

Okinawa Prefecture

Acrorad Co., Ltd. (Uruma City)

Development and Manufacturing of CdTe radiation detectors

Sakima Gishi Co., Ltd. (Ginowan City)

Development of epoch-making joint braces to contribute to medical and health care

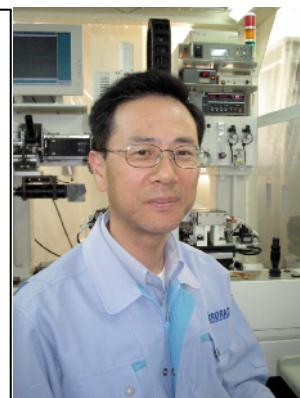
Development and Manufacturing of CdTe radiation detectors

Acrorad Co., Ltd.

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(Okinawa Special Free Trade Zone)
Okinawa Prefecture

Established in 1984
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<http://www.acrorad.jp/>



Ryoichi Ohno
President

Manufacturing CdTe crystal for radiation detectors solely in Japan

Developed high performance detectors by Industry-University-Government joint research

Holding the market shares of 100% and 25%, in domestic and international, respectively

CdTe radiation detector elements

Applying the bias voltage to the single crystal of high resistive CdTe (Cadmium Telluride) semiconductor, a compound of Cadmium and Tellurium, a suitable amount of electric signal can be measured according to the dose and energy of the radiation. This CdTe element, which efficiently absorbs the radiation (e.g. X-ray and Gamma ray) to convert it into electric signal, is very useful to fabricate the radiation detectors with high sensitivity and good energy resolution.

CdTe offers the new generations of radiation detectors

Compared to the existing scintillator based radiation detectors, CdTe detector has smaller size and higher special resolution. Accordingly, it is considered as the key technology to realize the new practical radiation imaging, such as lower exposure during the measurement, finer image, more reliable material analysis, and more compact devices.

Based on its 15 years research on crystal growth technology, Acrorad has started commercial production of 3-inch diameter CdTe single crystal, the biggest in the world for radiation detectors. Acrorad has been now developing 4-inch CdTe crystal. As a result of the collaborative researches with the universities and government, additionally, Acrorad has developed high-sensitivity and high-speed response radiation detectors. Furthermore, Acrorad has developed its original compact radiation imagers to be able to demonstrate the performances of the CdTe detectors to the related industrial market.

100% share in the domestic market also over 25% in the global market

Acrorad, the only one manufacturer of CdTe crystal and its radiation detectors in Japan, has holds 100% share in the domestic market and over 25% in the global market. Its customers include manufacturers and research institutes that are working on the development of next-generation radiation imagers for medical, security and industry applications.



CdTe single crystal ingot (in circle)
and the crystal growth furnace



MGC500
Acrorad's compact Gamma ray imager
(Certified by FDA as medical device)

Development of Epoc-making Joint Braces to Contribute to Medical and Health care

Sakima Gishi Co., Ltd.

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Established on 1980
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Tamotsu Sakima
President

Sakima has developed incredibly comfortable braces with a unique structure.

It won the “METI Minister Award” in the product/technology category at the first MONODZUKURI Japan Awards.

Unique structure for incredibly comfortable braces

Sakima’s “CB Brace” series are constructed with “joint parts” and “center bridges” that are inserted in the center of joint parts. Its simple structure makes CB Brace light, durable, flexible enough for sitting on heels, and incredibly comfortable without any bad feeling.

Application for various uses including medical treatment and rehabilitation

CB Brace is effective for medical treatment for osteoarthritis by aging, as well as rehabilitation from the consequences of a stroke and rheumatism. It is also popular among professional baseball players and wrestlers as rehabilitation. CB Brace has been highly acclaimed by its users for high effectiveness for recovery.



Production scene

Origin of the development of CB Brace

President Sakima had used the braces to treat spinal disease for 9 years. This is one of the reasons why CB Brace is user-friendliness..

Awards

Sakima has received many awards: Best Award by Governor of Okinawa Prefecture on 1999, JIII (Japan Institute of Invention and Innovation) Incentive Award in Kyushu District on 2000, Award by Ministry of Education, Sports, Science and Technology on 2001, and METI Minister Award in the product/technology category at the first MONODZUKURI Japan Awards on 2005.



CB Brace for osteoarthritis
(e.g. bow legs and
knock-kneed rheumatism)



CB Brace for unstrained
knees (e.g. rehabilitation for
one-side paralysis and
unstrained knees by polio)