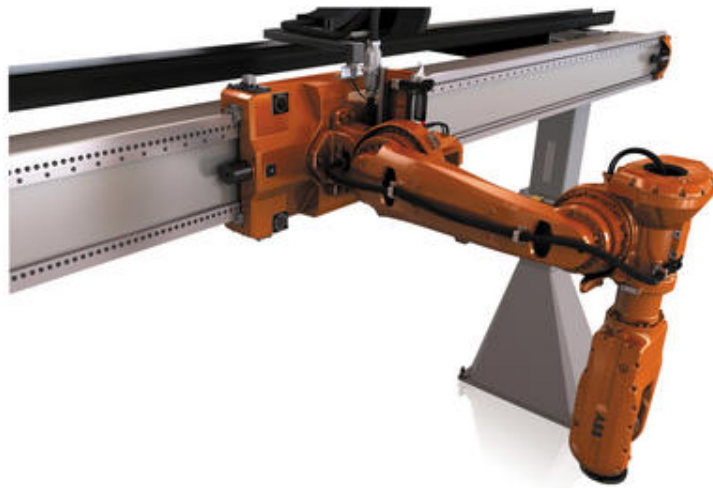


IRB 6620LX

Optimize your working range

ABB Robotics

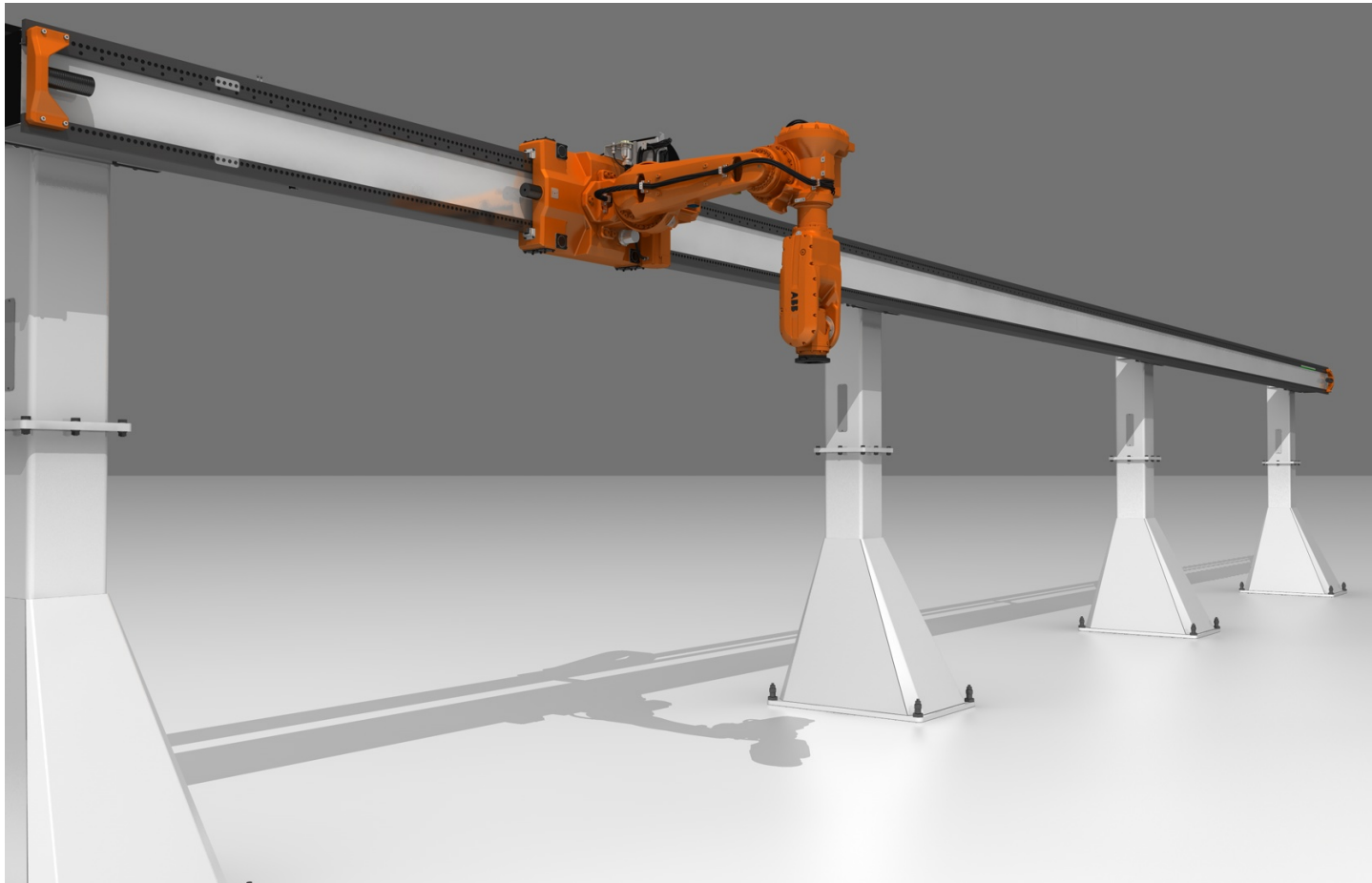
Agenda



- Introduction
- Overhead mounted robots
- IRB 6620LX – The high performer
- IRB 6620LX – Product features

IRB 6620LX – Introduction

An articulated robot arm overhead mounted on a linear rail



- A 150 kg capacity 6-axis robot with large scalable work envelope and the inherent flexibility of an articulated robot

IRB 6620LX

Optimized working range for various applications

