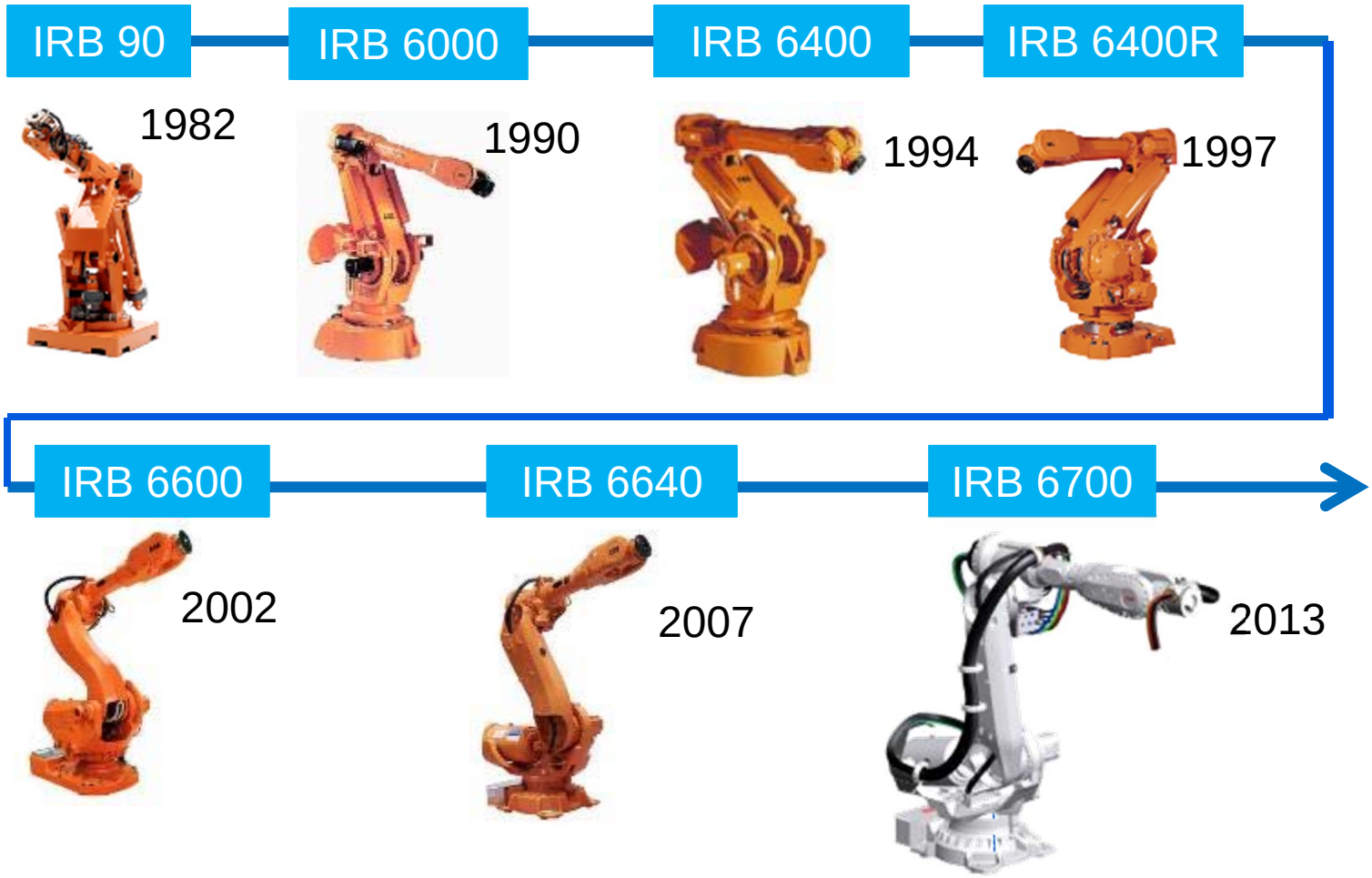
Ola Svanström, Product Manager

IRB 6700
New generation of robots with a lifetime of affordability and reliability

Agenda

- **Overview**
- Targeted applications
- Key differentiators
- Sustainable
- Technical data
- Summary

Overview
Seventh generation of robots



Overview
Differentiated value proposition

The highest performance robot with the lowest total cost of ownership

The IRB 6700 family is the highest performance robot in the 150-300 kg segment.

It has 20 percent lower TCO thanks to a more robust design, longer service intervals and simplified maintenance.

Overview
Three Ranges, Eight Variants

All variants are available with LeanID

High Line 235kg	Low Line 200kg	Power Line 300kg
Available now	Available Q1 2014	Available Q4 2014
220kg 2.65m	175kg 2.60m	270kg 2.70m
200kg 2.80m	140kg 2.85m	220kg 3.00m
155kg 3.05m		
145kg 3.20m		

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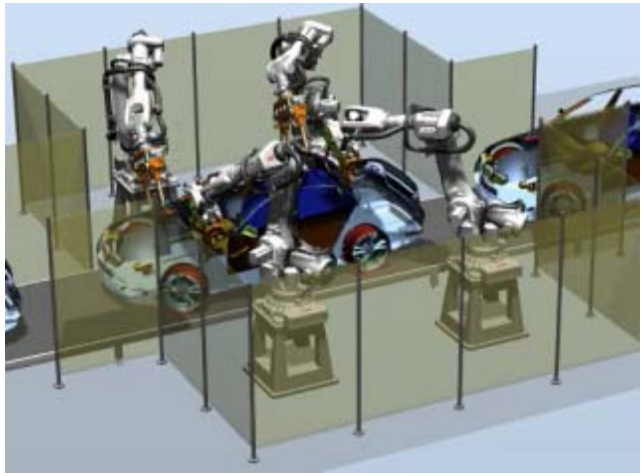
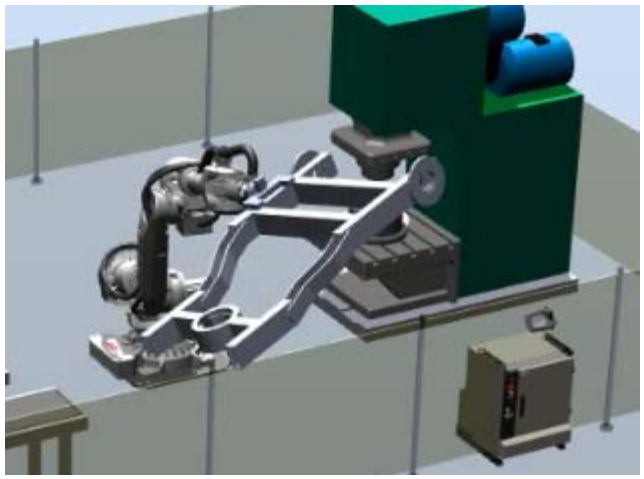
Targeted Applications
Spot Welding



