



CJDM

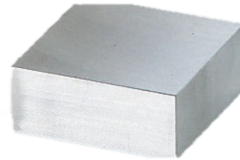
CAMBODIA **J**APAN **D**IZITALIZED **M**ANUFACTURING CENTER

Satoshi Hashimoto

COO

DMG MORI Asia/India

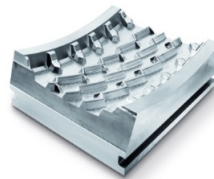
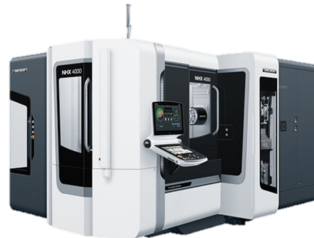
MACHINERY TO MAKE “PARTS”. ALL COMMERCIAL & INDUSTRIAL PRODUCTS ARE MADE BY “MACHINE TOOLS”



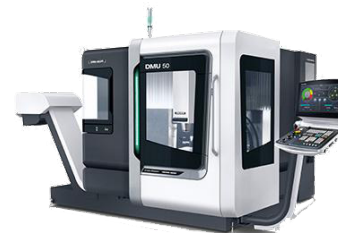
Turning machine



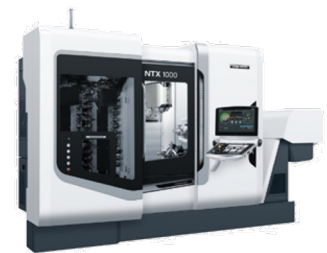