- Machine Tending
- Material handling
- Assembly lines
- Heavy Process applications
- Packaging and palletizing
- New logistic and production concepts



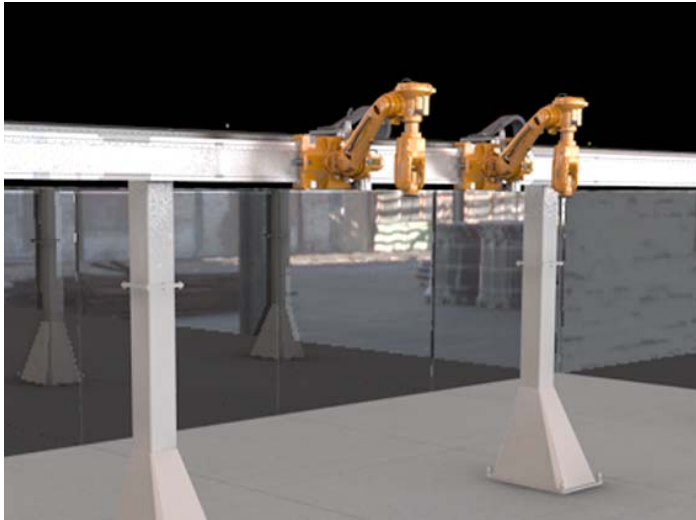
Overhead mounted robots

Combined advantages - 1+1 = 3



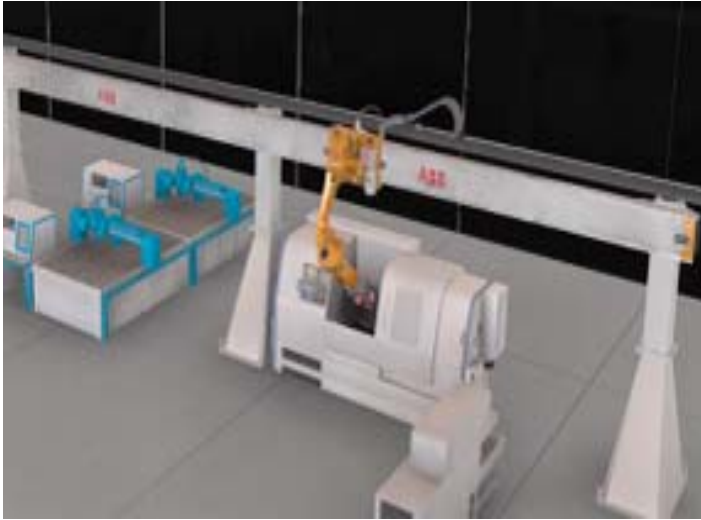
- IRB 6620LX combines the advantages to perfection, providing
 - Productivity and utilization improvements
 - Minimal space requirements
 - Personal safety and accessibility improvements
 - Quick return on investment

