

### STACIR Construction

Core Wire (INVAR) : Aluminum-clad INVAR Wire/High Tensile Strength Aluminum-clad INVAR Wire

Conductor (STAL) : Super Thermal Resistant Aluminum Alloy Wire used for continuous allowable temperature up to 210°C

### STACIR Standard

IEC, ASTM, JCS 1405

- Double current carrying capacity of the same size ACSR
- No limitation for application area: Heavy wind, snow & galloping area
- Equivalent Sag-tension properties to conventional ACSR
- No modification & reinforcement on existing tower
- Easy installation with same method & equipments as ACSR's
- Low cost and short construction period
- Proved long-term reliability

### STACIR Application

Hi-TACSR/AW is used for electric power transmission lines. River-crossing area, seaside district and over seas area, long span, mountain area etc.

### STACIR/AW Data Sheet

Size	Section Area		Conductor Construction		Approx. Overall diameter	Approx. Overall weight	Maximum resistance 20oC	DC Modulus atof Elasticity	Coefficient of Linear Expansion	Ultimate Tensile Strength	Current Carrying Capacity
	STAL	AL-INVAR	STAL	AL-INVAR							
mm2	mm2	mm2	No.xmm	No.xmm	mm	kg/km	Ω/km	Kgf/mm2	x10-6/oC	Kgf	A
160	159.30	37.16	30/2.60	7 x 2.60	18.20	441.7	0.1745	6,140	16.0	6,140	909
240	241.30	56.29	30/3.20	7 x 3.20	22.40	669.1	0.1159	9,170	16.0	9,170	1,203
330	326.80	52.84	26/4.00	7 x 3.10	25.30	905.1	0.0869	10,000	17.5	10,000	1,452
410	413.40	67.35	26/4.50	7 x 3.50	28.50	1,145.5	0.0686	12,720	17.5	12,720	1,708
480 (Rail)	483.84	33.54	45/3.70	7 x 2.47	29.61	1,340.7	0.0600	10,500	20.0	10,500	1,812
480(Cardinal)	484.52	62.81	54/3.38	7 x 3.38	30.42	1,343.5	0.0591	13,280	18.3	13,280	1,846

### Hi-STACIR/AW

Size	Section Area		Conductor Construction		Approx. Overall diameter	Approx. Overall weight	Maximum resistance 20oC	DC Modulus atof Elasticity	Coefficient of Linear Expansion	Ultimate Tensile Strength	Current Carrying Capacity
	STAL	Hi-AL-INVAR	STAL	Hi-AL-INVAR							
mm2	mm2	mm2	No.xmm	No.xmm	mm	kg/km	Ω/km	Kgf/mm2	x10-6/oC	Kgf	A
160	159.30	37.16	30/2.60	7/2.60	18.20	706.9	0.1745	8,040	16.0	6,500	909
240	241.30	56.29	30/3.20	7/3.20	22.40	1070.8	0.1159	8,040	16.0	9,700	1,203
330	326.80	52.84	26/4.00	7/3.10	25.30	1282.1	0.0869	7,580	17.5	10,500	1,452
410	413.40	67.35	26/4.50	7/3.50	28.50	1626.1	0.0686	7,590	17.5	13,300	1,708
480 (Rail)	483.84	33.54	45/3.70	7/2.47	29.61	1580.0	0.0600	6,900	20.0	11,000	1,812
480(Cardinal)	484.52	62.81	54/3.38	7/3.38	30.42	1795.7	0.0591	7,470	18.3	13,800	1,846