



Member State of OIML  
Japan



OIML Certificate No  
R60/2000-JP1-10.10

## OIML CERTIFICATE OF CONFORMITY

### Issuing authority

Name: National Metrology Institute of Japan / National Institute of  
Advanced Industrial Science and Technology (NMIJ / AIST)  
Address: AIST Tsukuba Central 3-9, Tsukuba Ibaraki 305-8563, Japan  
Person responsible: Dr. Tamotsu Nomakuchi, President of AIST

### Applicant

Name: JFE Advantech Co., Ltd.  
Address: 3-48 Takahata-cho, Nishinomiya, Hyogo 663-8202, Japan

### Manufacturer of the certified pattern

Name: JFE Advantech Co., Ltd.  
Address: 3-48 Takahata-cho, Nishinomiya, Hyogo 663-8202, Japan

### Identification of the certified pattern:

Compression load cell  
Type: ZR-5, ZR-10, ZR-20, ZR-20-KE, ZR-30, ZR-30-KE  
Fraction:  $\Pi=0.7$   
Temperature range:  $-10\text{ }^{\circ}\text{C} / 40\text{ }^{\circ}\text{C}$



Member State of OIML  
Japan



OIML Certificate No  
R60/2000-JP1-10.10

Characteristics:

Model designation			ZR-5	ZR-10	ZR-20	ZR-20-KE	ZR-30	ZR-30-KE
Accuracy class	Class	-	C					
Maximum number of load cell verification intervals	$n_{max}$	-	3000	3000	4000	4000	4000	4000
Humidity symbol			CH					
Minimum dead load	$E_{min}$	kg	0					
Maximum capacity	$E_{max}$	kg	5000	10000	20000	20000	30000	30000
Safe load limit	$E_{lim}$	kg	7500	15000	30000	30000	45000	45000
Minimum verification interval	$v_{min}$	kg	0.67	1.33	2	2	3	3
Apportionment factor	$p_{LC}$		0.7					
Ratio of minimum LC Verification interval $Y = E_{max} / v_{min}$	Y	-	7500	7500	10000	10000	10000	10000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	Z	-	3000	3000	4000	4000	4000	4000
Rated output		mV/V	1.5					
Excitation voltage		V DC	5 ~ 15					
Input impedance	$R_{LC}$	$\Omega$	400					
Cable length		m	9	9	9	9	11	11

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report(s) with the requirements of the following Recommendation of the International Organization of Legal Metrology - OIML):

R60, edition 2000 (E)  
For accuracy class C

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

The conformity was established by tests described in the associated test report no. 10-12/R60:2000, that includes 33 pages.



Member State of OIML  
Japan



OIML Certificate No  
R.60/2000-JP1-10.10

The Issuing Authority  
NMIJ/AIST



Dr. T. Nomakuchi  
President of AIST  
2010-06-24

The CIML member

Dr. Y. Miki  
2010-06-24

Important note: Apart from the mention of certificate's reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.