Inherent flexibility



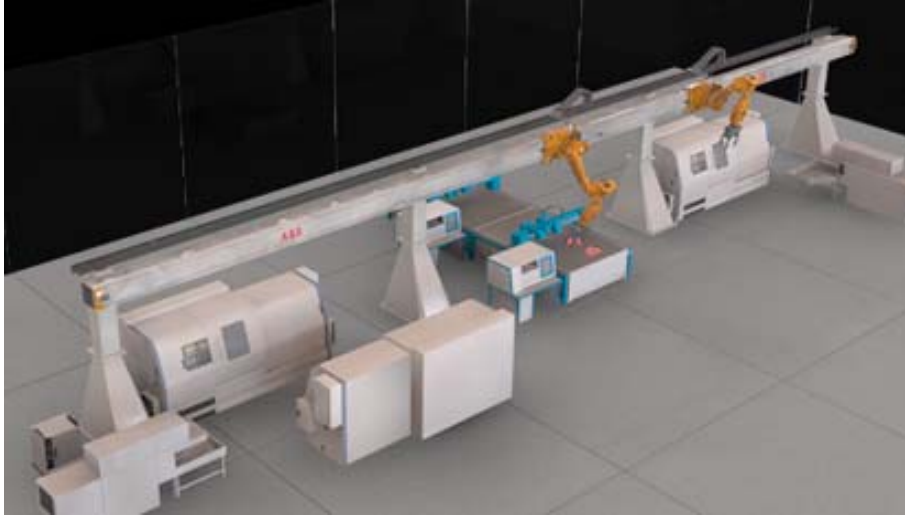
- The overhead mounted robot facilitates flexibility by providing a large scalable work envelope with limited floor space requirement
- The workspace is scalable and adaptable by the;
 - Length and height of linear rail
 - Number and positioning of support legs
 - Side or inverted mounted manipulator
- The flexible 5-axis manipulator makes it possible to access and manipulate work pieces in the tightest places

High productivity and utilization



- The scalable length and height of the linear rail makes it possible to serve several stations within a cell or serve several cells with only one robot
 - Productivity and utilization is improved at the same time as investment is reduced
- Perform several tasks in one production process
 - Increase robot utilization by performing value-added processing tasks in addition to "basic" material handling

Increased production flexibility



- Adaptability to production changes
 - The inherent flexibility of the IRB 6620LX enables quick and easy changeovers securing high uptime, and thus high productivity and utilization
- Balance non-synchronous production processes
 - Even out the overall production process by maintaining in-process stocks and reduce the need of additional equipment

A competitive solution against linear gantries

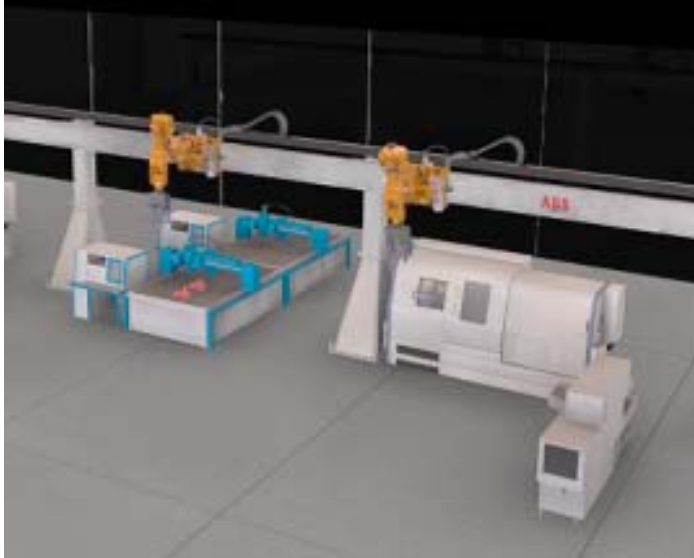


vs.



