

Oct. 27, 2021

"Rotary Crushing Mixing Method®" originally developed by JDC Corporation is awarded the Minister of Land, Infrastructure, Transport and Tourism's Prize for its Contribution to Reduce, Reuse, and Recycle Promotion.

The Rotary Crushing and Mixing Method (commonly known as Twister®) originally developed by JDC Corporation (President and CEO: Takeo Asakura, Head Office: Akasaka 4-9-9, Minato-ku, Tokyo) was awarded the Minister of Land, Infrastructure, Transport and Tourism's Prize in the 2021 Award for Contribution in Reduce, Reuse and Recycle Promotion. The award, which has been held every year since 1992 by 3Rs Promotion Council, is awarded to organizations and companies that are taking the initiative in 3R (Reduce, Reuse, Recycle) and have achieved remarkable results. This is the 29th award in the field of environmental and 3R, and it is widely established as an award system that is one of the largest in Japan.

The Rotary Crushing and Mixing Method pulverize and refines (crushes) the ground material using the striking force of multiple chains rotating at high speed in a cylinder, and also improves soil quality with the effect of uniformly dispersing the additive material. This is an unprecedented remarkable method that can simultaneously crush and mix with one mechanism, and it is suitable for the effective use of soil generated during construction because it adapts to a wide range of soil properties, from highly water-containing cohesive soil to soft rocks.

This method was originally developed by JDC Corporation, and in July 2016, the "Rotary Crushing and Mixing Method Research Association" was established for the purpose of dissemination of the technology. At present, the members of eight companies are working together to promote the provision of high-quality recycled improved soil for flood control projects, river levee renovation, and port reclamation. In addition, it is also vital in the purification of contaminated soil from VOCs (Volatile Organic Compounds), oil contaminated soil remediation, as well as removal of debris from soil accumulated by torrential rainfall and tsunami. In recognition of these efforts, the Rotating Crushing and Mixing Method



Research Association received the Ministry of Land, Infrastructure, Transport and Tourism's Prize in the 2021 Award for Contribution in Reduce, Reuse, and Recycle Promotion.

Based on its management philosophy of "contributing to the creation of a more affluent society," JDC Corporation group has identified "natural disaster responses" as one of the important issues (materiality) to be addressed. In response to natural disasters caused by torrential rains and large-scale typhoons, which have occurred frequently in recent years, we will use the Rotary Crushing and Mixing Method to raise levees, widen levees, and install levees, with the aim of realizing a "disaster-resistant national land development" in the future.



Rotary Crushing and Mixing Method Research Association

Address: 18-1 East Midorino, Tsukuba City, Ibaraki Prefecture c/o Research and Development Center, JDC Corporation

TEL: +81-3-5410-5755 FAX: +81-3-5410-5808

URL: https://www.twister-grp.com

<Member Companies>

JDC Corporation

Kokudo Kaihatsu Industry Co., Ltd.
Japan Foundation Engineering Co., Ltd.
DOROKOGYO Co., Ltd.
SANSHIN CORPORATION
TOA ROAD CORPORATION
Marine Engineering Co., Ltd.

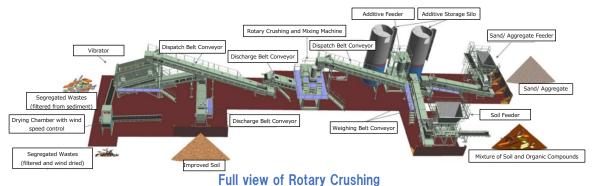
Taiyo Kisokogyo Co., Ltd.



<Reference>

■Rotary Crushing and Mixing Method

Natural disasters, such as river flooding, produce a large amount of highly cohesive sediment, containing water. Until now, sediment has been collected and transported and disposed of. The Rotary Crushing and Mixing Method is applicable to cohesive soil with a high water content ratio, which was difficult with conventional methods, and is capable of improving soil quality of bad soil containing rubble and separating disaster wastes in locations affected by floods, contributing to sustainable recycling technology.



■ Recycling of high water content cohesive soil: Improvement and effective use of clay



Before recycling (high water content cohesive soil)



State of supply of high water content cohesive supply status



After recycling (improved soil)

■ Recycling of soil containing underground stems: Removing underground stems from high water content cohesive soil mixed with underground stems for effective use



Before recycling
(high water content cohesive soil mixed
with underground stem)



After recycling (sorted reeds and underground stems)



After recycling (quality improved soil)

For more information, please contact

Business Strategy Department, Business Strategy Division, JDC Corporation (attn: Public Relations) Telephone +81-3-5410-5601