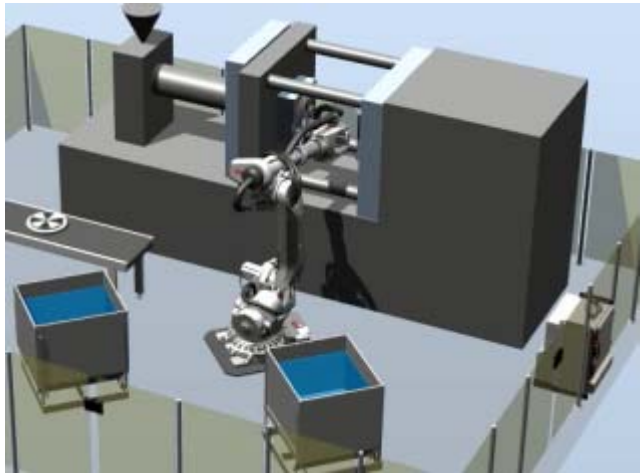
- In car body shops
- All variants needed to support Spot Welding needs from mass production to flexible premium car production
- Lowest TCO
  - Design is focused on uptime, reliability and reduced maintenance
  - Lean ID for longer spot welding dress pack life time on all variants
  - Robot family
  - 150kg @ 3.2m up to 300kg @ 2.7m

Targeted Applications
Material Handling



- Material Handling in both automotive and general industries
- An array of robot variants to cover different needs with just one family of robots
- Short cycle times
  - Cycle times 4-5 percent shorter than previous generation (IRB 6640)

Targeted Applications
Machine Tending



- An array of robot variants to cover different needs in just one robot family
- Foundry Plus 2 protection increases reliability and life time expectancy of the robot in e.g. die cast Machine Tending
- Shorter cycle times
  - An average 4-5 percent shorter than IRB 6640

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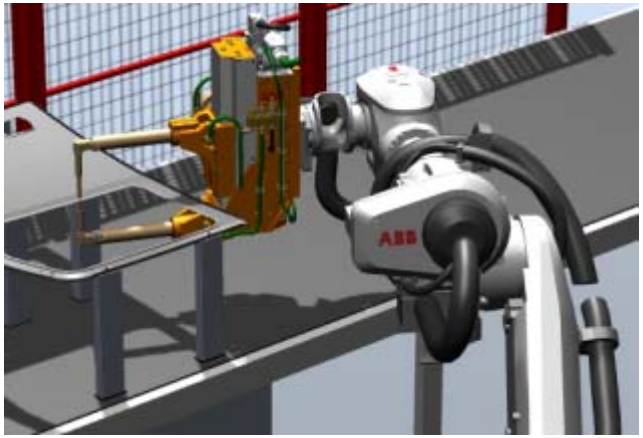
Key Differentiators

- **Lowest TCO**
- **Lean ID on all variants**
  - Long and predictable life time of dress packs - Significantly reduced downtime because of less dress pack failures
- **Outstanding reliability**
  - Design focused om uptime and fault free operation – Arm designed for Mtbf of 400000 h
- **Stronger**
  - 150kg payload at 3.2m reach, 300kg payload at 2.7m reach
- **Sustainable**
  - 15 percent lower power consumption

Key Differentiators
Lower TCO: Lean ID on all variants



- **High performing dress packs on complete range of robots**
  - IRB 6700 available LeanID
    - 140 kg to 270 kg payload
    - 2.60 m to 3.20 m reach
- **Dynamic 3D models**
  - RobotStudio, Delmia V5 Robotics, Process simulate, RobCAD
- **Static 3D models**
  - IGES, STEP, Parasolid, ACIS
- **All arm variants available in 4 versions**
  - Std
  - MH3
  - LeanID SW
  - LeanID MH

Key Differentiators
Lean ID

Traditional dress pack

- Short, unpredictable life time
- Bulky
- Difficult to simulate
- Smaller working range => More difficult to add new parts in line
- Adjustments needed for new parts

Lean ID

- Long and predictable life time
- Compact
- Accurate simulation
- Larger working range
- Easier to add new parts in line
- No adjustments needed

Key Differentiators
Outstanding reliability

- Trusted design based on 30,000 units and 15 years production
- Each IRB 6640 failure report analyzed so IRB 6700 would not repeat
- TCO model driving force behind redesign and incorporation of new solutions
- Robot testing most stringent ever
  - Operation
  - Components

Key Differentiators
Double service intervals

Gear box oil change interval axes 1-3, 6	After 20,000 hours. Quick connections on axes 1-3 to reduce time for draining/filling oil (previous generation IRB 6640 ref 6,000 hours + 24,000 hours)
Gear box oil change interval axes 4-5, after 20,000 hours	After 20,000 hours
Battery change	After 4 years, 3 shifts (previous generation IRB 6640 ref. at low alert after 2 years)
Counter balancing cylinder	Lubrication after 4 years, 3 shifts (previous generation IRB 6640 ref 2.5 years)
Gear lifetime	After 8 years and 3 shifts in normal BIW operation an inspection /overhaul is needed
Annual inspection	20 min. Gear box oil levels, harnesses, labels, balancing device, mech. stops

