

NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Committee

TECHNICAL BULLETIN — July 2014

376. Huss Frisbee Repair Instructions

The committee has been informed of a new repair instruction for a Huss Frisbee ride, a copy of which is attached to this TB. The defect was found during the ADIPS annual inspection.

The information contained within is that of the manufacturer and not NAFLIC. When following the advice from the manufacturer, you are reminded of your duties and responsibilities under HSG175 regarding modifications.

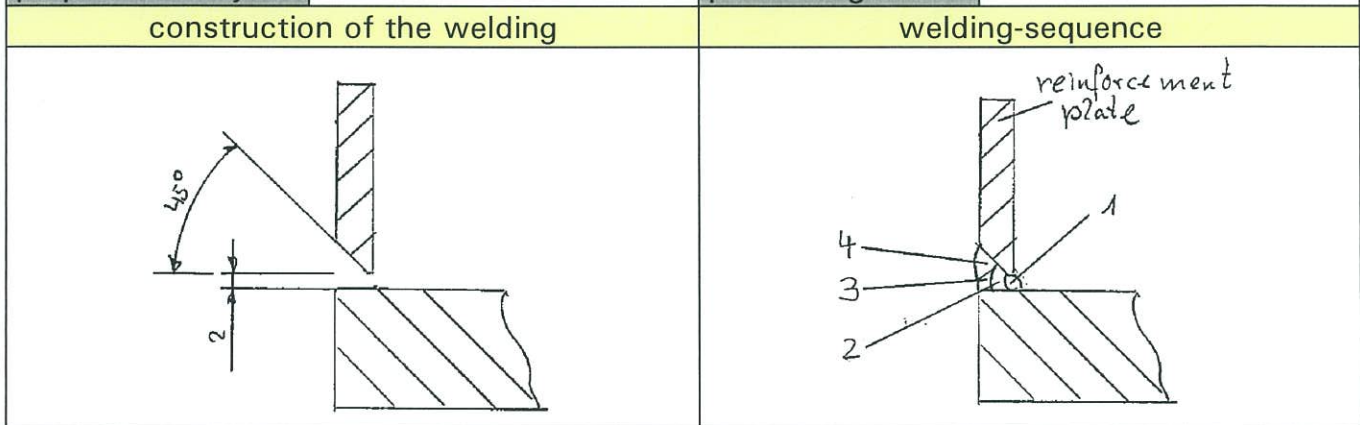
Committee Members: Mr. D Dadswell (Chairman), Mr. A Mellor (Secretary), Mr. P Smith, Mr. J Green, Mr. P Mitchell,
Mr. D Cox, Mr. M Thirkettle, Mr. W Gilbert, Mr. H Fisher, Mr. J Shilling & Mr. D Inman

Date of making: 2013-05-16

project	P29 Frisbee # 85273		
place of welding	Pleasure Island ,UK	form / EN	Sheet metal EN 10025
controler / -board	customer	material / EN	S235J2 + N
manufacturer	HUSS Maschinenfabrik	weldingprocess / EN	111 / ISO 4063
ident-nr.	-----	filler-metal / EN	E 38 4 B 42 H5 / ISO 2560
welder-name	-----	name of filler-metal	e.g.: Böhler Fox EV 47
WPAR-nr.	-----	gas / amount	-----
		gas for root / amount	-----

details, construction of the welding

kind of weld seam	butt weld	weld-position	Acc. to ISO 6947
preperation of joint	Acc. to ISO 9692-1	preheating	-----



sequence-nr.	1	2 - 4		
process	111	111	----	----
filler-metal / Ø	2,5	3,2	----	----
Amperes	80 - 100	100 - 140	----	----
Volts	----	----	----	----
kind of current	= +	= +	----	----
wire-feed	manual	manual	----	----
hand-feed ^{*)}	manual	manual	----	----
warmth „Q“ ^{*)}	----	----	----	----
swing,interrupt etc. ^{*)}	----	----	----	----
duration of interrupt ^{*)}	----	----	----	----

further information^{*)}:

wolframelectrode / Ø	-----	postheating	----
temperature of sequence	Max 280°C°	dur./temp./proc.	-----
adjustments	-----	rate of heating	-----
suction / ventilation	-----	rate of cooling	on air
distance of nozzle	-----	angle of burner	-----

other No welding spatter are allowed, if necessary drying of the electrode, the seam has to be free of notches ,MT-Inspection, scope 100%,

