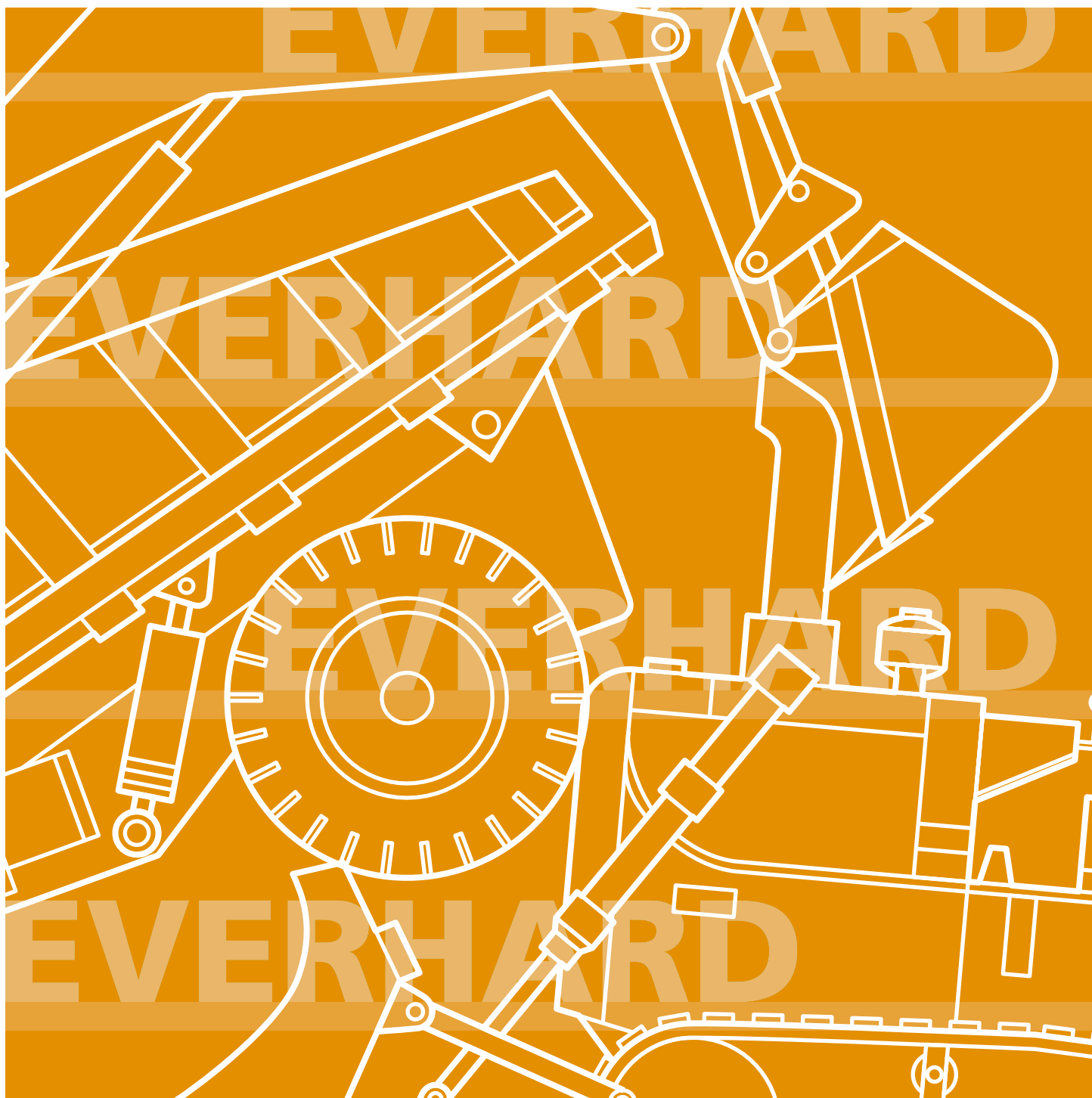




JFE

JFE EVERHARD™ EH-SP

JFE's Super Abrasion-Resistant
Steel Plate



JFE Steel Corporation

JFE-EH-SP

Excellent abrasion resistance without sacrificing formability and weldability.

Until now, wear resistance was created with increasing hardness which consequently reduces formability and weldability. After extensive research for years, JFE succeeded in developing excellent abrasion resistant steel, JFE-EH-SP. By utilizing extremely hard precipitates “Titanium Carbide”, excellent wear resistance of JFE-EH-SP has been achieved without increasing hardness.