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Sustainable
15% reduced energy consumption

IRB 6640
A front runner in low energy consumption

IRB 6700
15 percent less energy compared with IRB 6640

Sustainable
Built from non-hazardous materials

- Fully complies with environmental directives RoHS 2002/95/EC and Reach No1907/2006 directives

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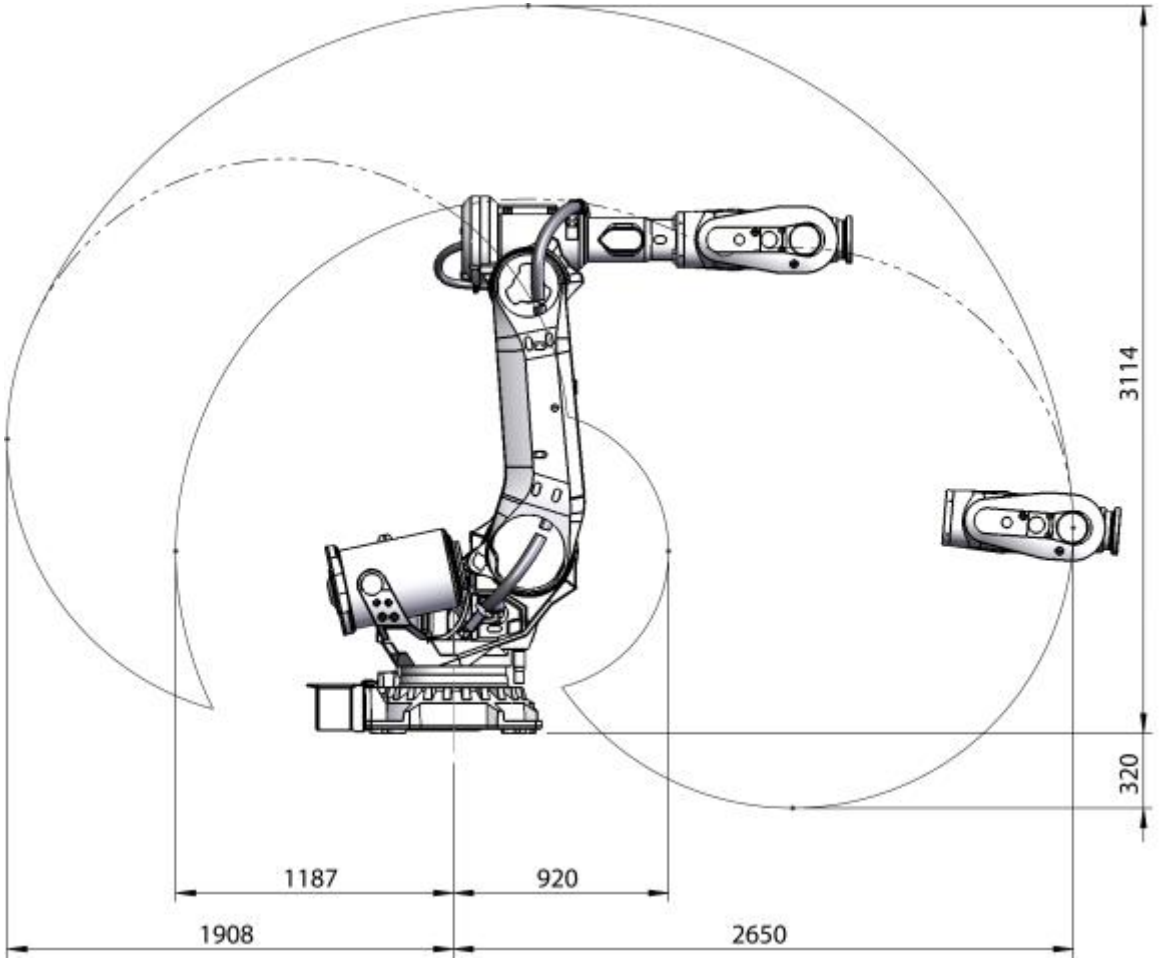
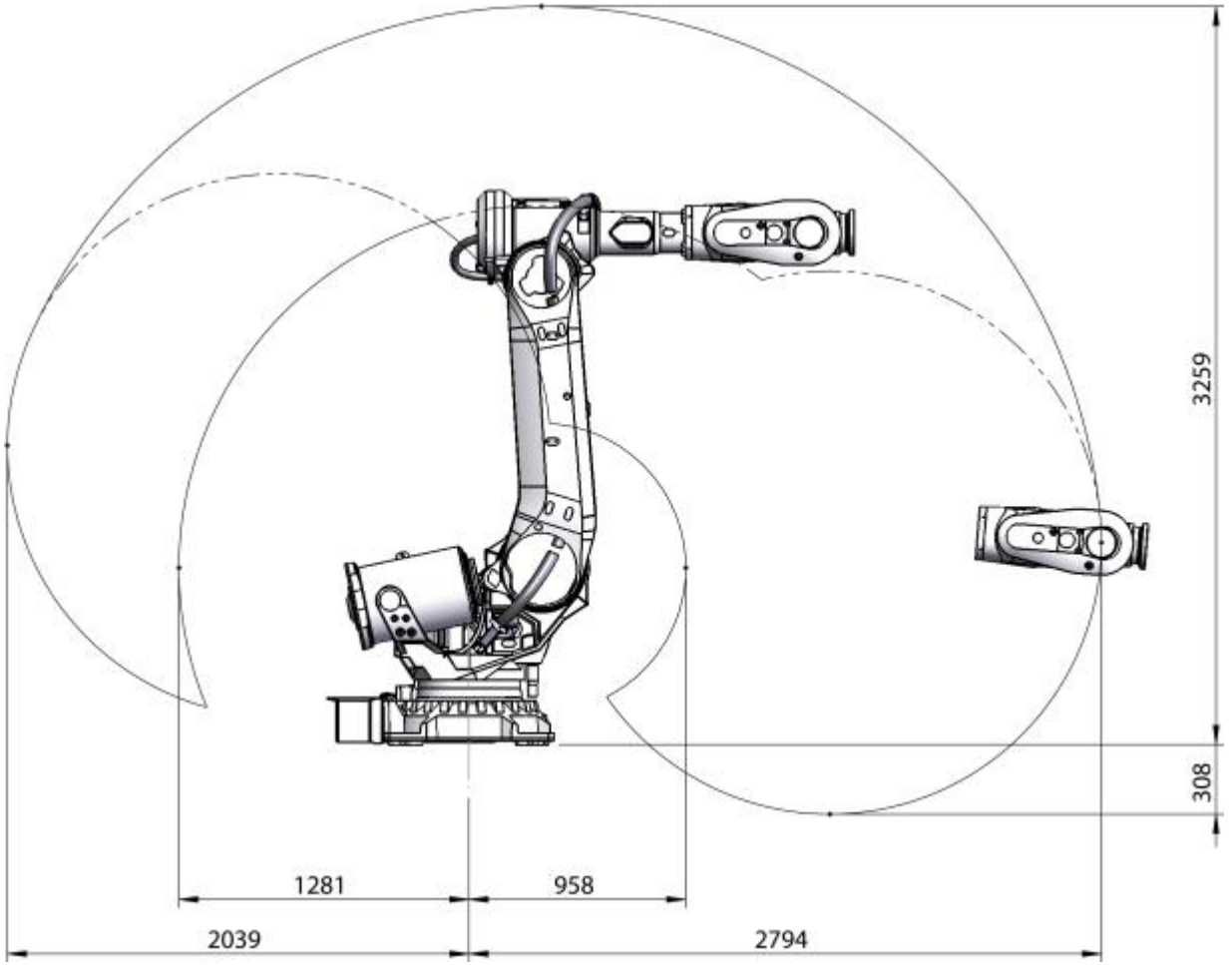
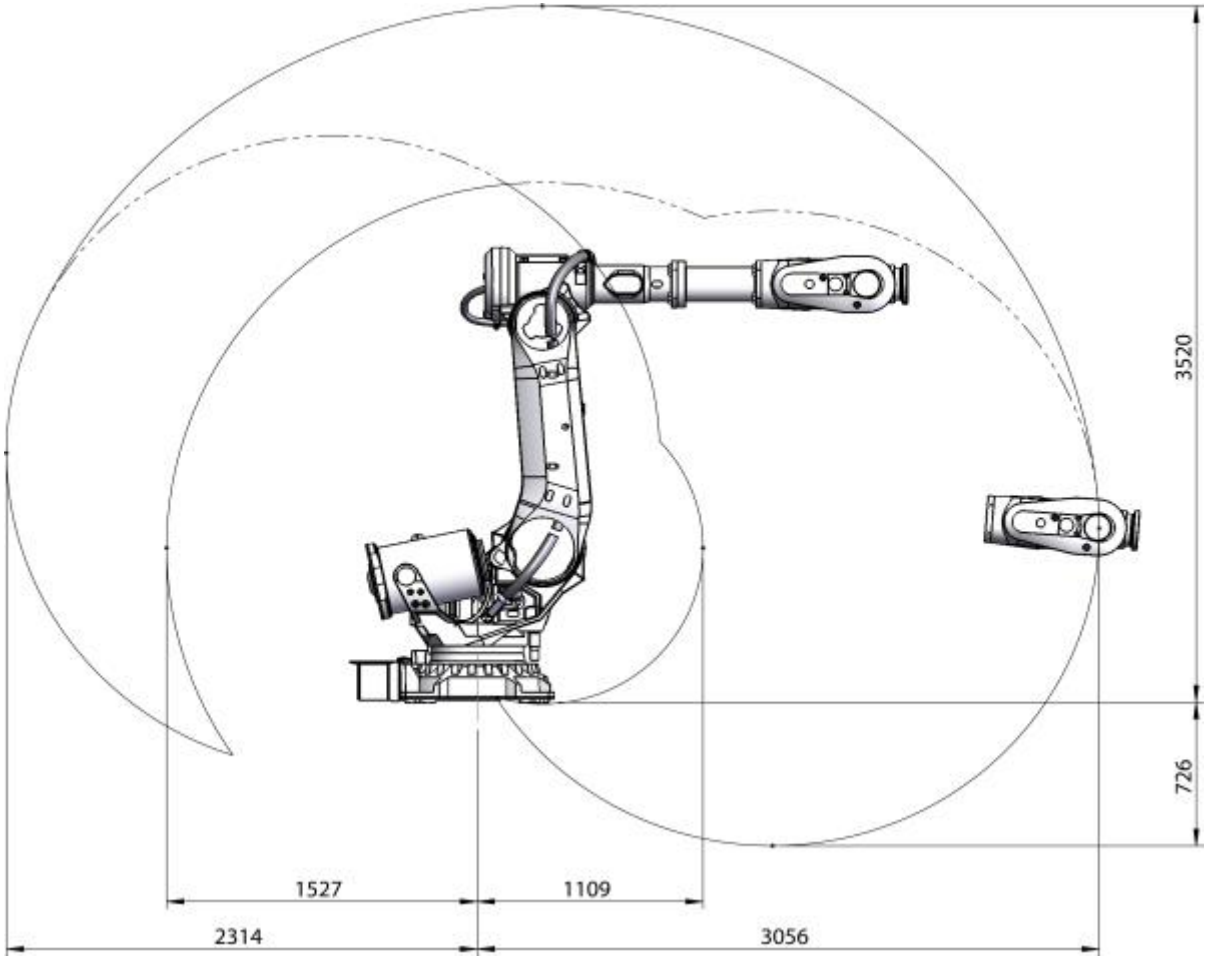
Technical Data
Working range IRB 6700-235/2.65



