

Dynamo Inc, a frontrunner in core pins and die components for the high-pressure die casting (HPDC) industry, has joined forces with Lethiguel, the pioneer in jet cooling systems for die-casting. This strategic collaboration aims to bolster the core technologies of both companies, enhancing their capabilities to address the current challenges in the market and maximize customer satisfaction.

The synergy between Dynamo Inc and Lethiguel is poised to result in a stronger, more competitive presence in the die-casting industry, ensuring a robust response to the dynamic demands of today's market landscape.



■ QUALITY AND ENVIRONMENTAL MANAGEMENT SYSTEMS

CERTIFICATES OF REGISTRATION:

ISO 9001:2015

ISO 14001:2015

intertek

Total Quality. Assured.



Calin Moldovean

Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 22A Victory Park,
Victory Road, Derby DE24 8EP, United Kingdom

Intertek Certification Limited is a UKAS
accredited body under schedule of
accreditation no. 054.

■ COMPANY PROFILE

Main Office Dynamo, Inc.

Capital / 20 million yen Established / 1990

Representative / CEO Masatoshi Mark Tsujimura

Address / Kyoei-douri 7-107 Seto-City Aichi-Ken Japan

Tel + 81-561-88-1076 Fax +81-561-88-1077

URL <http://www.dynamo.co.jp> Email / info@dynamo.co.jp

Number of Employees / 310 - We pride ourselves to be an equal opportunity employer

Sales / 3.2 billion yen/year

Member Organizations / NADCA

Japan Die Casting Association



■ COOLING CORE PIN

JET COOLING HOLE CAPABILITIES.

Smallest: Ø1.5, max depth is 150.0mm

Over Ø6.0, max depth is 800.0mm



■ INSERTS AND COATINGS

Die Cast cavity parts.

Explore our extensive range of surface treatments. Bicouche X stands out as our comprehensive solution addressing numerous common challenges.

Enhanced adhesion and durability have been achieved through a multi-layer coating process. The application of a thick film in Bicouche X coat ensures exceptional resistance to washout and abrasion, surpassing typical coatings in performance.



Hardness (HV)	2800~3000
Coefficient of friction	0.45~0.5
Heatproof temperature	800°C
Abrasion resistance	High
Heat resistant	High
Corrosion resistance	High
Color	Reddish Purple

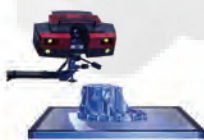


CERTIFIED QUALITY

We excel in jet cooling processing, leveraging a state-of-the-art facility with over 20 advanced gun drills. With a production capacity exceeding 50,000 cooling core pins monthly, each meticulously certified for quality and concentricity within a 0.3mm T.I.R., our commitment to precision is unwavering.



Concentricity Tester
1.0mm or less wall
thickness



Non-contact Measuring
Machines
2 units (Accuracy
 $\pm 0.03\text{mm}$)



Contact CMM 6 Units
(Accuracy $\pm 0.01\text{mm}$)



X-Ray Equipment 1 unit

HARD LOCK SETSCREW

**SEMI PERMANENT LOCKING
STRUCTURE.**

WORKABILITY

Easy locking, using a single
hexagon wrench.

RE-USABILITY

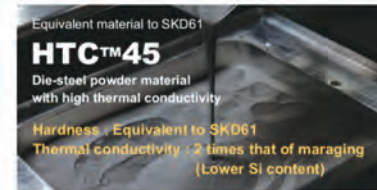
Repeated removal and
installation does not affect
anti - loosening effect.

ECONOMICAL

Lifetime cost is lower
because of the reduced maintenance.

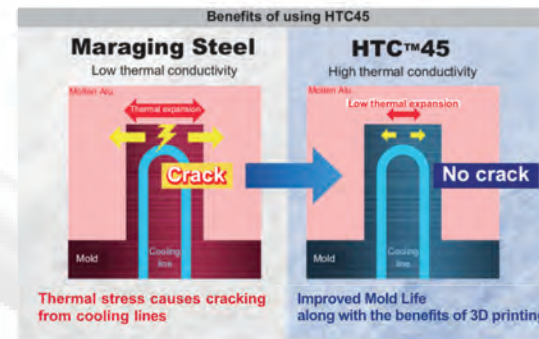


World's first AM molding and mass-production using an SKD61 equivalent material.



Molding Density
Average
99.996-99.998%

2 Units in Production
W240 x D240 x H350



Solutions to the problems of maraging metal powder

Problem	Due to its low thermal conductivity, it is possible to crack due to thermal stresses.
Solution	By using a high thermal conductivity powder (HTC45), cooling effect is twice that of maraging. This reduces thermal stress and prevents cracking, resulting in a longer life.
Problem	Because of export restrictions of material, it is difficult to expand sales globally.
Solution	HTC45 does not contain Cobalt, so it is not restricted.
Problem	In the case of a hybrid insert boundary surface between SKD61 and Maraging is weak and likely to crack.
Solution	Since there is no big difference in the coefficient of thermal expansion between SKD61 and HTC45, cracks are not likely to originate from the boundary surface during mass production.

Increased Capacity Larger working envelope

W500 x D500 x H400
Coming Summer of 2024



Dynamoinc.us

SALES CONTACT:

JOSE DE LA ROSA

GLOBAL SALES MANAGER

sales_jd@dynamo.co.jp

+1 (708) 261 - 6492

**Leading
the World
in new Technology**

*Large AM insert
made of SKD61 material is
now a reality.*