- More flexible
 - Handle part re-orientation
 - Pick and place parts in any angle and direction
 - Pre- and post processing applications without limitations
 - Easily adaptable to production changes and changeovers
- Adds value to the product
 - Facilitate pre- and post processing applications
- Quick and easy installation
 - Precise alignment as for linear gantries not needed

Improved safety and accessibility in machine tending



- Better handling and accessibility possibilities of machined parts through machine doors either from top or from side
- Re-orientation of work pieces between different stations
- Open access in front of machine for machine maintenance, short batches, quick changeovers, manual operation, etc
- Improved human safety. No robot present when operating the machine manually.

Reduced investment, operation and maintenance cost

- One IRB 6620LX replaces numerous complex material handling systems, which saves both investment and maintenance cost
- Quick and easy changeovers reduce the operation cost
- IRB 6620LX fits to existing factory layout, which reduce investment and installation costs as well as capital cost
- Support legs use minimal floor space. Can be designed and positioned to fit existing factory layout for reduced investment and operation cost.



IRB 6620LX – The high performer



*Tested according to ISO9283, see ISO testing conditions in Product Specification

- Best performance in its class
 - Linear axis speed: 3.3 m/s
 - Repeatability, RP: 0.05 mm*
- Short cycle time and high accuracy through integrated dynamic model in robot controller. TrueMove™ and QuickMove™
- Low manipulator weight in relation to payload

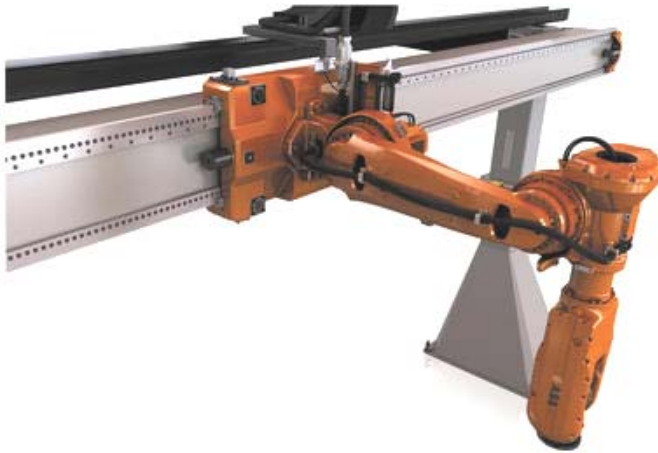
IRB 6620LX – High reliability and robustness

- Built on standard components to secure high reliability and performance
- Linear axis carriage designed for reliability and high performance
- Manipulator available in Foundry Plus 2 protection incl. IP67
- Linear unit has IP66 protection as standard, connectors are IP67
- Robot cable and communication media are tested thoroughly to secure cable life and reduce risk of loss of production