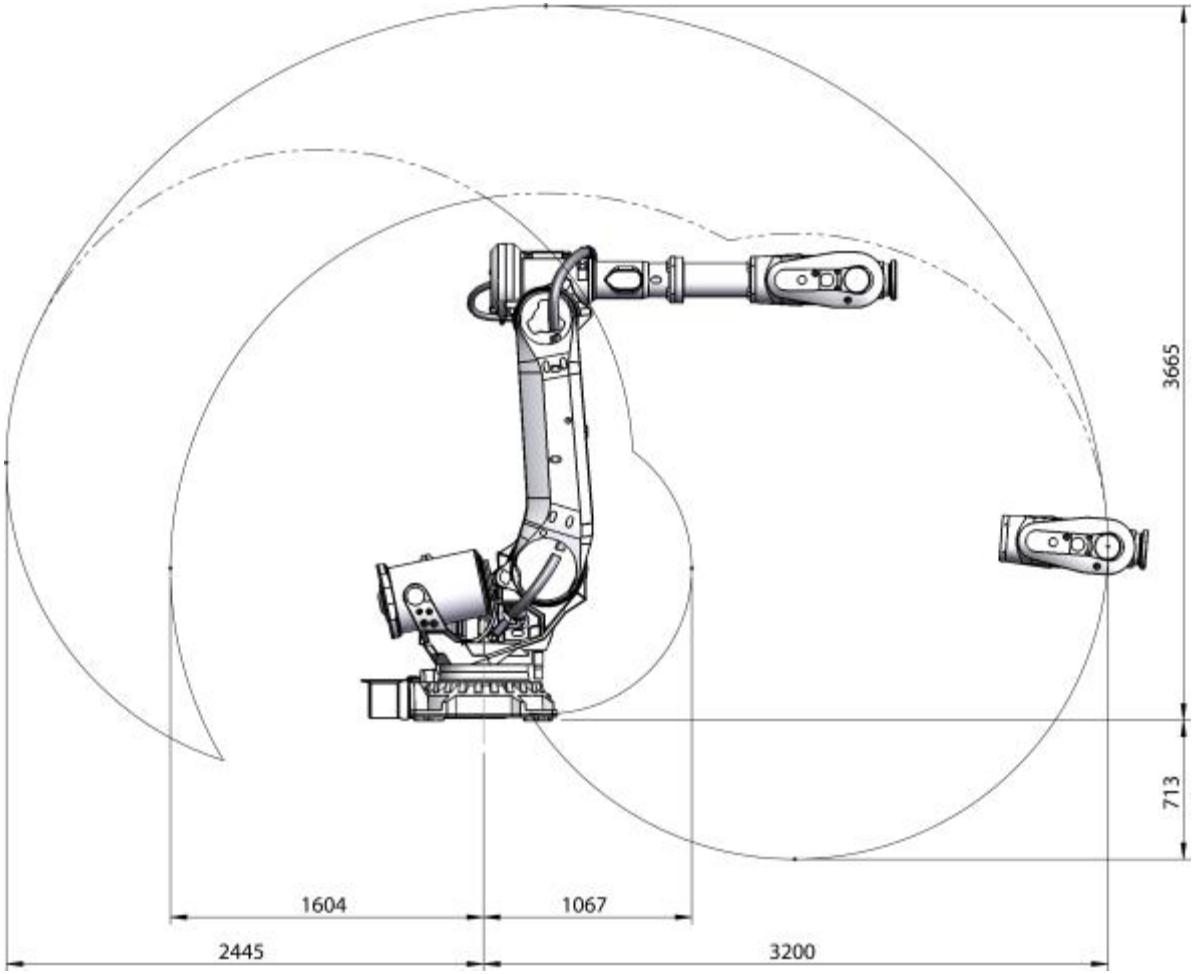
Technical Data
Working range IRB 6700-205/2.80