Milling machine

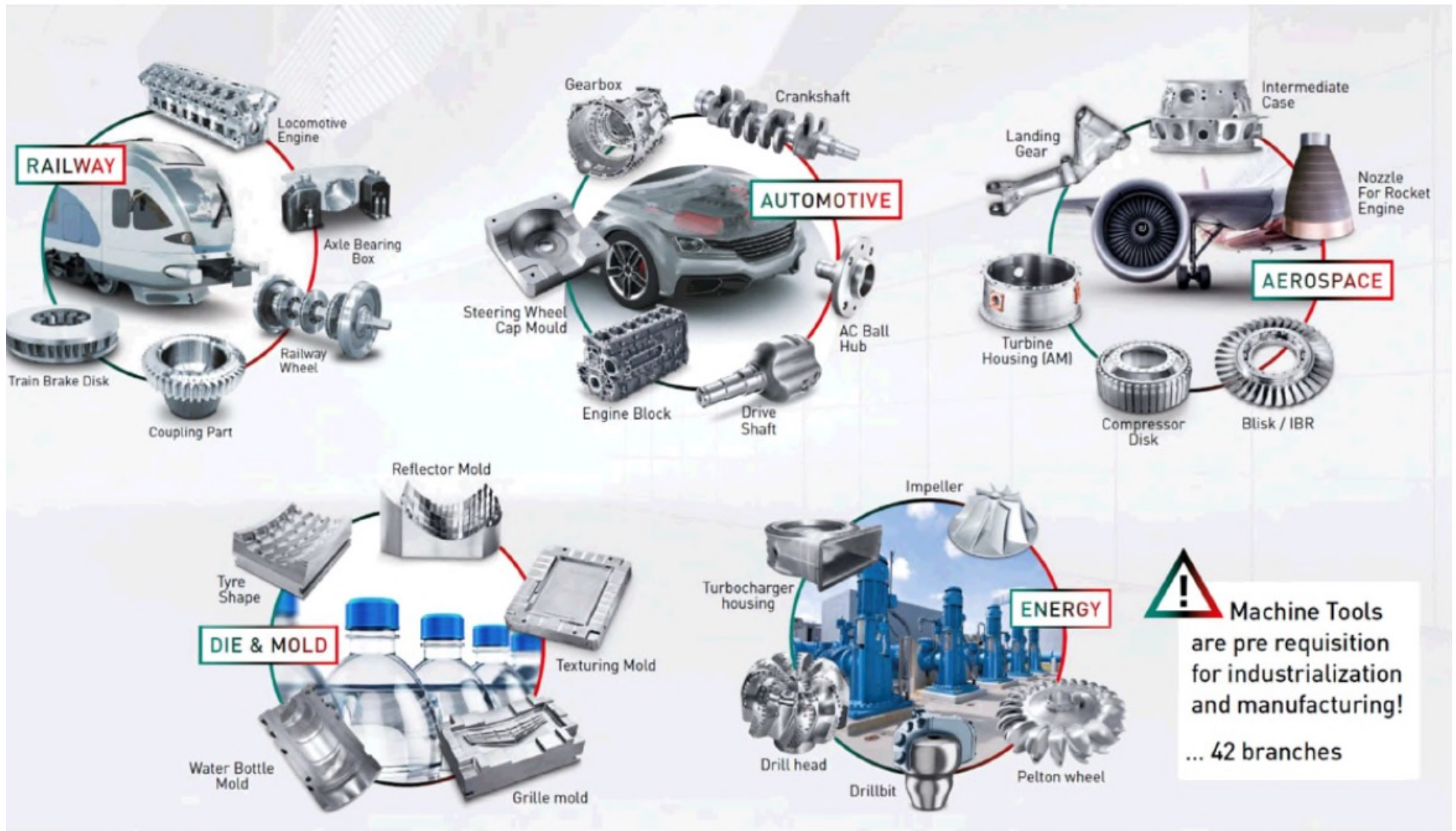


5 axis machine



Mill-Turn machine

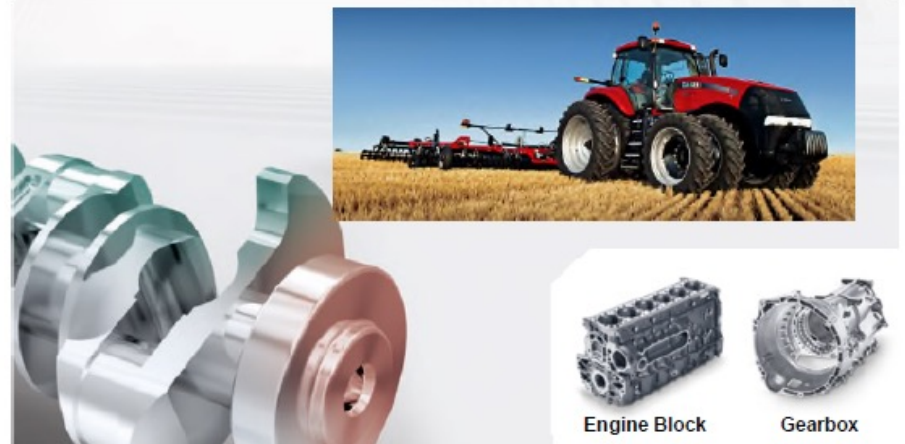




AEROSPACE



AGRICULTURE



DIE & MOLD



MEDICAL

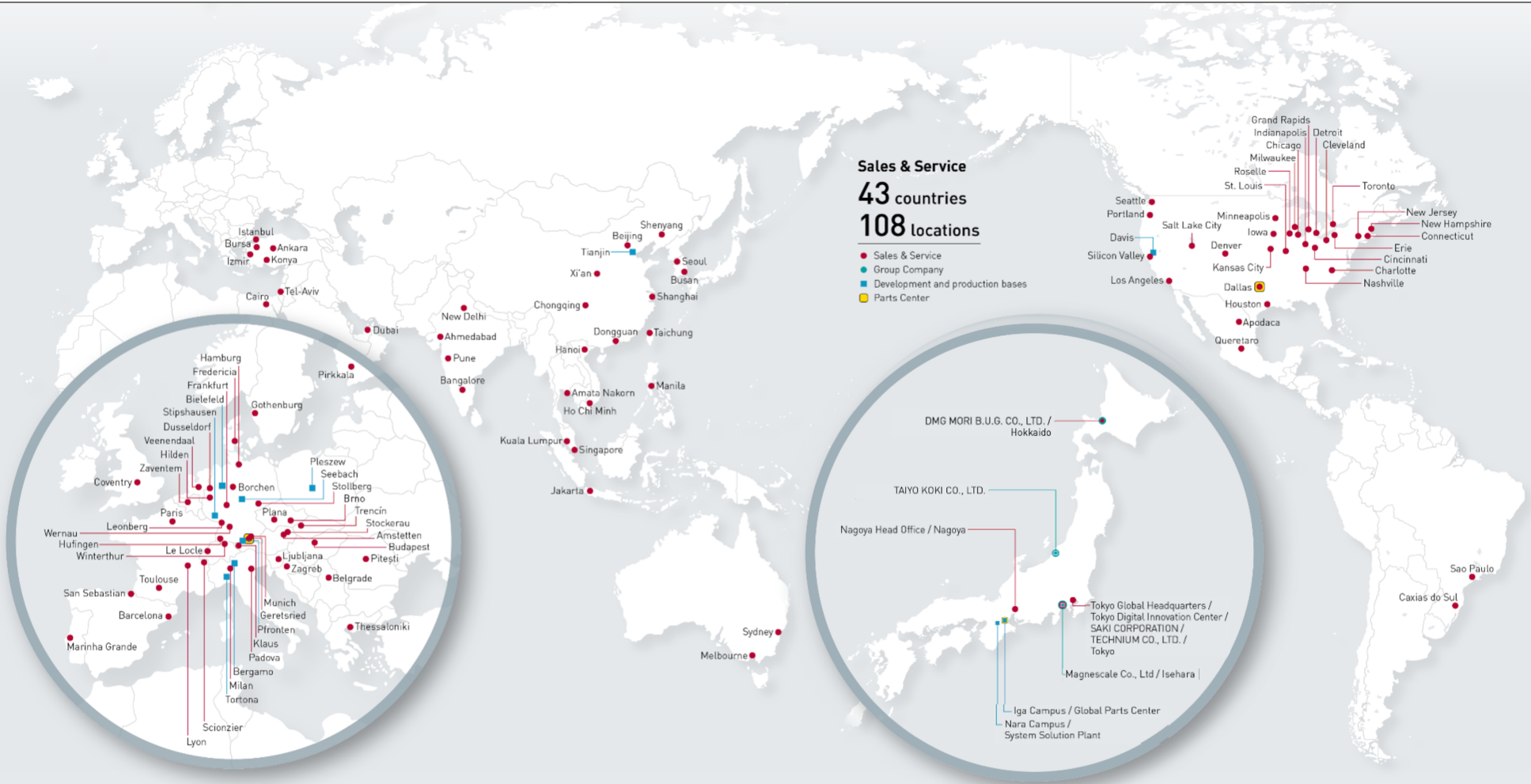


Representative	Dr. Masahiko Mori
Established	26 October 1948
Stock Listings	Prime Market of Tokyo Stock Exchange Frankfurt Stock Exchange (SDAX index)
Business	Offering total manufacturing solutions including machine tools, software, measuring, service / support, application, engineering
Turnover	474.8 bn JPY (Result: Jan.-Dec. 2022)
No. of Employees	12,626 people (end 2022)
Operation Bases	Tokyo Global Headquarters (Shiomi, Tokyo) Nara Product Development Center (Nara) Iga Campus (Iga, Mie) Nara Campus (Yamato-Koriyama, Nara) Germany (Bielefeld, Pfronten, Seebach, Stipshausen) Italy (Bergamo, Tortona) USA / China / Poland



