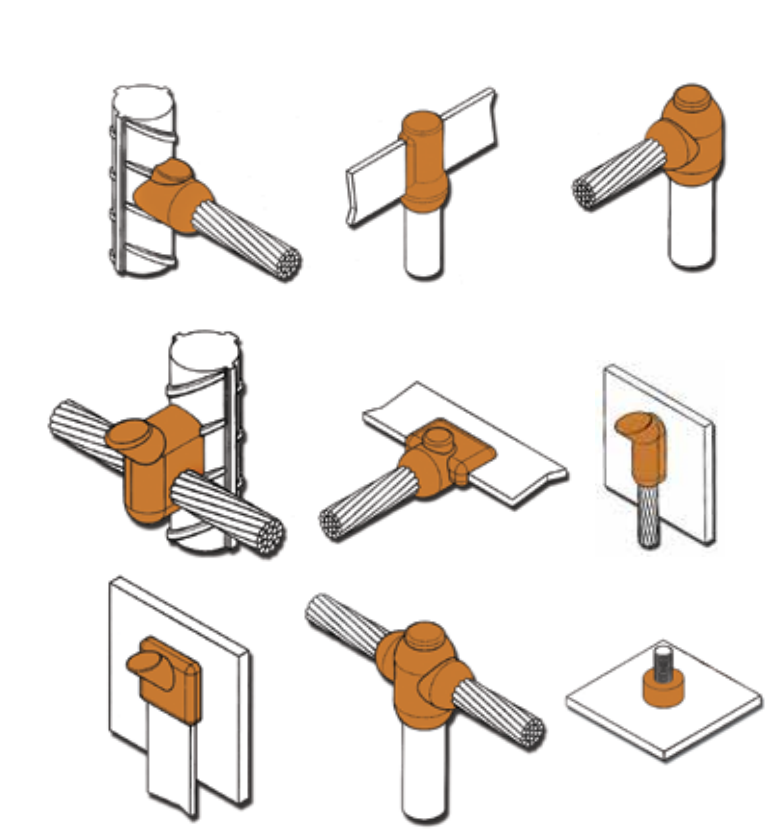




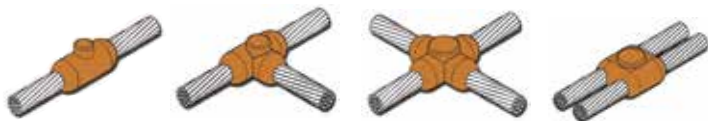
TokaiWeld Exothermic Product Catalogue

Your Preferred **Lightning & Security**
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TokaiWeld Connection Selector

Cable to Cable



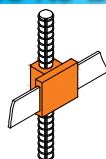
TCCS - pg 03 TCCT - pg 03 TCCX - pg 04 TCCH - pg 04

