Both Copper & Alumunium Welding Cable with HOFR & TRS are I Marked 100% HOFR WITH MINIMUM ONEYEAR GUARANTEE

- Heat Resistant. Oil Resistant & Fire Retardent.
- Light in Weight.
- Heavy Duty in Current.
- Technically Sound.
- With Guaranteed Life.
- Saving of 40% Operating Cost.
- Works at High Temperature.





ASSOCIATE IS-9857 LOGIATE WELDING CABLES

Calculation of Size i.e. sq.mm. means
Area of one wire x No. of wires

= $\pi r^2 x$ No. of wires.

or $\frac{\pi d^2}{4}$ x No. of wires.

Say 35sq.mm.

= $\frac{3.14 \times 0.2 \times 0.2}{4} \times 1115$ wires ± 25.

Do Check the correct quantity (by checking size) & quality (by checking resistance) of conductor in any cable.

Formula for calculating size has been given above and resistance can be measured by milli-ohm-meter (cost approx. Rs. 2500). For details and procedure contact us.

Lets make things better

ASSOCIATE INDUSTRIES

YOU WILL PREFER TO ASSOCIATE WITH ASSOCIATE



INTRODUCTION:-

Associate Flexiweld Pvt. Ltd. is manufacturing 'ASSOCIATE' Brand Welding Cables with Copper & Aluminium Conductor and insulated with HOFR Synthetic Rubber confirming to IS: 9857/90 with latest amendments.

The Promotor is a qualified Engineer with 40 years experience in Cable Industries. The Products Manufactured are tested from raw material stage finished cable.

Cables were tested by ISI, Quality Marking Centre and Regional Test House and were found conforming to IS requirements. Aluminium Cable & Copper Cable with HOFR insulation & TRS insulation are ISI marked.

TECHNICAL DATA:-

COPPER WELDING CABLE

Nominal	THE WALL		Construction	Approx.	Max. D.C. Resistance of Conductor at 20°C (/Km.)	Tensile Strength			
Cross Sectio- nal area of Cond. (mm²)	of of wire wire rope thickness Sheath thick		Nominal Sheath thick- ness (mm.)	Nominal overall diameter (mm.)		weight of 100 mtrs. roll in (Kgs.)	HOFR	nm²) TRS	
16	0.2	6.0	0.025	2.0	10.5	24	1.210	9.0	8.0
25	0.2	7.5	0.025	2.0	11.5	35	0.780	9.0	8.0
35	0.2	9.0	0.025	2.0	13.5	45	0.554	9.0	8.0
50	0.3	10.5	0.025	2.2	15.5	62	0.386	9.0	8.0
70	0.3	12.5	0.025	2.4	17.5	86	0.272	9.0	8.0
95	0.3	15.0	0.025	2.6	20.5	115	0.206	9.0	8.0

ALUMUNIUM IN WELDING CABLE

Nominal			Construction	Approx.	Max. D.C.	Tensile Strength			
Cross Sectional area of Cond. (mm²)	Diameters of wire (mm.)	Diameters of wire rope (mm.)	Polyester tape thickness (mm.)	Nominal Sheath thick- ness (mm.)	Nominal overall diameter (mm.)	weight of 100 mtrs. roll in (Kgs.)	Resistance of Conductor at 20°C (/Km.)	HOFR	nm*) TRS
25	0.3	7.5	0.025	2.0	11.5	19	1.230	9.0	8.0
35	0.3	9.0	0.025	2.0	13.5	23	0.901	9.0	8.0
50	0.3	10.5	0.025	2.2	15.5	30	0.634	9.0	8.0
70	0.3	12.5	0.025	2.4	17.5	40	0.445	9.0	8.0
95	0.3	15.0	0.025	2.6	20.5	52	0.334	9.0	8.0
120	0.3	17.0	0.025	2.8	22.5	63	0.256	9.0	8.0

^{*}For further detail refer Test-Report

Which is Accompanied with each supply.