Highly improved abrasion resistance

Almost same weldability and formability as conventional JFE-EH500

Specification

Chemical composition

Grade	Available thickness mm	Heat treatment	Chemical composition %									
			C	Si	Mn	P	S	Cr	Mo	V	Ti	B
JFE-EH-SP	5~65	Controlled Heat Treatment	0.35 max.	0.55 max.	1.60 max.	0.030 max.	0.030 max.	0.50 ~1.50	Other alloying elements are added.			

Mechanical properties

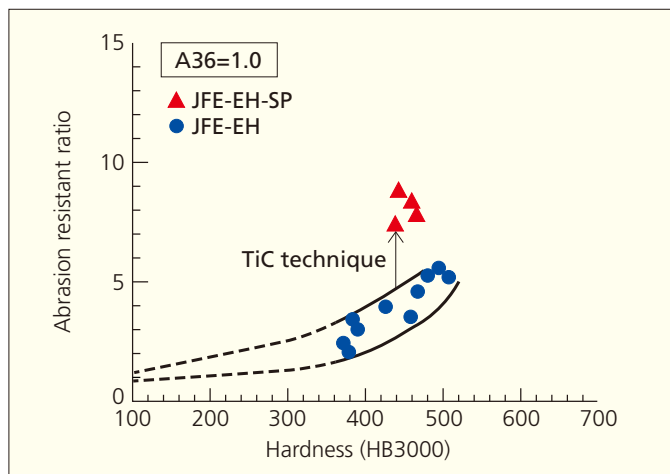
Grade	Hardness test*	
	Thickness mm	Brinell hardness (3000) Average of 5 values
JFE-EH-SP	5~65	401min.

* Test for plate surface.

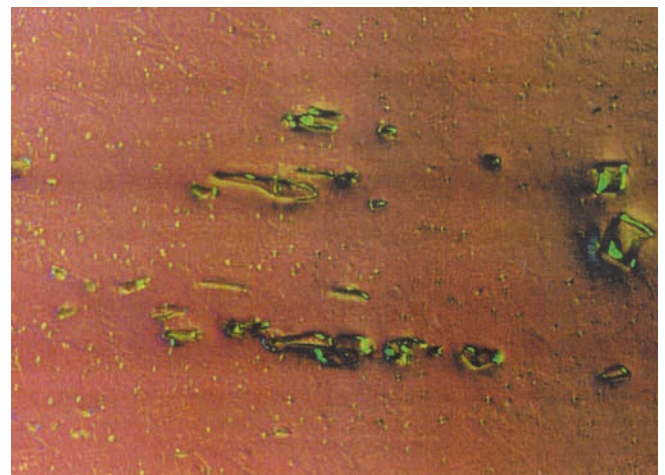
Appearance, shape, dimensions, mass and their tolerances comply with JIS G 3193.

Super Abrasion-Resistance

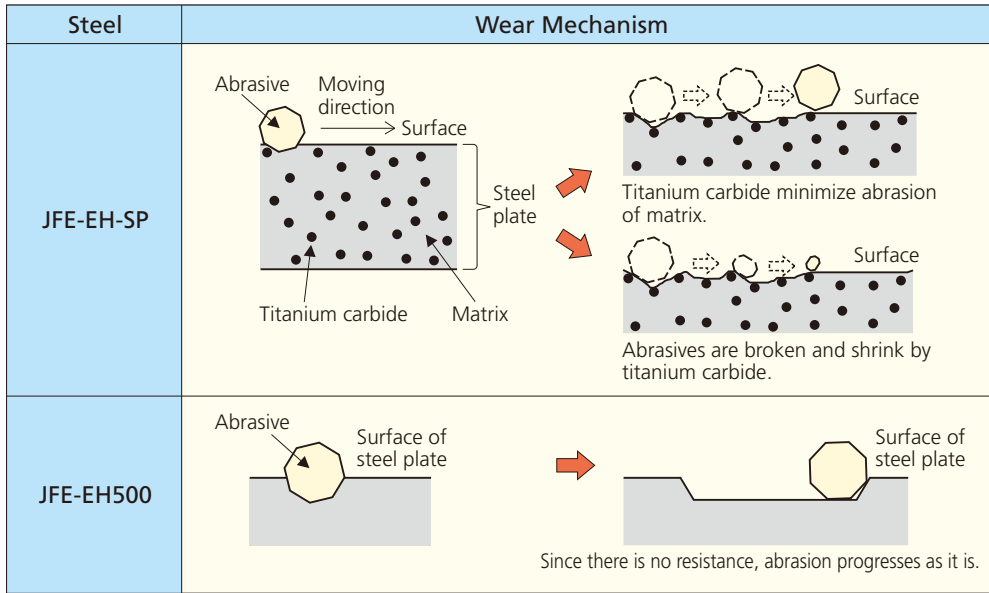
JFE-EH-SP vs Conventional material



Relationship between hardness and abrasion resistance (Abrasive : flatterly sand)