6COUNTRIES | **15**factories | **6,100**people | **12,000**machines per year

R&D	1,300 people
Production	2,800 people
Quality	400 people
Purchase	800 people
Managing	800 people



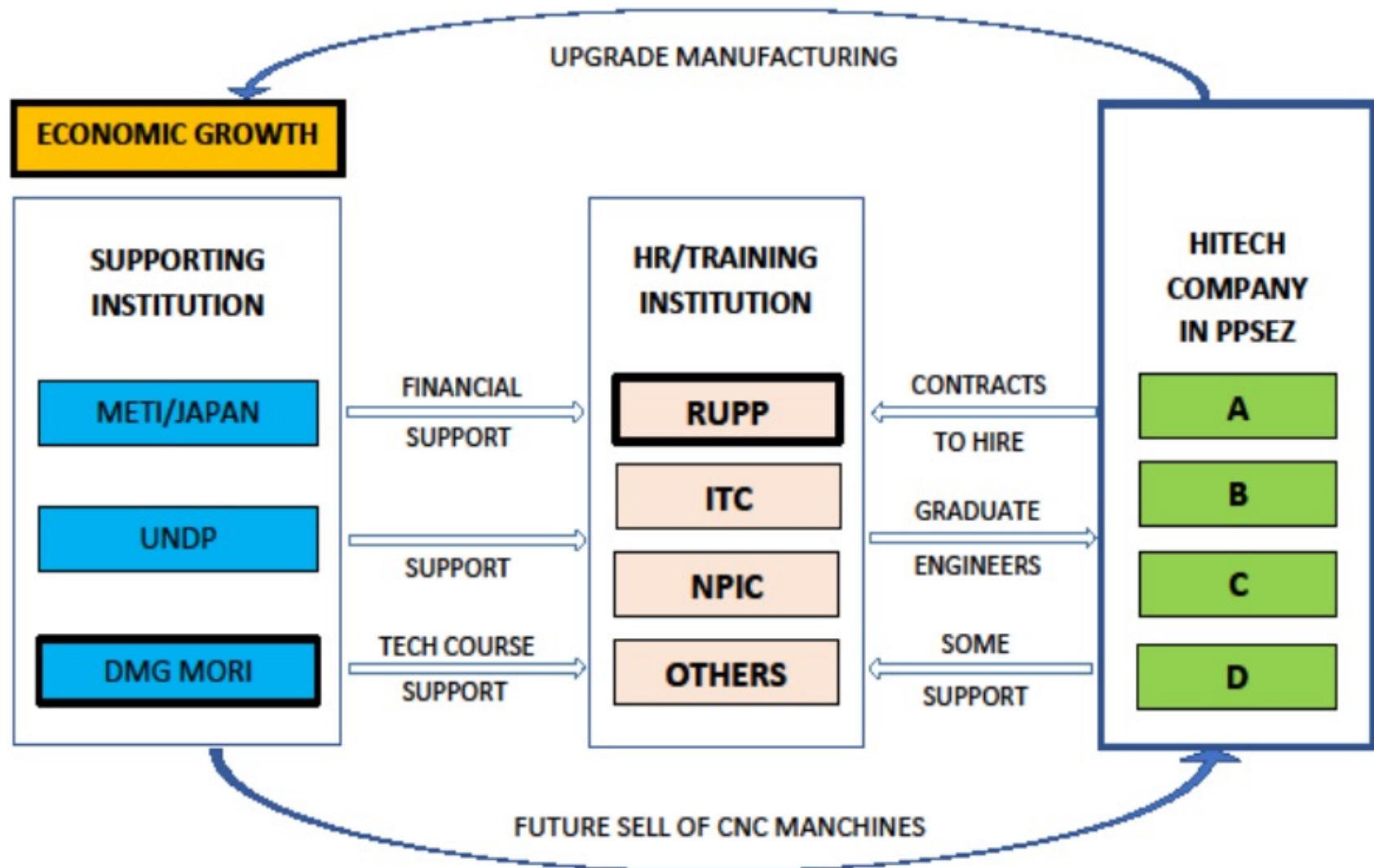
43COUNTRIES | **108**PLACES | **5,900**people

Field service**1,900**people



- Demand for machinery in Cambodia is expected to increase in the future, and there is **an urgent need to develop high skilled workforce** who can operate machine tools to produce precise parts. And eventually identify the direction of future industrial policy in Cambodia.
- The Cambodian government also requires the development of engineers with the collaboration with Academic / Public / Private sectors.