IRB 6620LX – Flexibility to match your requirements

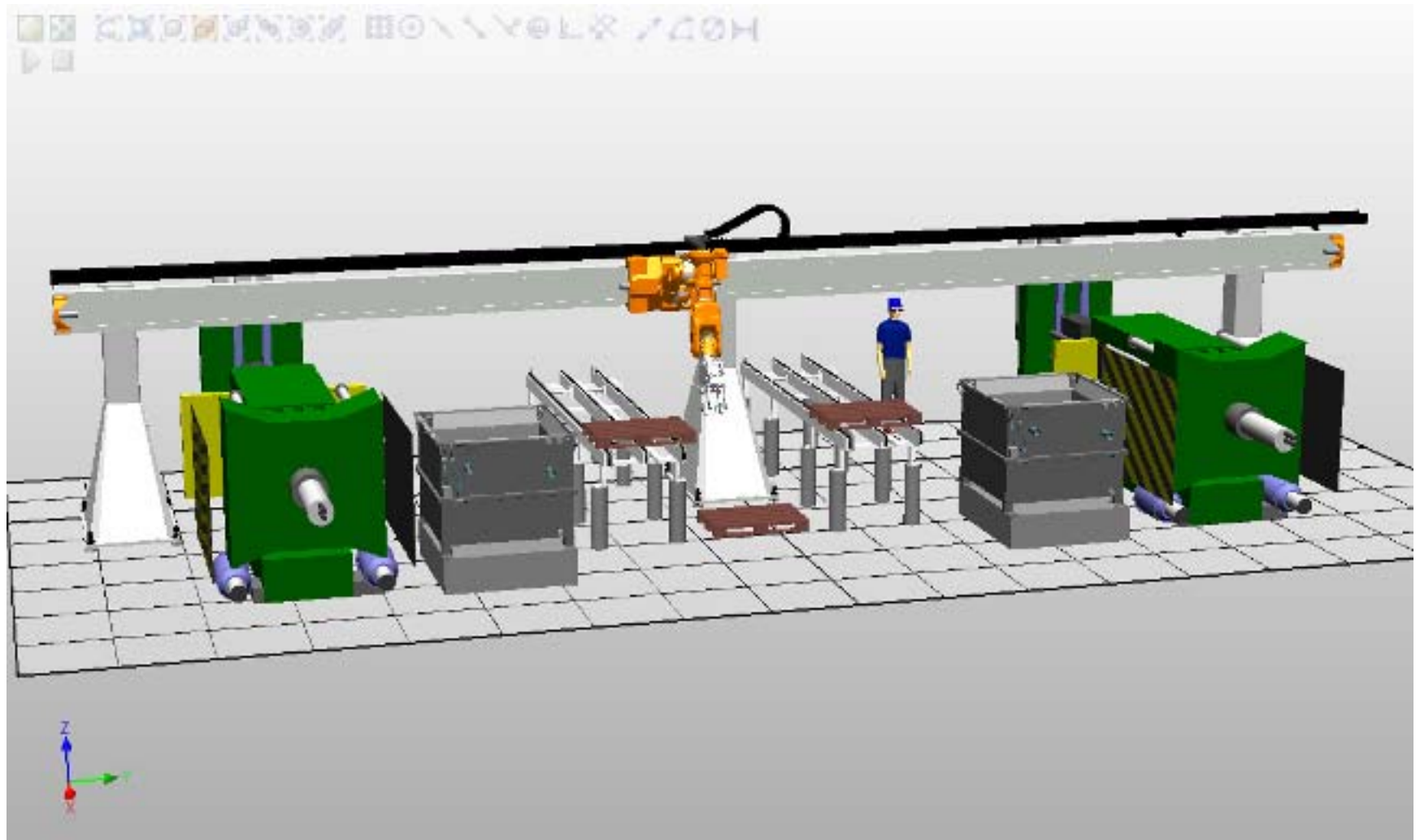
- Scalable to fit existing production layout
 - Linear rail travel length and height in incremental steps
 - Flexible positioning of support legs
- Support legs
 - Standard legs with proven design and performance
 - Possibility do design own support legs to fit factory floor layout or other
- Side or inverted mounted articulated robot increase flexibility
- Up to two 5-axis manipulators per linear rail

IRB 6620LX – Easy and flexible installation



- Quick and easy installation
- Standard industrial factory floor can normally be used to attach and level the linear axis unit
- Compact and light design of carriage and 5-axis manipulator
- Large and compact works space

Easy modeling and simulation in RobotStudio



IRB 6620LX – Product features

- Payload: 150 kg
- Arm reach: 1.9 m
- Linear axis speed: 3.3 m/s
- Position repeatability, RP: 0.05 mm*
- Linear rail travel length: 1.8 – 33.0 m; 0.4 m intervals
- Linear rail height, 2.5 - 4.0 m; 0.1 m intervals
- Upper and lower support legs

*Tested according to ISO9283, see ISO testing conditions in Product Specification