Cable to Earth Rod



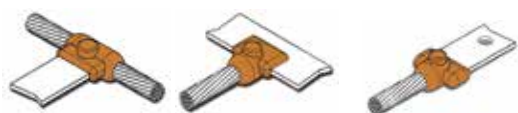
TERT - pg 05 TER90 - pg 05

Bar to Re-bar



TBR1 - pg 06

Cable to Bar

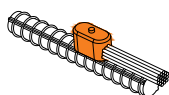


TCBT - pg 06 TBCT - pg 06 TCB - pg 06

Cable to Re-bar

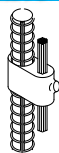


TCR1X - pg 07 TCRV - pg 07 TCR1V - pg 07 TCRP - pg 07



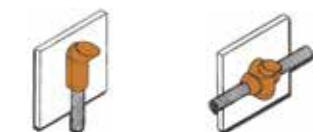
TCRH - pg 07

Cable to Rebar Fully Wrapped



TERC040R - pg 07

Cable to Steel Surface and Pipe



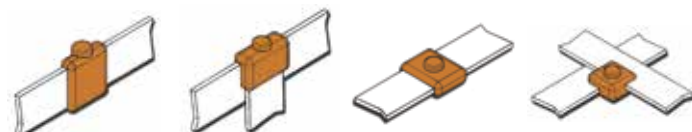
TCS1P - pg 08 TCS3V - pg 08

Bar to Steel Surface

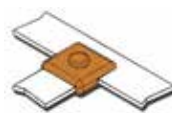


TB1S - pg 08 TB2S - pg 08 TB3S - pg 08

Bar to Bar



TB1B - pg 09 TB2B - pg 09 TB3B - pg 09 TB4B - pg 08



TB5B - pg 09

Bar to Earth Rod



TEBR - pg 10 TEBT - pg 10 TEBRH - pg 10

Stud to Steel Surface



TSVS - pg 10 TSHS - pg 10

Cable To Rail



TRW -L/R - pg 11 TRF - pg 11 TRC - pg 11

Stud to Rail

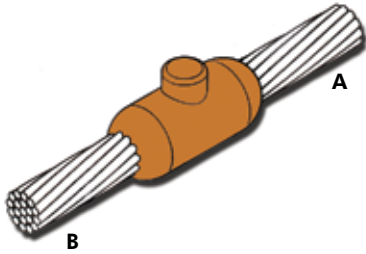


TWS - pg 12

Bar to Rail

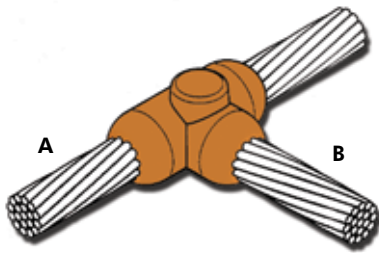


TBF90 - pg 12



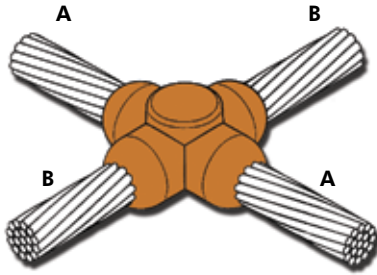
TCCS Straight Joint

Mould	A (mm ² Ø)	Powder	Clamp
TCCS025	25	32	GHC-1
TCCS035	35	32	GHC-1
TCCS050	50	45	GHC-1
TCCS070	70	65	GHC-1
TCCS095	95	90	GHC-1
TCCS120	120	115	GHC-1
TCCS150	150	115	GHC-1
TCCS240	240	200	GHC-1
TCCS300	300	250	GHC-1
TCCS400	400	2 X 150	GHC-2



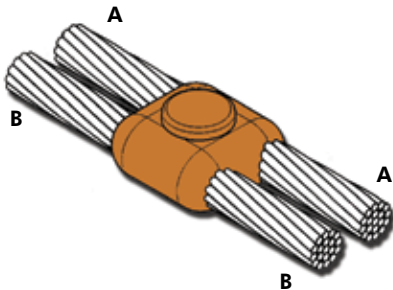
TCCT T-Joint

Mould	A (mm ²)	B (mm ²)	Powder	Clamp
TCCT025/025	25	25	45	GHC-1
TCCT035/035	35	35	45	GHC-1
TCCT035/025	35	25	45	GHC-1
TCCT050/050	50	50	90	GHC-1
TCCT050/035	50	35	65	GHC-1
TCCT050/025	50	25	65	GHC-1
TCCT070/070	70	70	90	GHC-1
TCCT070/050	70	50	90	GHC-1
TCCT070/035	70	35	65	GHC-1
TCCT070/025	70	25	65	GHC-1
TCCT095/095	95	95	115	GHC-1
TCCT095/070	95	70	90	GHC-1
TCCT095/050	95	50	90	GHC-1
TCCT095/035	95	35	90	GHC-1
TCCT120/120	120	120	150	GHC-1
TCCT120/095	120	95	150	GHC-1
TCCT120/070	120	70	90	GHC-1
TCCT120/050	120	50	90	GHC-1
TCCT150/150	150	150	200	GHC-1
TCCT150/120	150	120	150	GHC-1
TCCT150/095	150	95	150	GHC-1
TCCT150/070	150	70	90	GHC-1
TCCT185/185	185	185	200	GHC-1
TCCT185/120	185	120	200	GHC-1
TCCT185/095	185	95	150	GHC-1
TCCT240/240	240	240	2 X 150	GHC-2
TCCT240/185	240	185	200	GHC-1
TCCT240/150	240	150	200	GHC-1
TCCT240/120	240	120	200	GHC-1
TCCT300/300	300	300	2 X 200	GHC-2
TCCT300/240	300	240	2 X 200	GHC-2
TCCT300/185	300	185	250	GHC-1