RUPP is expected to become a hub for industry, government, and academia, and become a driving force for Industry 4.0 in Cambodia.



Digital education

Physical Education

Decided to arrange online course by DMG MORI Academy Germany

Started on-line course Phase 1.0
“Digitalized Manufacturing for Industry 4.0”

End of online course Phase 1.0

Started online course Phase 1.5
“Digital Operation Technology for Siemens NX CAD/CAM”

End of online course Phase 1.5

Training in Japan

Started onsite training to lecturers by resident staff from DMG MORI Academy Japan

2020

2021

2022

2023

• **DMG MORI and RUPP agreed to launch a joint project**

• Press Conference
“RUPP-DMG MORI Cooperation Initiative for *Advanced Manufacturing, Research and Training Center at RUPP”
** Tentative name of CJDM*

• Press Conference
“Preparation for the Establishment of Cambodia-Japan Digitalized Manufacturing Center”

• **As one of the Japanese Government’s Grant Aid Projects, decided to install DMG MORI machines to RUPP**

• MoU Signing Ceremony in Siem Reap

• **Completion of CJDM Building
Machine Delivery & Installation**

• Inauguration Ceremony

Online training for RUPP from DMG MORI Academy in Germany as Phase 1.0 from February to September 2021.

WELCOME WORDS MR. SEBASTIAN PLAU

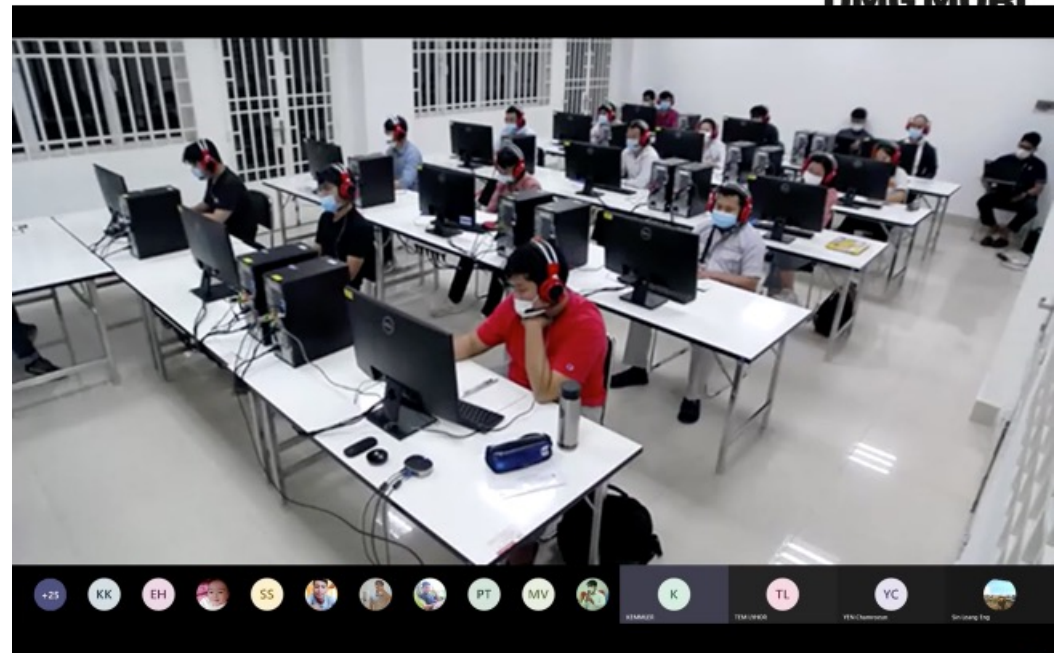
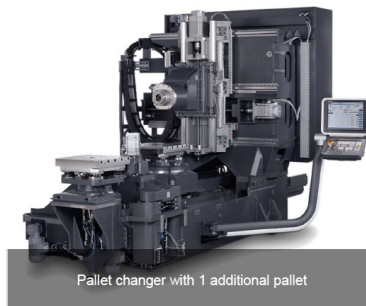
DMG MORI



