IRB 6620
- The agile spot welder
IRB 6620

- Compact
- Flexible
  - Shelf
  - Upside down
  - Up to 15° tilt
- Powerful
  - 150 kilo payload
- Agile
  - Unsurpassed agility
- Lean
  - No balancing cylinder
  - Only 900 kilos
- Option
  - Foundry Plus

The perfect robot for numerous applications…
…from spot welding to machine tending
IRB 6620 - Compact

IRB 6640
General purpose
- Material handling
- Heavy spot welding
- Press brake tending
- Injection moulding
- Die casting
- Sand core handling
- Electronics
- Packaging…
- 235 kilo
- 2,55 m

IRB 6620
- Compact spot welding robot
- 150 kilo
- 2,20 m

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IRB 6620 - Agile

- Huge working range for its size
- Possible to build more dense packed cells
- Saving floor space…
  - … by working as a shelf robot
  - … by inverted mounted robots
  - … working as a crawler robot
IRB 6620 - Agile

- Working range – Inverted mounted
IRB 6620 - Flexible

- Two robots in one
  - Normal robot
  - Shelf robot

- Easier to mount the robots
  - inverted
  - on top of another machine
IRB 6620 - Flexible

- Flexible in mounting
  - Floor standing
  - Tilted
  - Inverted (with 150 kilo payload)
IRB 6620 – Designed for Spot Welding

- 50 kg load capacity on rear upper arm
  *Can handle all available dress pack designs*

- No motors on rear upper arm
  *Compactness in retracted position and no interference with cablings*

- Extra space inside robot foot

- Large center hole through axis 1
  *Easy change of dress pack and long life time dress pack routing*
IRB 6620 – Designed for Spot Welding

- No counter balancing cylinder
  *Easy dress pack routing*

- Calibration in process
  *The robot can be calibrated with dress pack mounted*

- Lifting devices on foot
  *The robot can be lifted with dress pack mounted*

- Visible synchronization scales
  *With dress pack mounted*

- Commonality with IRB 66X0
  *Foot print, wrist interface etc too simplify auto project logistics*
IRB 6620 – Designed for Spot Welding

- Low total weight
  *Simplifies installation*

- Rigid upper arm design
  *Collision resistance*

- Flexible working range limitation
  *Electronic Position Switches on all axes*
IRB 6620 – Designed for Spot Welding

- Insulated wrist flange
  Available as option

- Large working range axis 5 also with axis 6 dress pack bracket mounted ± 125 °

- Large moment of inertia capability
  Flexibility to handle also large tools

- Prolonged wrist with smooth surfaces
  Dress pack cannot get stuck and life time is enhanced
IRB 6620 – Designed for Spot Welding

- Large working range axis 2
  *Semi shelf concept useful in many SW installations*

- Gear box weld spatter protection
  *For harsh spot welding*

- Axis 2 center as low as possible
  *To reduce the robot total height*
IRB 6620 – Designed for Spot Welding

- Tip dresser on robot foot (option)
  - Extended wrist (so the cables don’t get stuck)
  - Wrist designed for a wide working range on axis 5, even with dresspack mounted
  - Easy to exchange dresspack because of excellent reachability
    - No balancing cylinder (no interference when working on robot)
    - Extensive hole through the gear for axis 1 (where the dressing cables pass by)
  - Plenty of room in the robot foot (your hands easily fit when mounting the dressing cables)
IRB 6620 / IRB 6600 - Commonality

- Compact gears (axes 1, 2, 3, 6)
  - All compact gears from the same supplier
  - Axis 6 same as IRB 6640

- Motors
  - All motors from the same supplier
  - Axes 4, 5, 6 same as IRB 6640
IRB 6620 / IRB 6640 - Commonality

Reuse of components IRB 6620 / IRB 6640:
- Calibration equipment
- SMB and Brake Release
- Floor cable interface
- Foot Print
- Bearings axis 4
- Flange interface
- Insulated wrist flange
- Controller and Teach Pendant
- Process cabinet
- 7 and 8 axes configurations
- Spot Welding software
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