TCCX Cross Joint

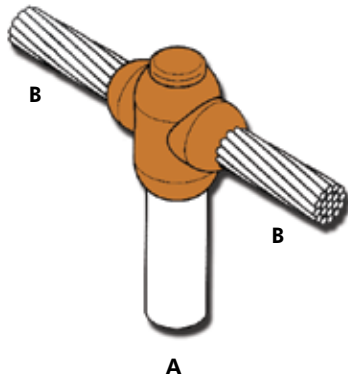
Mould	A (mm ²)	B (mm ²)	Powder	Clamp
TCCX025/025	25	25	45	GHC-1
TCCX035/035	35	35	65	GHC-1
TCCX035/025	35	25	65	GHC-1
TCCX050/050	50	50	90	GHC-1
TCCX050/035	50	35	90	GHC-1
TCCX050/025	50	25	90	GHC-1
TCCX070/070	70	70	115	GHC-1
TCCX070/050	70	50	115	GHC-1
TCCX070/035	70	35	115	GHC-1
TCCX070/025	70	25	115	GHC-1
TCCX095/095	95	95	150	GHC-1
TCCX095/070	95	70	150	GHC-1
TCCX095/050	95	50	115	GHC-1
TCCX095/035	95	35	115	GHC-1
TCCX120/120	120	120	200	GHC-1
TCCX120/095	120	95	200	GHC-1
TCCX120/070	120	70	150	GHC-1
TCCX120/050	120	50	150	GHC-1
TCCX150/150	150	150	250	GHC-1
TCCX150/120	150	120	250	GHC-1
TCCX150/095	150	95	200	GHC-1
TCCX150/070	150	70	150	GHC-1
TCCX185/185	185	185	2 X 150	GHC-2
TCCX185/150	185	150	250	GHC-1
TCCX185/120	185	120	250	GHC-1
TCCX185/095	185	95	200	GHC-1
TCCX185/070	185	70	200	GHC-1
TCCX240/240	240	240	2 X 250	GHC-2
TCCX240/185	240	185	2 X 200	GHC-2
TCCX240/150	240	150	2 X 200	GHC-2
TCCX240/120	240	120	2 X 150	GHC-2



TCCH Parallel Joint

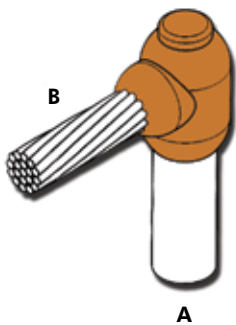
Mould	A (mm ²)	B (mm ²)	Powder	Clamp
TCCH025/025	25	25	45	GHC-1
TCCH035/035	35	35	65	GHC-1
TCCH035/025	35	25	65	GHC-1
TCCH050/050	50	50	90	GHC-1
TCCH050/035	50	35	90	GHC-1
TCCH050/025	50	25	90	GHC-1
TCCH070/070	70	70	115	GHC-1
TCCH070/050	70	50	115	GHC-1
TCCH070/035	70	35	90	GHC-1
TCCH070/025	70	25	90	GHC-1
TCCH095/095	95	95	150	GHC-1
TCCH095/070	95	70	150	GHC-1
TCCH095/050	95	50	150	GHC-1
TCCH095/035	95	35	115	GHC-1
TCCH120/120	120	120	200	GHC-1
TCCH120/095	120	95	200	GHC-1
TCCH120/070	120	70	200	GHC-1
TCCH120/050	120	50	150	GHC-1
TCCH150/150	150	150	200	GHC-1

Cable To Earth Rod



TERT

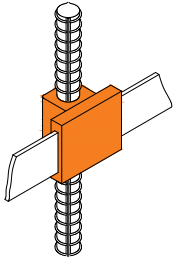
Mould	A (mm Ø)	A (inches Ø)	B (mm)	Powder	Clamp
TERT12.7/025	12.7	1/2	25	90	GHC-1
TERT12.7/035	12.7	1/2	35	90	GHC-1
TERT12.7/050	12.7	1/2	50	90	GHC-1
TERT12.7/070	12.7	1/2	70	90	GHC-1
TERT12.7/095	12.7	1/2	95	115	GHC-1
TERT14.2/016	14.2	5/8	16	90	GHC-1
TERT14.2/025	14.2	5/8	25	90	GHC-1
TERT14.2/035	14.2	5/8	35	90	GHC-1
TERT14.2/050	14.2	5/8	50	90	GHC-1
TERT14.2/070	14.2	5/8	70	115	GHC-1
TERT14.2/095	14.2	5/8	95	115	GHC-1
TERT14.2/120	14.2	5/8	120	150	GHC-1
TERT14.2/150	14.2	5/8	150	200	GHC-1
TERT14.2/185	14.2	5/8	185	200	GHC-1
TERT14.2/240	14.2	5/8	240	250	GHC-1
TERT17.2/016	17.2	3/4	16	90	GHC-1
TERT17.2/025	17.2	3/4	25	90	GHC-1
TERT17.2/035	17.2	3/4	35	90	GHC-1
TERT17.2/050	17.2	3/4	50	90	GHC-1
TERT17.2/070	17.2	3/4	70	115	GHC-1
TERT17.2/095	17.2	3/4	95	115	GHC-1
TERT17.2/120	17.2	3/4	120	150	GHC-1
TERT17.2/150	17.2	3/4	150	200	GHC-1
TERT17.2/185	17.2	3/4	185	200	GHC-1
TERT17.2/240	17.2	3/4	240	250	GHC-1
TERT17.2/300	17.2	3/4	300	2 X 150	GHC-2