DIGITALIZED MANUFACTURING FOR INDUSTRY 4.0

SESSION 1 | FEBRUARY 2021

2



MEETING NAME | PRESENTATION NAME

NAME | DATE

8 / 10

Industry-Academia collaborative programs)
“Digitalized manufacturing for industry 4.0”
Students : 30 people

On 14th October 2021, Press Conference for Preparation of Cambodia-Japan Digitalized Manufacturing Center (CJDM) was held in RUPP.

Announcement of the financial support of the Japanese government to the project by Ambassador Mikami



<https://www.khmertimeskh.com/50952306/cjdm-prepares-for-the-fourth-industrial-revolution/>



ស្ថានទូតជប៉ុនប្រចាំព្រះរាជាណាចក្រកម្ពុជា សេចក្តីប្រកាសព័ត៌មាន

លេខ: 27 PR-21/EnJ

ព្រឹទ្ធិ១១ ខែតុលា ឆ្នាំ២០២១

លិខិតអនុញ្ញាតឱ្យមានការគាំទ្រហិរញ្ញវត្ថុ និងបណ្តុះបណ្តាលកម្លាំងមនុស្ស

ជាការឆ្លើយតបទៅនឹងសំណើរបស់រាជរដ្ឋាភិបាលកម្ពុជា និងក្នុងគោលបំណងពង្រឹងទំនាក់ទំនងមិត្តភាព និងកិច្ចសហប្រតិបត្តិការរវាងប្រទេសជប៉ុននិងព្រះរាជាណាចក្រកម្ពុជា រដ្ឋាភិបាលជប៉ុនបានសម្រេចពង្រីកជំនួយអភិវឌ្ឍន៍ (ODA) ជាឥណទានសម្រាប់ ដែលមានទឹកប្រាក់សរុបចំនួន ១ ៣៣៦ លានយ៉េនប្រមាណជា ៥៧.៦ លាន ដុល្លារអាមេរិកសម្រាប់ “គម្រោងពង្រីកសមត្ថភាពផ្គត់ផ្គង់ទឹកស្អាតនៅរៀបរាប់ (វិសោធន៍ការងារ) និងហិរញ្ញប្បទានឥតសំណងជម្រក ដែលមានទឹកប្រាក់សរុបចំនួន ១ ៦០០ លានយ៉េនប្រមាណជា ១៤.៨ លានដុល្លារសម្រាប់ “កម្មវិធីអភិវឌ្ឍន៍សេដ្ឋកិច្ច និងសង្គម”។

“គម្រោងពង្រីកសមត្ថភាពផ្គត់ផ្គង់ទឹកស្អាតនៅរៀបរាប់ (វិសោធន៍ការងារ) និងបន្តអភិវឌ្ឍន៍ប្រព័ន្ធទឹកស្អាត និងបង្កើនប្រព្រឹត្តិកម្មទឹកស្អាតដែលមានសមត្ថភាពឆលើក ០០០ ម៉ែត្រគីឡូម៉ែត្រ និងបណ្តាញចែកចាយទឹកដែលមានប្រវែងលើស ២០០គីឡូម៉ែត្រ នៅខេត្តរៀបរាប់ បន្ទាប់ពីវិសោធន៍ការងារ ១”។