Technical Data
Working range IRB 6700-175/3.05



Technical Data
Working range IRB 6700-150/3.20



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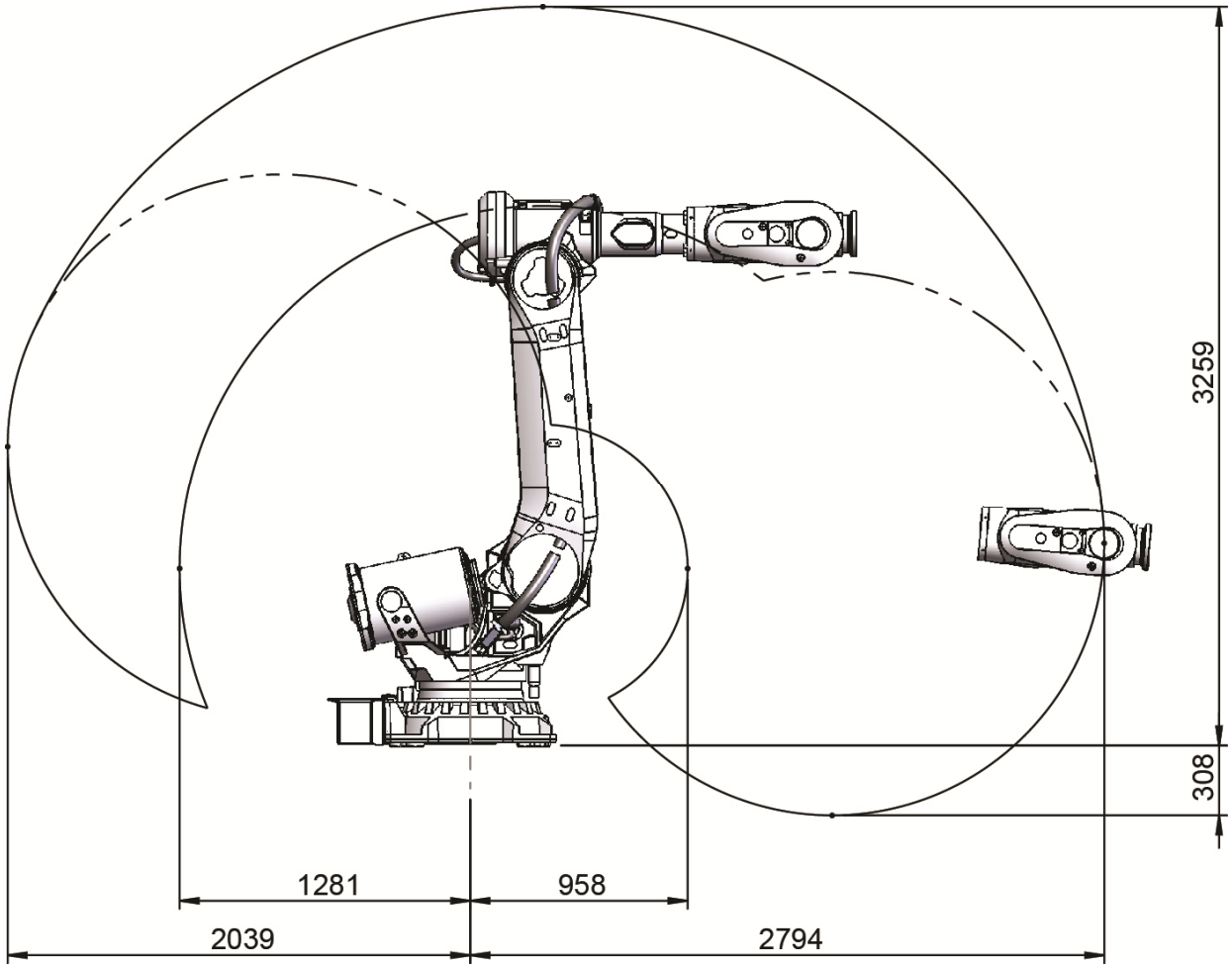

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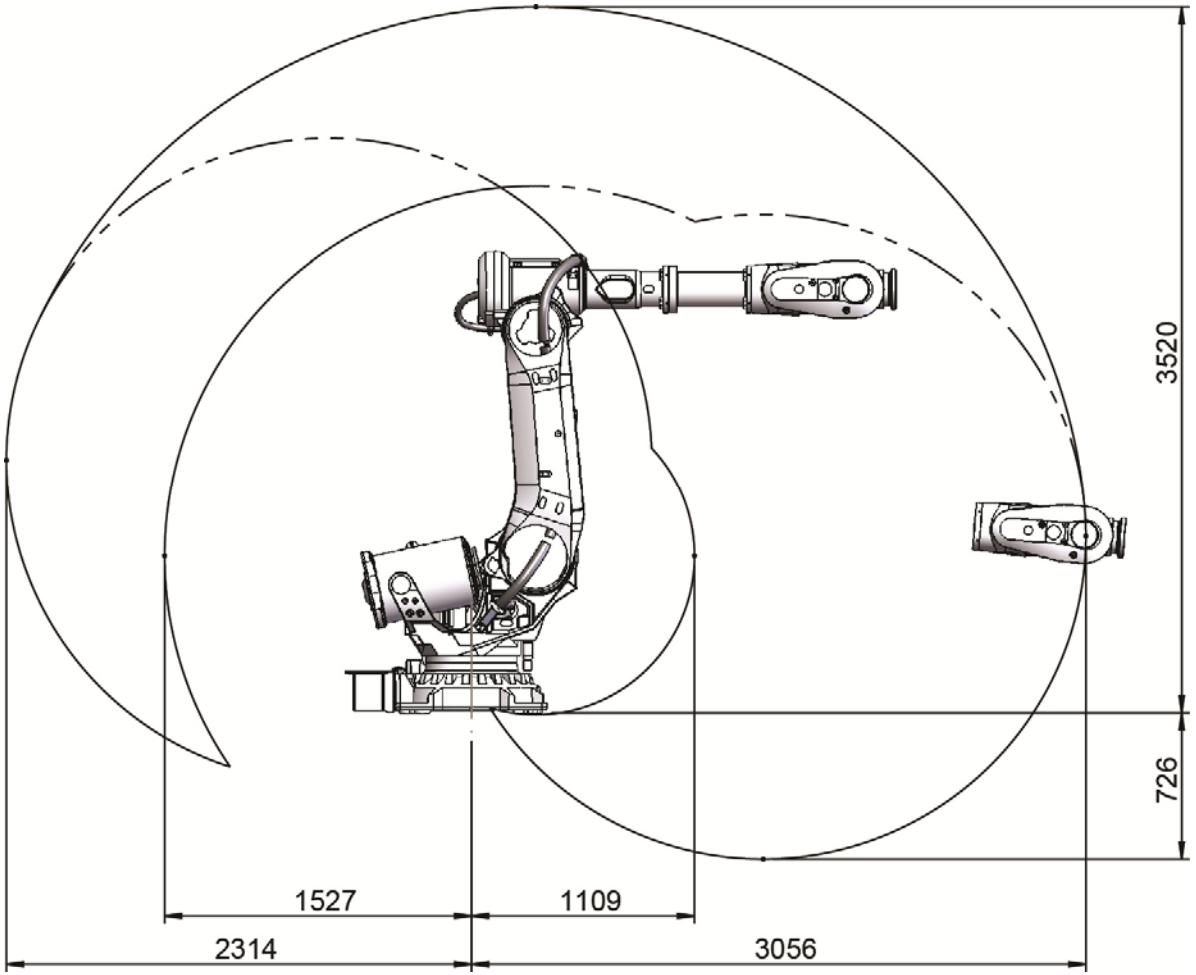

