Division of Mechanical Science and Engineering	Research field	Man-machine Systems	Lab. ID MS26
Laboratory web site	http://www-mm.hm.t.kanazawa-u.ac.jp/		

Research subjects

Study fields are "Phenomena on production", "Automation of production", "High accuracy on production" and "General topics on production system", directly affect to "Monodukuri" or production supporting Japan's economic activity. Keywords: Automation, Production technology, Robot, CAD/CAM, Mechatronics.

Master/Doctor course: Education policy, curriculum, typical activity in the laboratory

General meeting: Twice a month, all member gathers to report the state of progress. Group meeting: Twice a month, members belong to the study groups gathers and have more detailed discussion on their studies. CAD/CAM meeting: Several times a year, topics about CAD/CAM technology are discussed by researchers inside/outside of the laboratory.

Daily life in the laboratory, etc.

Let's join conferences held in domestic and international to have presentation on your study! You can join conferences and exhibitions if you wish. Of course, to join the activities, you need certain work as much as a general workers. But after the presentation, you'll find some fulfillment!

Message or comments by the laboratory faculty staffs

At the beginning period, basic tools (skills for machining, programming etc.) are offered. You can freely try your idea to solve the issue. Those who wants to have degrees are welcomed. For the decades, the university on production field in Japan suffers from chronic shortages of educational personnel. Please try doctor degree to became faculty member.

Recent Master theses in these 3 years (+ more if appropriate)

year.month	Thesis title (including English translation of Japanese thesis title)
2017.3	Collision detection for multi-axis control machining using machined surface simplification
2017.3	Development of high accuracy grinding system by an industrial robot -Relation between grinding load and removals-
2017.3	Automation of Soil Test by an Industrial Robot -Application of Peeling Tool-
2017.3	Development of tip burnishing process with rotary tool and evaluation of burnished surface
2016.3	Automation of operations using industrial robot on the basis of image processing
2016.3	Development of Orthros, an Evaluation System for Free Curved Plate Thickness using a Robot (Generation of Thickness Measurement Path for a Workpiece with Texture)
2016.3	Measurement of Force and Influence of Surface Material of Roller to Burnishing Characteristics in Inclined Roller Burnishing
2015.3	Cutting of Cemented Carbide with Diamond Coated Carbide End Mill
2015.3	Development of Computer-Aided Manufacturing Software for 4.5-Axis Milling in CNC Turning Center
2015.3	Development of Collision Check Method with Lower Calculation Cost for Tool Path Generation - Application of Cutting Point Dependent Refinement of Progressive Mesh -
2015.3	Development of a Forging Type Rapid Prototyping System (Influence of Local Heating and Tool Path on Formability)
2015.3	Characteristics of Force Controlled Roller Burnishing Method with Sliding Effect
2014.3	Propose of Roller Burnishing Method with Sliding Effect and Application of Coated Roller
2014.3	Automation of Soil Mixing for Soil Test by using Industrial Robot (Development of the Mixing Tool)
2014.3	Development of a Forging Type Rapid Prototyping System (Development of Local Heating System)
2013.3	Dressing of the cBN Wheel using Water Jet
2013.3	Development of free curved plate thickness measurement system (Generation of Measuring Path Considering Continuity of The Posture)
2013.3	Automation of Gas Cutting by an Industrial Robot -Tool Path Generation Using Image Processing-

Recent Doctoral theses in these 3 years (+ more if appropriate)

year.month	Thesis title (including English translation of Japanese thesis title)
2016.3	A Study on Thickness Measurement of Free Curved Surface
2012.9	Study on Bulge Forming by an Incremental Hammering

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