IRB 6620LX – Selected product features

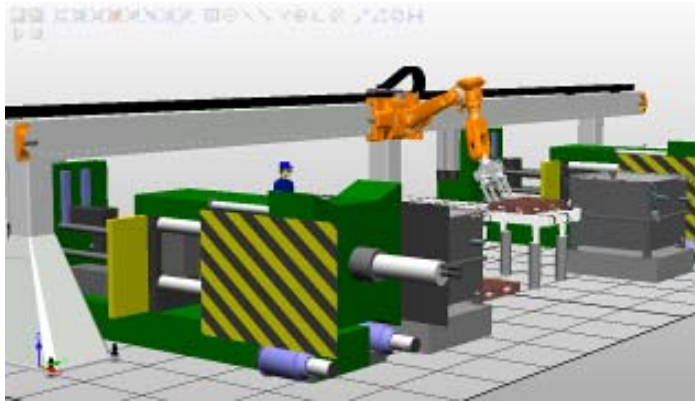


- Standard protection
 - Axis 1 IP66 (connectors IP67)
 - Axis 2-6 IP54
- Foundry Plus 2 protection
 - Axis 1 IP66 (connectors IP67)
 - Axis 2-6 IP67
 - Two component epoxy, nickel coated tool flange, improved sealing and gaskets, etc.
- Side- or inverted mounted manipulator
- One or two 5-axis manipulators per linear axis unit.

Please contact
ABB for two 5-
axis manipulator
configuration



IRB 6620LX – Selected product features

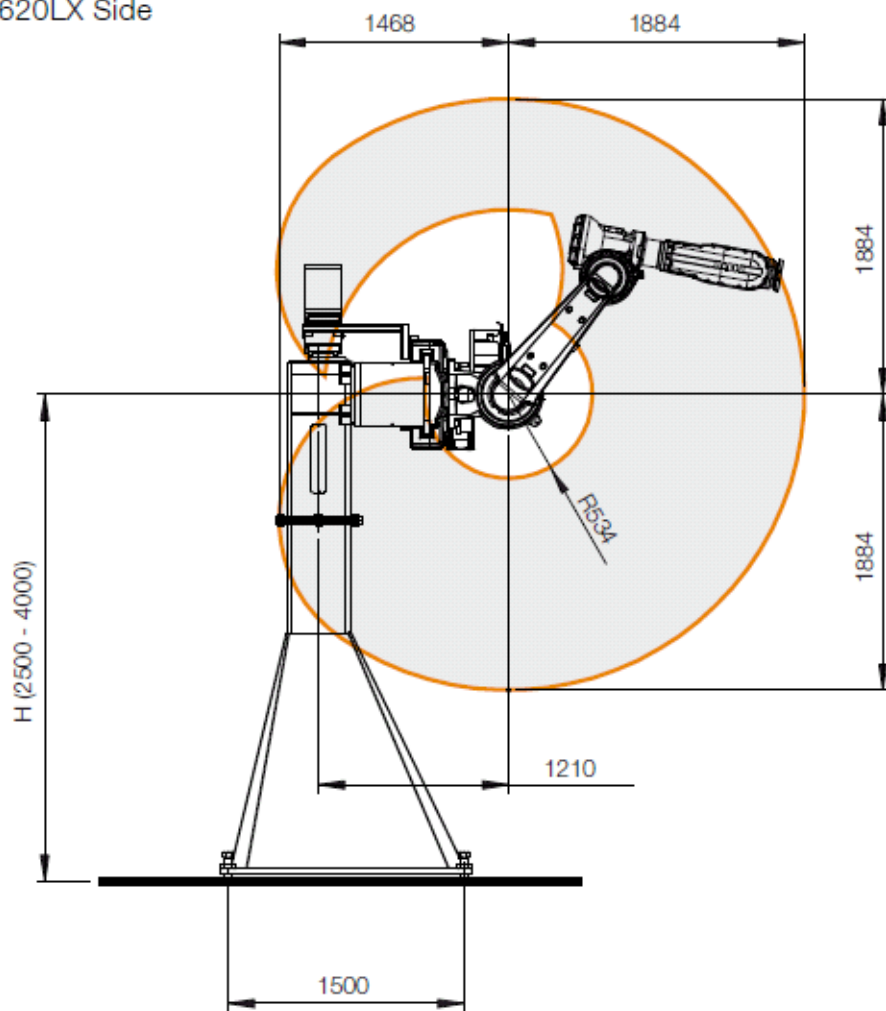


See complete hardware and software options in the product specifications of IRB 6620 and Linear Axis Unit