TER90

Mould	A (mm Ø)	A (inches Ø)	B (mm)	Powder	Clamp
TERL12.7/025	12.7	1/2	25	65	GHC-1
TERL12.7/035	12.7	1/2	35	65	GHC-1
TERL12.7/050	12.7	1/2	50	65	GHC-1
TERL12.7/070	12.7	1/2	70	90	GHC-1
TERL12.7/095	12.7	1/2	95	90	GHC-1
TERL12.7/120	12.7	1/2	120	90	GHC-1
TERL14.2/016	14.2	5/8	16	65	GHC-1
TERL14.2/025	14.2	5/8	25	65	GHC-1
TERL14.2/035	14.2	5/8	35	65	GHC-1
TERL14.2/050	14.2	5/8	50	90	GHC-1
TERL14.2/070	14.2	5/8	70	90	GHC-1
TERL14.2/095	14.2	5/8	95	90	GHC-1
TERL14.2/120	14.2	5/8	120	90	GHC-1
TERL14.2/150	14.2	5/8	150	115	GHC-1
TERL14.2/185	14.2	5/8	185	115	GHC-1
TERL14.2/240	14.2	5/8	240	150	GHC-1
TERL14.2/016	17.2	3/4	16	65	GHC-1
TERL14.2/025	17.2	3/4	25	65	GHC-1
TERL14.2/035	17.2	3/4	35	65	GHC-1
TERL14.2/050	17.2	3/4	50	90	GHC-1
TERL17.2/070	17.2	3/4	70	90	GHC-1
TERL17.2/095	17.2	3/4	95	90	GHC-1
TERL17.2/120	17.2	3/4	120	90	GHC-1
TERL17.2/150	17.2	3/4	150	115	GHC-1
TERL17.2/185	17.2	3/4	185	115	GHC-1
TERL17.2/240	17.2	3/4	240	150	GHC-1
TERL17.2/300	17.2	3/4	300	200	GHC-1

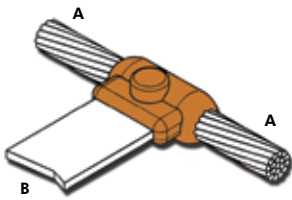
Bar To Rebar



TBR1

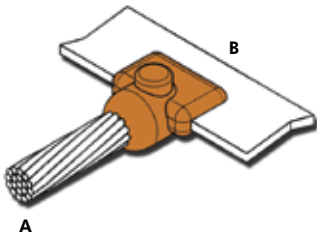
Mould	A(mm Ø)	B (mm)	Powder	Clamp
TBR1/25X3	20-40	25X3	115	GHC-1
TBR1/25X6	20-40	25X6	150	GHC-1

Cable To Bar



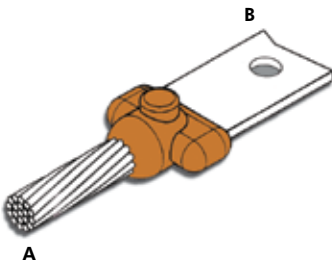
TCBT

Mould	A (mm ²)	B (mm ²)	Powder	Clamp
TCBT016/25X3	16	25 X 3	65	GHC-1
TCBT025/25X3	25	25 X 3	65	GHC-1
TCBT035/25X3	35	25 X 3	65	GHC-1
TCBT050/25X3	50	25 X 3	65	GHC-1
TCBT070/25X3	70	25 X 3	90	GHC-1
TCBT070/25X6	70	25 X 6	115	GHC-1
TCBT095/25X3	95	25 X 3	90	GHC-1
TCBT095/25X6	95	25 X 6	150	GHC-1
TCBT120/25X3	120	25 X 3	150	GHC-1
TCBT120/25X6	120	25 X 6	150	GHC-1
TCBT150/25X6	150	25 X 6	200	GHC-1
TCBT240/50X6	240	50 X 6	2 X 200	GHC-2
TCBT300/50X6	300	50 X 6	2 X 250	GHC-2