^{*}Note: 120 Sqmm Copper HOFR Insulated (without ISI) & Higher Size are also manufactured. (Contact for details)

OUR MOTIVE CUSTOMER'S DELIGHT



Current Carrying Capacity (Amps.) at Percentage duty cycle

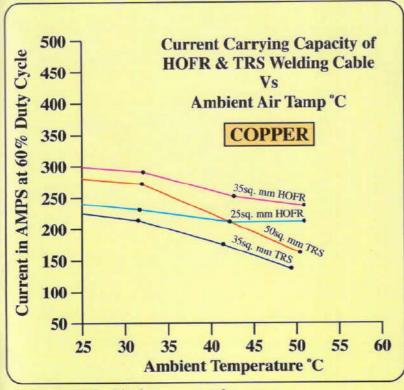
Copper Cable	HOFR			TRS		
Size	100%	60%	30%	100%	60%	30%
sq. mm.	A	A	A	A	A	A
16	135	174	246	94	121	172
25	177	228	343	125	161	228
35	221	285	403	156	201	285
50	279	360	509	197	254	360
70	352	454	643	248	320	453
95	424	547	774	299	386	546
Alum. Cable 16 % 25 % 35 % 50 % 78 % 95 %	144	186	263	100	129	183
	176	227	321	123	159	225
	222	287	405	155	200	283
	280	361	511	196	253	358
	339	438	619	237	306	433
	404	522	738	283	365	517

Ambient Air Temp. 30°C

Max. Conductor temp. HOFR - 90°C, TRS - 60°C

Derating factor for variation in Ambient Temperatur

	Femp. C	25	30	35	40	45	50
Factor	HOFR	1.04	1.00	0.96	0.91	0.87	0.82
Factor	TRS	1.08	1.00	0.91	0.82	0.71	0.58



* Detail graph of both Copper & Alumunium

Voltage Drop
D.C. Voltage Drop / 100 Amps./ 10 Meter

	Copper Cables	
Size	90°C	60°C
(sq. mm.)	HOFR	TRS
16	1.587	1.438
25	1.018	0.922
35	0.723	0.655
50	0.503	0.456
70	0.355	0.321
95	0.269	0.244
93	0.207	
-2/8	lumunium Cabl	
218		
A	lumunium Cabl	e
A	lumunium Cabl	e 60°C
Size (sq. mm.)	lumunium Cabl 90°C HOFR	e 60°C TRS
Size (sq. mm.)	lumunium Cable 90°C HOFR 1.574	e 60°C TRS
Size (sq. mm.) 25 35	90°C HOFR 1.574 1.153	e 60°C TRS 1.428 1.043
Size (sq. mm.) 25 35 50	90°C HOFR 1.574 1.153 0.811	60°C TRS 1.428 1.043 0.735

Ambient temp. 45°C, 60% Duty Cycle

^{*} Detail chart of Voltage drop is also available

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SIZE (Sq. mr	n.) HOFR Cable	Equivalent Cable as specified in IS-434	Suitable for Manual Welding	Golden HOFR Cable (Sq. mm.)	
Copper	Alumunium	Machine Size @ 60% Duty Cycle	Electrode upto		
16	25	150 Amps.	3.15 mm (10 SWG) .	10	
25	35	230 Amps.	4.00 mm (8 SWG)	16	
35	50	400 Amps.	4.00 mm (8 SWG)*	25	
50	70	600 Amps.	5.00 mm (6 SWG)	35	
70	95	800 Amps.	6.30 mm (4 SWG)	50	
95	120	1000 Amps.	Specially for automatic use.	70	

for any welding set select size for bigbest size of electrode in use.

* For Longer Length then 15 meters

ACHIEVEMENTS:-

- Pioneer in HOFR Technology. Took ISI License in 1992 in HOFR (25 Yrs.) Technology was adopted by other organization and competitors almost after 10 Yrs.
- 2. Educated customers about the correct size of cable to be used for their application.
- 3. Introduced the trend of thin cables.
- 4. Introduced Orange colour Welding Cables as per BS-Specification in 1996.
- 5. Designed & supplied Cables as per customer's requirement i.e. size 240 sq. mm, 185 sq. mm & 150 sq. mm.
- 6. Working Temperature of our HOFR Cables is 30 to 40% lower than maximum conductors temp. i.e. 90°C
- 7. Resistance 5-6% better than what IS recommends hence the conductivity is higher / heat is low.
- 8. In GOLDEN HOFR working temperature has been increased to 115°C instead of 90°C and can work at one lower size (Ref. Our Golden Brochutre)
- High Current Carrying Capacity of Golden HOFR Cable makes it very suitable for SAW Welding & Gauging Application
- 10. And above all we have list of endless satisfied customers.

Always a Step Abead

Successfully Running:-

* ASSOCIATE GOLDEN HOFR

WELDING CABLES (Ref. our Golden Brochure)

* MIG TORCH CABLE

With PU Tube/Silicone Tube & Teflon Wires

Mfrs.:

ASSOCIATE FLEXIWELD PVT. LTD.

Dealer/Stockist

Note: Also available ready to use kit of Cable, Holder & Connected Thimble