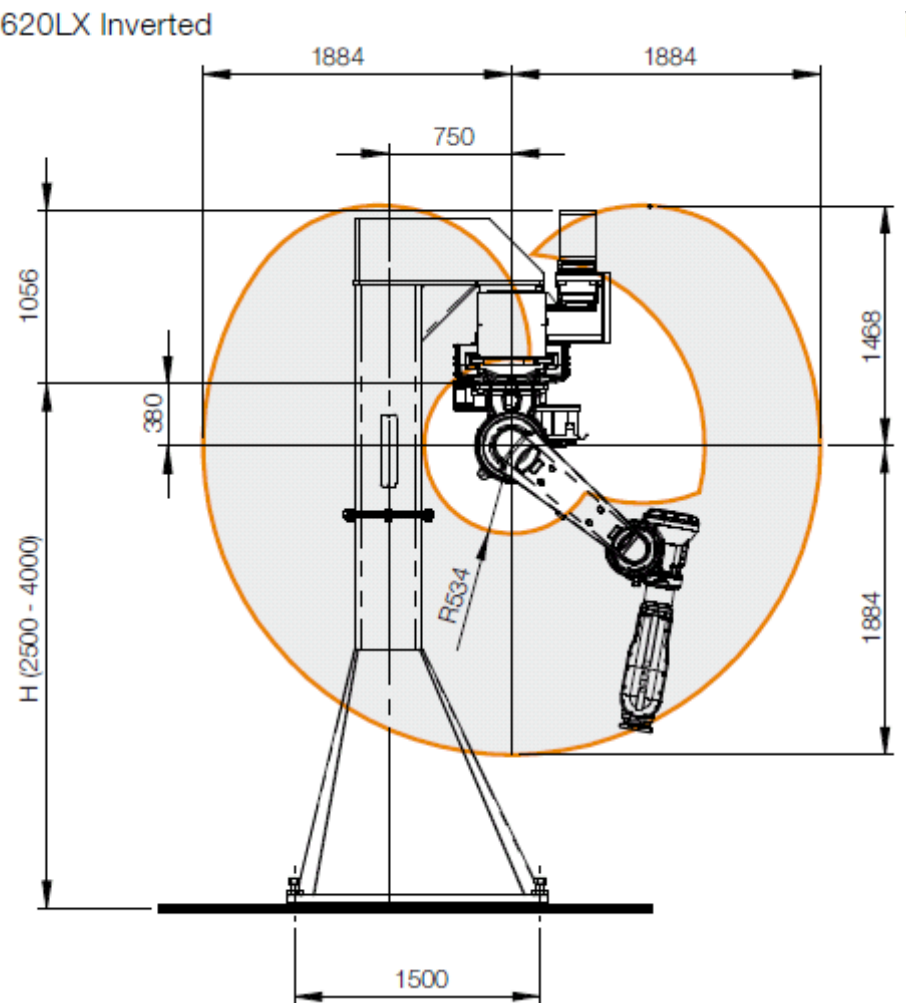
- Lubrication system controlled via battery or central control system
- Floor attachment and leveling equipment
- Parallel and Bus communication
- Parallel and Ethernet communication (from Jan 2010)
- RobotStudio configuration wizard
- MultiMove
- EPS (from Mar 2010)