HPA
Michalik, (IWE) 2013-02-18
name, date, signature



controler / -board
name, date, signature

^{*)} if needed

Mild Steel Filler Metals – SMAW Covered Electrodes

EN ISO 2560-A:2005:	E 38 4 B 42 H5
EN ISO 2560-B:2005:	E 49 16-1 A U H5
AWS A5.1-04:	E7016-1H4R
AWS A5.1M-04:	E4916-1H4R

BÖHLER FOX EV 47

SMAW basic electrode, mild steel

Description

Basic electrode for high-quality welds. Good weldability in all positions except vertical-down. Metal recovery about 110 %. Very low hydrogen content (according AWS condition HD < 4 ml/100 g weld metal).

Weld metal extremely ductile, crack resistant and ageing resistant thus especially suited for rigid weldments with heavy seam cross sections.

Typical Composition of All-weld Metal

	C	Si	Mn
wt-%	0.06	0.5	0.7

Mechanical Properties of All-weld Metal

(*)		U		S	
Yield strength R_e N/mm ² (MPa):		460	(≥ 400)	400	(≥ 360)
Tensile strength R_m N/mm ² (MPa):		530	(490 - 600)	500	(450 - 580)
Elongation A ($L_0 = 5d_0$) %:		27	(≥ 22)	29	(≥ 22)
Impact work ISO-V KV J	+ 20 °C:	190	(≥ 110)	200	(≥ 110)
	- 20 °C:	110		150	
	- 40 °C:	90	(≥ 47)	100	

(*) u untreated, as-welded

s stress relieved 600 °C/2 h/furnace down to 300 °C/air

Operating Data

re-drying if necessary:
300 - 350 °C, min. 2 h
 Electrode identification:
FOX EV 47 7016-1 E 38 4 B

∅ mm	L mm	amps A
2.5	250/350	80 - 110
3.2	350/450	100 - 140
4.0	450	130 - 180
5.0	450	180 - 230

**Base Materials**

steels up to a yield strength of 380 N/mm² (52 ksi)

S235JR-E295, S235J2G3 - S355J2G3, C22, P235T1-P275T1, P235T2, P275T2, L210 - L320, L290MB - L320MB, P235G1TH, P255G1TH, P235GH, P265GH, P295GH, S235JRS1 - S235J4S, S355G1S - S355G3S, S255N - S355N, P255NH-P355NH, S255NL - S355NL, GE200-GE240

ASTM A 27 a, A36 Gr. all; A214; A 242 Gr. 1-5; A266 Gr. 1, 2, 4; A283 Gr. A, B, C, D; A285 Gr. A, B, C; A299 Gr. A, B; A328; A366; A515 Gr. 60, 65, 70; A516 Gr. 55; A570 Gr. 30, 33, 36, 40, 45; A 572 Gr. 42, 50; A606 Gr. all; A607 Gr. 45; A656 Gr. 50, 60; A668 Gr. A, B; A907 Gr. 30, 33, 36, 40; A841; A851 Gr. 1, 2; A935 Gr. 45; A936 Gr. 50; API 5 L Gr. B, X42 - X52

Approvals and Certificates

TÜV-D (1098.), DB (10.014.09), ÖBB, TÜV-A (72), ABS (3H5), BV (3HHH), DNV (3H10), GL (3H5), LR (3m H5), RMR (2), RINA (3YH5, 3H5), LTSS, VUZ, SEPROZ, CE