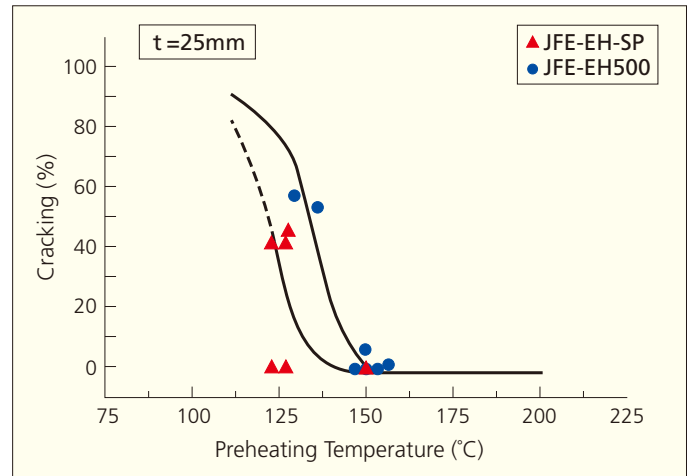
Green particles : Titanium carbide



Weldability

JFE is always developing and improving the abrasion-resistant steel plates in consideration of weldability.

JFE-EH-SP shows almost same weldability as that of conventional JFE-EH500 while abrasion-resistance of EH-SP is superior.



y-groove weld cracking test

Applications

JFE-EH-SP has been used at various mining plants and power plants instead of conventional abrasion resistance steel.

Applications

APPLICATION	ABRASIVE	CONVENTIONAL
LOADER BUCKET SKID PLATES	GOLD	500 BHN STEEL
CHUTE LINERS	GRANITE	500 BHN STEEL
LOADER BUCKET HEEL PLATES	CONCRETE	500 BHN STEEL
TRUCK BODY LINER PLATES	COPPER	500 BHN STEEL
CRUSHER DISCHARGE HOPPER	COPPER	500 BHN STEEL
CRUSHER FEEDER	COPPER	500 BHN STEEL
CRUSHER CHUTE	COPPER	500 BHN STEEL
TRUCK BODY LINER PLATE	GOLD	400 BHN STEEL
DRAGLINE BUCKET SHROUDS	ROCK	400 BHN STEEL
CRUSHER PARTS	COPPER	500 BHN STEEL
TRUCK LINER PLATES	COPPER	500 BHN STEEL
COAL CHUTE	COAL	500 BHN STEEL
VIBRATORY FEEDER	GOLD	500 BHN STEEL
CRUSHER PARTS	GOLD	500 BHN STEEL
CHUTE	ROCK	450 BHN STEEL

JFE Steel Corporation<http://www.jfe-steel.co.jp/en/>**HEAD OFFICE**

Hibiya Kokusai Building, 2-3 Uchisaiwaicho 2-chome, Chiyodaku, Tokyo 100-0011, Japan Phone: (81)3-3597-3111 Fax: (81)3-3597-4860

