# World-Leading Robotic Jechnology



- Motoman Inc. is formed as a 50/50 joint venture between Hobart Brothers and Yaskawa Electric

Introduced MotoMax<sup>®</sup> III - the first three-year warranty in the robot industry

1989

Delivered North America's first autonomous robot solution - A.R.C. - utilizing extended reference point and jigless welding software

> Created LaserWorld<sup>®</sup> family of standard, preengineered nd:YAG laser cutting solutions

> > LASERWORLD

based simulation and off-line programming solution: **ROTSY/MotoSim®** 

Expanded standard. pre-engineered "World" solutions with FabWorld®. PalletWorld<sup>®</sup> and PlasmaWorld<sup>®</sup>

**⊢**■ Introduced the robot

industry's first graphical PC-

Introduced capability to program two robots from a single robot controller: dual robot control

1993





 Motoman opens Troy, Ohio, production facility to make 120-kg and 150-kg robots and ANSI/RIAcompliant and UL-approved robot controllers

Expanded standard, preengineered "World" solutions with ArcWorld<sup>®</sup> II

1995



First robot manufacturer to offer a fully integrated robot calibration solution: MotoCal<sup>®</sup>

Expanded standard, preengineered "World" solutions with **DispenseWorld®** 

Expanded standard, preengineered "World" solutions with ArcWorld<sup>®</sup> III

1997

Motoman celebrated "10 Years, 10,000 Robots!"

1999

Expanded standard, pre-

engineered "World" solutions

with **PressWorld**<sup>™</sup> and

Created capability to

a single robot controller:

triple robot control

program three robots from

**DieCastWorld®** 



Created new applicationspecific robot models with integral process cables: EA - "Expert Arc" welding and ES - "Expert Spot" welding

Patented alignmentfree headstock/tailstock fixture mounting solution: **MotoMount**<sup>™</sup>

2001

2002

Introduced industry-

and MotoSweep™

leading 7-axis solutions for

machine tending and large

part processing: MotoRail™

Created capability to

#### Created EPL-series

application-specific "Expert Palletizing" robot line with utilities management package

Introduced revolutionary 13-axis dual-arm DA20 robot with human- 🍯 like flexibility of movement

Created revolutionary 7-axis actuatordriven IA20 robot with amazing freedom of movement and

ability to maneuver in very

tight areas

2005

## 1990

1991

Created ArcWorld<sup>®</sup> family - the robot industry's first standard, pre-engineered arc welding solutions





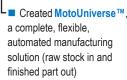
1992

Expanded standard, preengineered "World" solutions with SpotWorld® PC-based expert Patented (US 5,889,924) maintenance software solution: RobotPro®

simplified, yet powerful, method of programming First robot manufacturer to and controlling multiple receive IACET accreditation robots and external axes for training programs asynchronously and simultaneously

1994

Created family of 6-axis cleanroom robots for disk drive, semi-conductor, and flat panel markets



1996

First robot manufacturer to offer application-specific interface for simulation and off-line programming of palletizing applications -Visual Pallet® and



Expanded standard. pre-engineered "World" solutions with LoadWorld and PackWorld®

1998

Created ultra-compact WorldLight® family of solutions for arc welding dispensing and palletizing - First robot manufacturer to offer up to 10-year. complete robot support programs: LIFE

2000

Introduced PX "Painting" Expert" line of coating robots with 3-roll, Lemma, and hollow wrist options



program four robots from Patented robotic test-tube a single robot controller: inspection and sortation quad robot control solution: AutoSorter™

Created DX1350 Patented (US 6,377,871) "Deburring Expert" robot an integrated die cast robot solution including servo controlled ladle and sprayer

- Expanded standard. pre-engineered "World" solutions with ArcWorld® V

Expanded standard,

pre-engineered "World"

with ProcessWorld™

2003

solutions with ArcWorld<sup>®</sup> IV

Expanded standard, pre-

engineered "World" solutions



2004

Introduced new 11- and 12-axis DA9IC robot for machine tending, assembly and even beverage serving solutions (RoboBar®)

Motoman celebrated "One Mission, 15 Satisfving Years." with installed base of over 20.000 robots

reduction drive

Created new EH "Expert Handling" robot series optimized for higher-duty applications and reduced life cycle cost

Introduced new DIA10 actuator-driven 15-axis, dual-arm (10 kg each) robot for power train and other assembly and handling applications ..



- Introduced world's fastest "Super Speed Arc" SSA2000 welding robot and "Super Speed Flexible" SSF2000 handling and general-process robot

Created compact. fully integrated dual robot platform for clinical specimen processing: AutoSorter™ III



Created PC-based, virtual robot training package: SES (Simple Education System)

2007

#### r Launched new pick, pack and stack robots: MPK2. MPK50 and MPL-series

Introduced 7-axis VA and VS "Versatile" arc and spot welding robot series

Introduced MA, MH and MS "Master" arc, handling and spot robot series

Enhanced MotoSim EG with Virtual Robot Controller

Motoman celebrates 20 years

 Introduced MyMotoman<sup>™</sup>, a remote robot monitoring service



Motoman Robotics moves to new 305.000 sq ft stateof-the art headquarters in Miamisburg, Ohio

Introduced high-speed. delta-style MPP3 robot and compact

2011



FS100 controller with open software architecture for packaging, cartoning and kitting applications

# 2009

### 2006

2008

# 2010

- Created new EPH "Expert Press Handling" robot series with lightweight U-arm and extended life

Introduced next generation SDA10 and SIA20 robots featuring slim profiles and dramatic improvements in acceleration

Launched EPX "Expert Paint" robot series

Introduced EasyLoad<sup>™</sup>. the first robotic teach pendant-resident machine loading system set-up and monitoring wizard

Introduced EasyPallet™ Pendant to quickly and easily create robot palletizing jobs

- ■ Introduced PerfectEdge™ robotic finishing solution

Motoman Inc. and Yaskawa Electric America, Inc. combine to form Yaskawa America, Inc. (Motoman **Robotics Division** and Drives & Motion Division)

Motoman Robotics breaks ground for new headquarters facility