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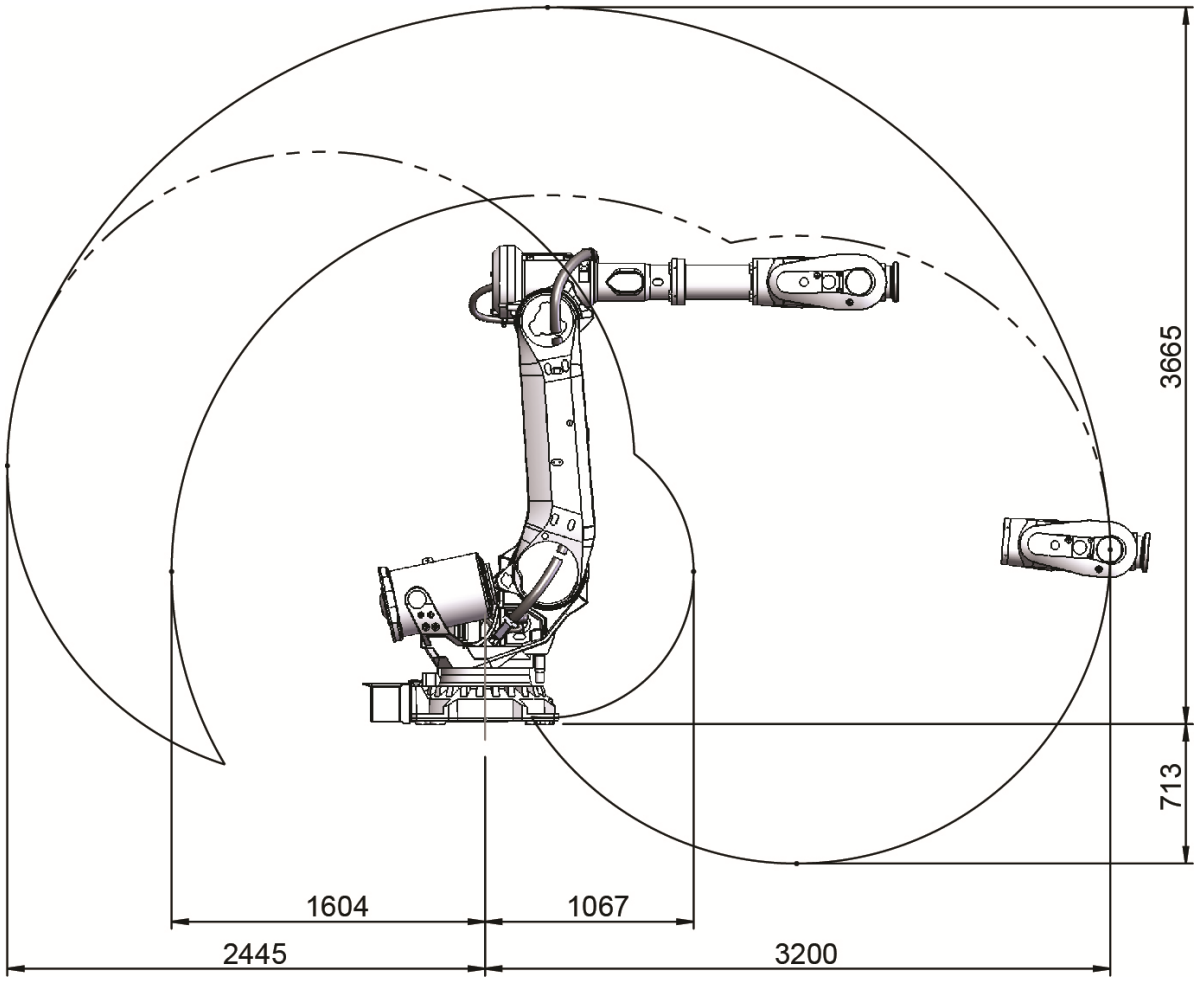
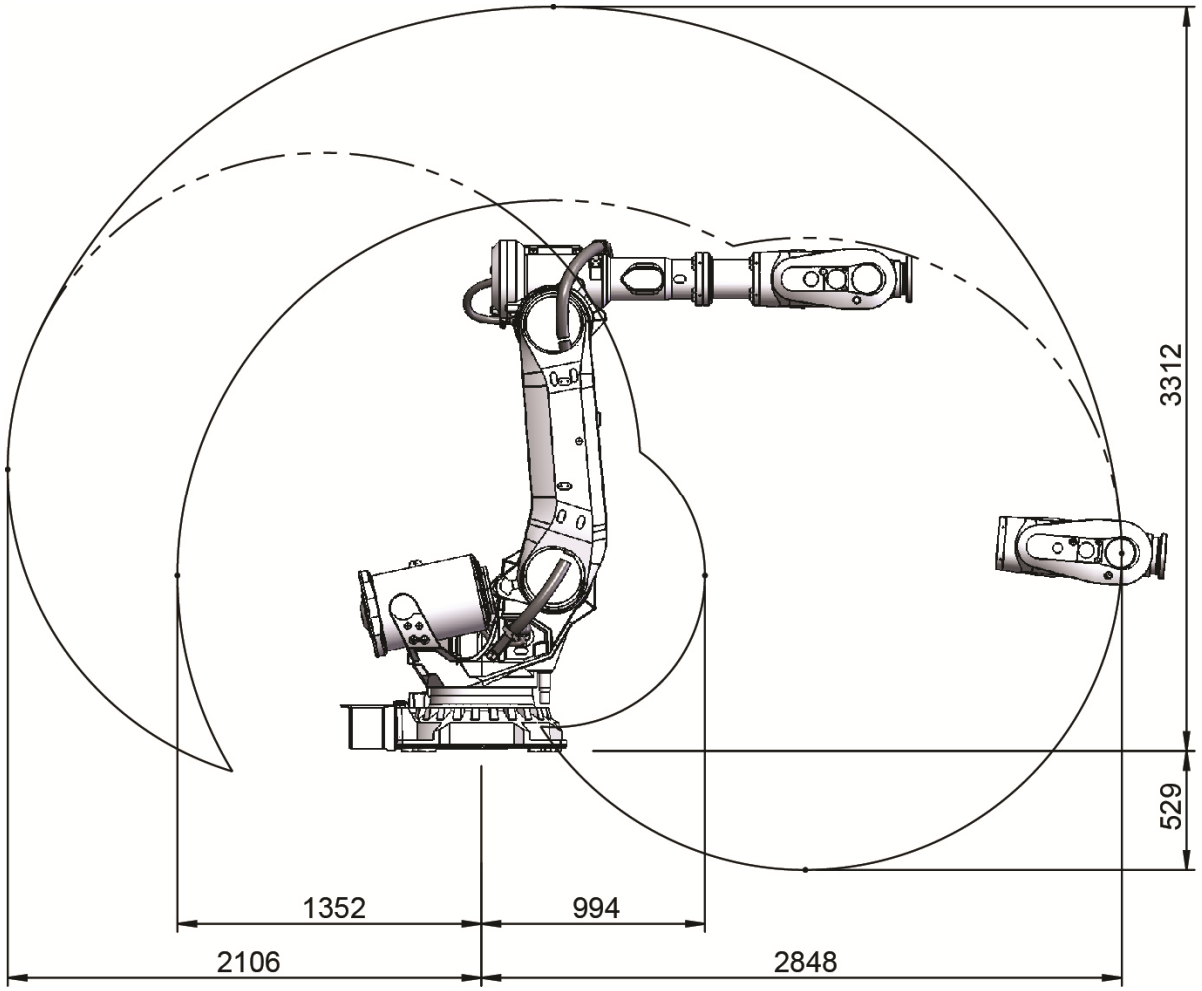
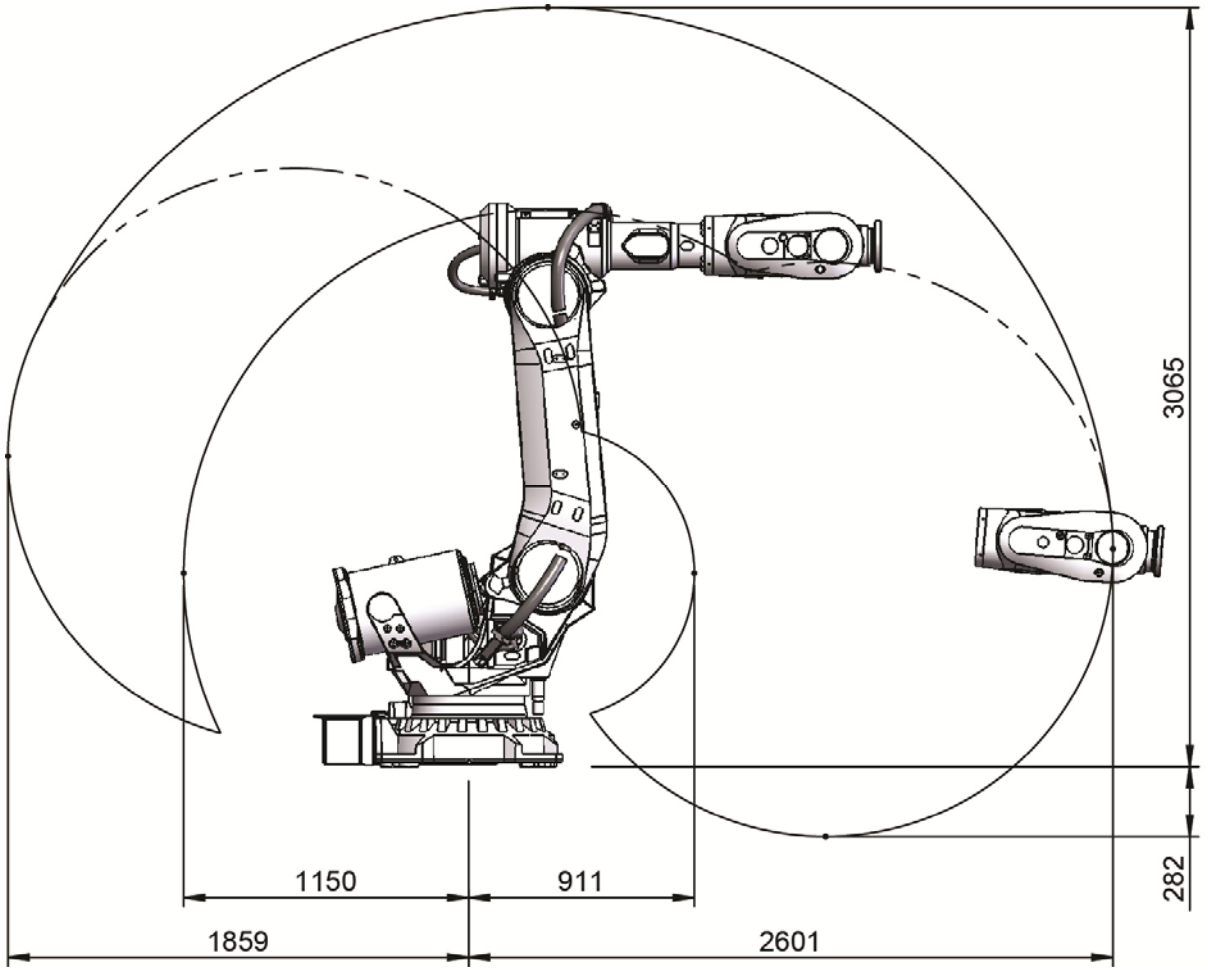


Technical Data
Working range IRB 6700-155/2.85



Technical Data
Working range IRB 6700-200/2.60



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Summary
The numbers tell the story

- **20% Lower Total Cost of Ownership**
  - Design focused on uptime and reliability
  - Annual service time reduced 15 percent
  - 15 percent less power consumption
- **Unmatched Reliability**
  - 400,000 MTBF
- **High Performance**
  - 4-5 percent faster

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