ASIA PACIFIC**SEOUL**JFE Steel Korea Corporation
16th Floor, 41, Cheonggyecheon-ro, Jongno-gu, Seoul,
03188, Korea
(Youngpung Building, Seorin-dong)
Phone: (82)2-399-6337 Fax: (82)2-399-6347**BEIJING**JFE Steel Corporation Beijing
1009 Beijing Fortune Building No.5, Dongsanhuan
North Road, Chaoyang District, Beijing, 100004,
P.R.China
Phone: (86)10-6590-9051 Fax: (86)10-6590-9056**SHANGHAI**JFE Consulting (Shanghai) Co., Ltd.
Room 801, Building A, Far East International Plaza,
319 Xianxia Road, Shanghai 200051, P.R.China
Phone: (86)21-6235-1345 Fax: (86)21-6235-1346**GUANGZHOU**JFE Consulting (Guangzhou) Co., Ltd.
Room 3901 Citic Plaza, 233 Tian He North Road,
Guangzhou, 510613, P.R.China
Phone: (86)20-3891-2467 Fax: (86)20-3891-2469**MANILA**JFE Steel Corporation, Manila Office
23rd Floor 6788 Ayala Avenue, Oledan Square,
Makati City, Metro Manila, Philippines
Phone: (63)2-886-7432 Fax: (63)2-886-7315**HO CHI MINH CITY**JFE Steel Vietnam Co., Ltd.
Unit 1704, 17th Floor, MPlaza, 39 Le Duan Street,
Dist 1, HCMC, Vietnam
Phone: (84)28-3825-8576 Fax: (84)28-3825-8562**HANOI**JFE Steel Vietnam Co., Ltd., Hanoi Branch
Unit 1501, 15th Floor, Cornerstone Building, 16 Phan
Chu Trinh Street, Hoan Kiem Dist., Hanoi, Vietnam
Phone: (84)24-3855-2266 Fax: (84)24-3533-1166**BANGKOK**JFE Steel (Thailand) Ltd.
22nd Floor, Abdulrahim Place 990, Rama IV Road,
Silom, Bangrak, Bangkok 10500, Thailand
Phone: (66)2-636-1886 Fax: (66)2-636-1891**YANGON**JFE Steel (Thailand) Ltd., Yangon Office
Unit 05-01, Union Business Center, Nat Mauk Road,
Bocho Quarter, Bahan Tsp, Yangon, 11201, Myanmar
Phone: (95)1-860-3352**SINGAPORE**JFE Steel Asia Pte. Ltd.
16 Raffles Quay, No.15-03, Hong Leong Building,
048581, Singapore
Phone: (65)6220-1174 Fax: (65)6224-8357**JAKARTA**PT. JFE STEEL INDONESIA
6th Floor Summitmas II, JL Jendral Sudirman Kav.
61-62, Jakarta 12190, Indonesia
Phone: (62)21-522-6405 Fax: (62)21-522-6408**NEW DELHI**JFE Steel India Private Limited
806, 8th Floor, Tower-B, Unitech Signature Towers,
South City-I, NH-8, Gurgaon-122001, Haryana, India
Phone: (91)124-426-4981 Fax: (91)124-426-4982**MUMBAI**JFE Steel India Private Limited, Mumbai Office
603-604, A Wing, 215 Atrium Building, Andheri-Kurla
Road, Andheri (East), Mumbai-400093, Maharashtra,
India
Phone: (91)22-3076-2760 Fax: (91)22-3076-2764**CHENNAI**JFE Steel India Private Limited, Chennai Office
No.86, Ground Floor, Polyhose Towers(SPIC Annexe),
Mount Road, Guindy, Chennai-600032, Tamil Nadu,
India
Phone: (91)44-2230-0285 Fax: (91)44-2230-0287**BRISBANE**JFE Steel Australia Resources Pty Ltd.
Level28, 12 Creek Street, Brisbane QLD 4000
Australia
Phone: (61)7-3229-3855 Fax: (61)7-3229-4377**EUROPE and MIDDLE EAST****LONDON**JFE Steel Europe Limited
15th Floor, The Broadgate Tower, 20 Primrose Street,
London EC2A 2EW, U.K.
Phone: (44)20-7426-0166 Fax: (44)20-7247-0168**DUBAI**JFE Steel Corporation, Dubai Office
P.O.Box 261791 LOB19-1208, Jebel Ali Free Zone
Dubai, U.A.E.
Phone: (971)4-884-1833 Fax: (971)4-884-1472**NORTH, CENTRAL and SOUTH AMERICA****NEW YORK**JFE Steel America, Inc.
600 Third Avenue, 12th Floor, New York, NY 10016,
U.S.A.
Phone: (1)212-310-9320 Fax: (1)212-308-9292**HOUSTON**JFE Steel America, Inc., Houston Office
750 Town & Country Blvd., Suite 705 Houston,
Texas 77024, U.S.A.
Phone: (1)713-532-0052 Fax: (1)713-532-0062**MEXICO CITY**JFE Steel America, Inc., Mexico Office
Ruben Dario #281-1002, Col. Bosque de
Chapultepec, C.P. 11580, CDMX. D.F. Mexico
Phone: (52)55-5985-0097 Fax: (52)55-5985-0099**RIO DE JANEIRO**JFE Steel do Brasil LTDA
Praia de Botafogo, 228 Setor B, Salas 508 & 509,
Botafogo, CEP 22250-040, Rio de Janeiro-RJ, Brazil
Phone: (55)21-2553-1132 Fax: (55)21-2553-3430**Notice**

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