ចំណែកគម្រោង “កម្មវិធីអភិវឌ្ឍន៍សេដ្ឋកិច្ច និងសង្គម” ប្រភេទសម្ភារៈ និងបរិក្ខារផ្សេងៗ នឹងត្រូវផ្តល់ជូនដល់ ៨ វិស័យដូចខាងក្រោម៖

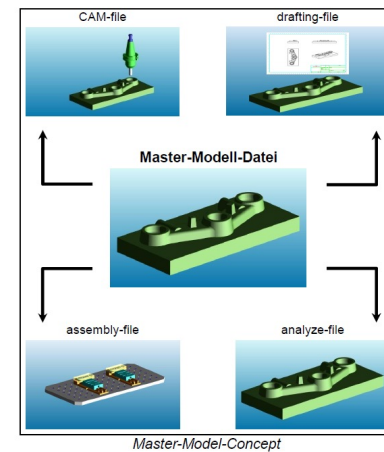
- ការតម្រូវជាវិសោធន៍ការងារសម្រាប់ ឱ្យមានការគាំទ្រហិរញ្ញវត្ថុ និងបណ្តុះបណ្តាលកម្លាំងមនុស្ស (Landmine Action Sector) មានទឹកប្រាក់ចំនួន ២០០លានយ៉េន (ប្រមាណ ១.៨ លានដុល្លារអាមេរិក)
- សម្ភារៈបច្ចេកទេស សម្រាប់បង្កើនវិសោធន៍ការងារ (Construction Material Sector) មានទឹកប្រាក់ចំនួន ២៥០លានយ៉េន (ប្រមាណ ២.៣ លានដុល្លារអាមេរិក)
- សម្ភារៈបច្ចេកទេសសម្រាប់ស្ថាប័នវិសោធន៍ការងារ និងបណ្តុះបណ្តាលកម្លាំងមនុស្ស (Cadastral Survey Sector) មានទឹកប្រាក់ចំនួន ២៥០លានយ៉េន (ប្រមាណ ២.៣ លានដុល្លារអាមេរិក)
- ការបំពាក់សម្ភារៈ និងបរិក្ខារបច្ចេកទេសសម្រាប់វគ្គៈស្ថានភាពបណ្តុះបណ្តាលបច្ចេកទេស និងវិជ្ជាជីវៈ (Human Resource Development Sector) មានទឹកប្រាក់ចំនួន ៤០០ លានយ៉េន (ប្រមាណ ៣.៦ លានដុល្លារអាមេរិក)

From November 2021 to September 2022, DMG MORI Academy in Germany conduct online training for RUPP as Phase 1.5. There is also a plan for face-to-face lectures at RUPP.



INTRODUCTION TO NX

DMG MORI



+ Master-Model-Concept

- Typically, when you have a 3D model, you'll start adding drafting or CAM operations, to your file. All that data can make the file so large that you can't even rotate the 3D model.
- You can break this data up into multiple files so that no one single file is carrying too much data. In the Master Model concept, you'll create your 3D model, then create files that are linked to it, but are still separate. So now you can add operations, without slowing down your operations
- This also allows you to isolate your files for specific team members. Multiple people can have multiple applications open at the same time

DIGITAL OPERATION TECHNOLOGY FOR SIEMENS NX CAD/CAM

© DMG MORI ACADEMY GMBH | 2. SESSION

Industry-Academia collaborative programs)
“Digital Operation Technology for Latest CAD/CAM”
Students : 16 people



*Face to Face Sessions in September 2022

Meeting with the Minister Nishimura, Minister of Economy, Trade and Industry (METI) and report on the CJDM project in Siem Reap, Cambodia on 17th September 2022



MACHINE DELIVERY TO CJDM IN OCT 2022

DMG MORI

3 units of state of the art machinery delivered to CJDM

- Turning machine
- Milling machine
- Additive manufacturing machine



CJDM was featured in the local online news on 15th November 2022 after mentioned in the Japan-Cambodia joint statement at the ASEAN-JAPAN SUMMIT by prime ministers.

