifetime of LeanID Dr essPack	ces installation time.
	one hour.	doubled compared to exter nal	Savings over a 6 year
		package: 3 versus 1.5 years.	period and a population of
			150 robots.
Calculation	50 stops less per year	2 fewer dress pack changes per robot	2 robots saved (1.3%)
	thanks to LeanID	over a 6 year period	3 days programming time x 10%
	1 hour per stop	100 € labour cost per change	of robots x 2 times
	150 robots	+ 2000 € material	
	250 € / min		
Total cost saving	5000 € / robot per year	700 € / robot per year	350 € / robot per year
* Estimated repair cost			

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