IRB 6620LX – Work envelope

RB 6620LX Side

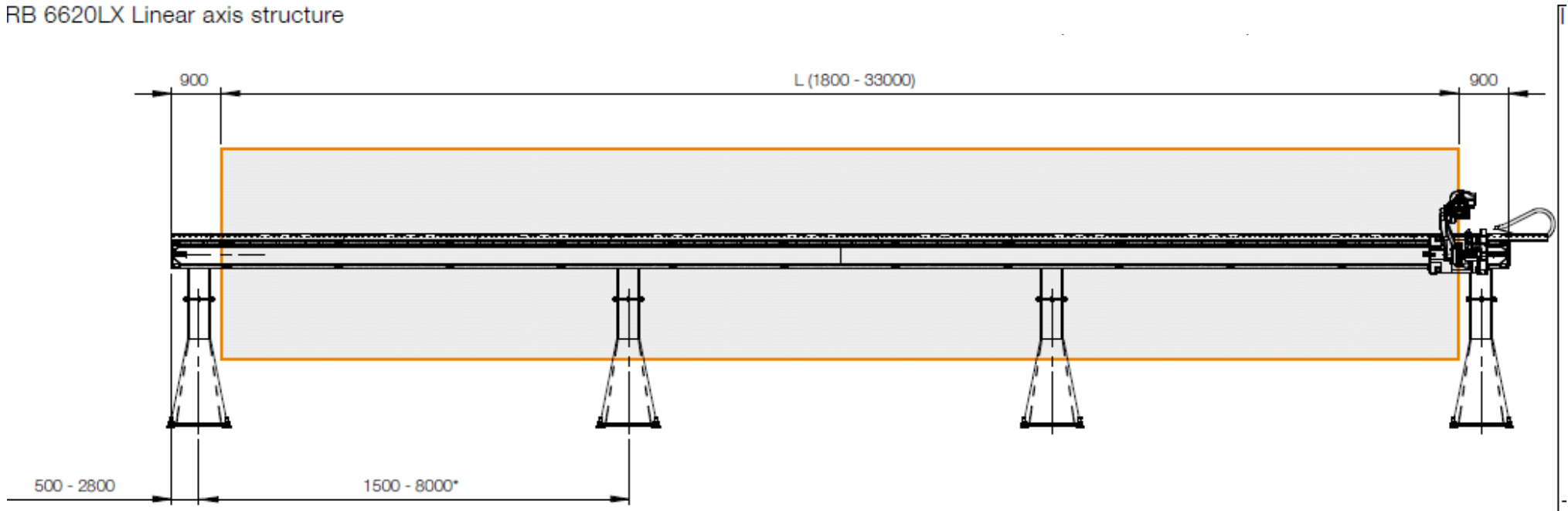


RB 6620LX Inverted

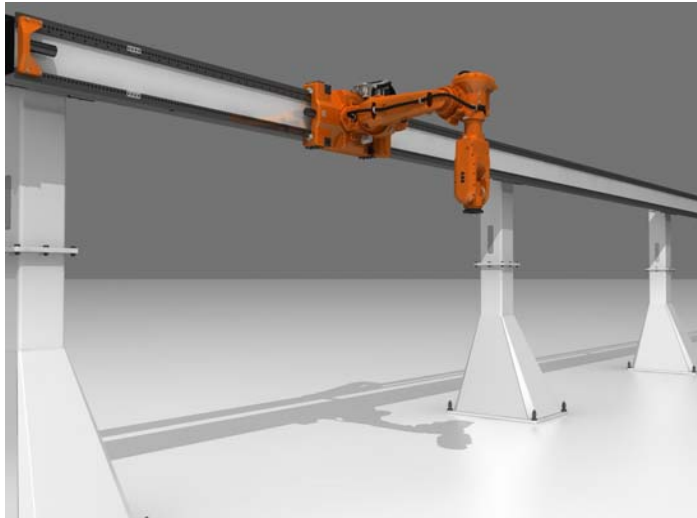


IRB 6620LX – Work envelope

RB 6620LX Linear axis structure



IRB 6620LX Summary



- Combines advantages to perfection
- Increased productivity and utilization
- Improved safety and accessibility
- Unmatched speed and acceleration
- Scalable design
- Easy and flexible installation

**Power and productivity
for a better world™**

ABB