National November 15, 2022

Cambodia, Japan promotes training of skilled workers in the context of Industry 4.0

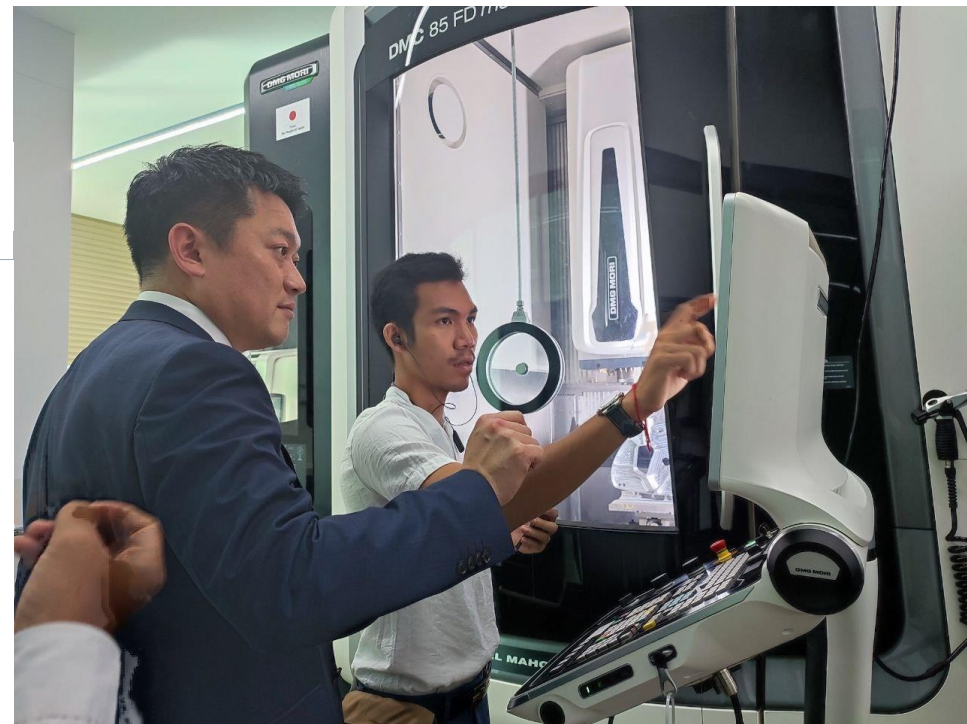
Cambodia and Japan promoted the training of skilled labor in the context of Industry 4.0 by establishing the Cambodia-Japan Digitalized Manufacturing Center (CJDM).

Japanese Prime Minister Fumio Kishida, who attended the 40th and 41st ASEAN Summits and related meetings in Cambodia, said Cambodia needed technology and human resources to support the industry to boost economic growth. With the cooperation of Japan, CJDM will train human resources.

Dr Mey Kalyan, a senior adviser at the Supreme National Economic Council, said that CJDM aims to train human resources in Cambodia in the digital industry to meet the needs of this sector in the future.

The adviser added that through the training of human resources, it will attract more companies to invest in Industry 4.0 in Cambodia.

The CJDM is supported and supported by Japan. CJDM will be officially launched in early December 2022. The center will play a key role in human resource production, research, development, innovation and services in the digital production sector in Cambodia.



<https://www.khmertimeskh.com/501185367/cambodia-japan-promotes-training-of-skilled-workers-in-the-context-of-industry-4-0/>

<https://m.freshnewsasia.com/index.php/en/localnews/266065-2022-11-15-03-53-55.html> *Khmer only

From 24th November – 22nd December 2022, three candidates for lecturers of CJDM attended training in DMG MORI Academy Japan.