TBCT

Mould	A (mm ²)	B (mm ²)	Powder	Clamp
TBCT016/25X3	16	25 X 3	32	GHC-1
TBCT025/25X3	25	25 X 3	45	GHC-1
TBCT035/25X3	35	25 X 3	45	GHC-1
TBCT035/25X3	35	25 X 3	45	GHC-1
TBCT050/25X3	50	25 X 3	45	GHC-1
TBCT070/25X3	70	25 X 3	65	GHC-1
TBCT070/25X6	70	25 X 6	90	GHC-1
TBCT095/25X6	95	25 X 6	115	GHC-1
TBCT120/25X3	120	25 X 3	115	GHC-1
TBCT120/25X6	120	25 X 6	115	GHC-1
TBCT150/25X3	150	25 X 3	115	GHC-1
TBCT150/25X6	150	25 X 6	115	GHC-1
TBCT240/50X6	240	50 X 6	250	GHC-1
TBCT300/50X6	300	50 X 6	2 X 150	GHC-2

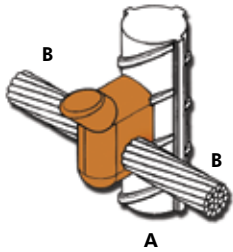


TCB

Mould	A (mm ²)	B (mm ²)	Powder	Clamp
TCB016/25X3	16	25 X 3	45	GHC-1
TCB025/25X3	25	25 X 3	45	GHC-1
TCB035/25X3	35	25 X 3	45	GHC-1
TCB050/25X3	50	25 X 3	65	GHC-1
TCB070/25X3	70	25 X 3	65	GHC-1
TCB070/25X6	70	25 X 6	65	GHC-1
TCB095/25X3	95	25 X 3	90	GHC-1
TCB095/25X6	95	25 X 6	90	GHC-1
TCB120/25X6	120	25 X 6	90	GHC-1
TCB150/25X6	150	25 X 6	115	GHC-1
TCB150/50X6	150	50 X 6	2 X 150	GHC-2
TCB240/50X6	240	50 X 6	2 X 150	GHC-2
TCB300/50X6	300	50 X 6	2 X 150	GHC-2

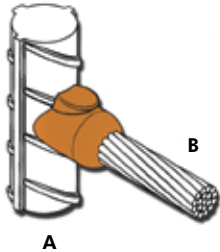
TokaiWeld

Cable To Rebar



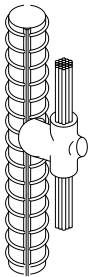
TCR1X

Mould	A(mm Ø)	B (mm)	Powder	Clamp
TCR1X/050	10-40	50	90	GHC-1
TCR1X/070	10-40	70	90	GHC-1
TCR1X/095	10-40	95	90	GHC-1
TCR1X/120	10-40	120	90	GHC-1



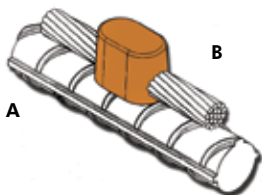
TCRV

Mould	A(mm Ø)	B (mm)	Powder	Clamp
TCRV/050	10-40	50	65	GHC-1
TCRV/070	10-40	70	90	GHC-1
TCRV/095	10-40	95	90	GHC-1
TCRV/120	10-40	120	90	GHC-1



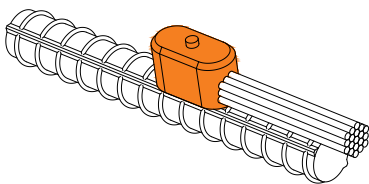
TCR1V

Mould	A(mm Ø)	B (mm)	Powder	Clamp
TCR1V/120	10-40	120	90	GHC-1
TCR1V/150	10-40	150	90	GHC-1
TCR1V/95	10-40	95	90	GHC-1



TCRP

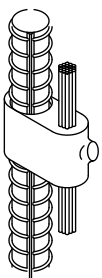
Mould	A(mm Ø)	B (mm)	Powder	Clamp
TCRP3/050	10-40	50	90	GHC-1
TCRP3/070	10-40	70	90	GHC-1
TCRP3/095	10-40	95	90	GHC-1
TCRP3/120	10-40	120	90	GHC-1
TCRP3/150	10-40	150	150	GHC-1



TCRH

Mould	A(mm Ø)	B (mm)	Powder	Clamp
TCRH/070	10-40	70	90	GHC-1
TCRH/150	10-40	150	150	GHC-1

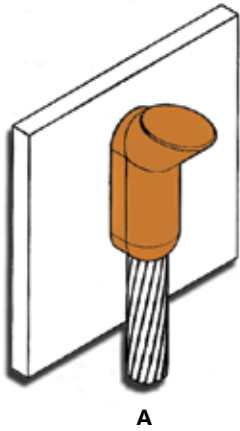
Cable To Rebar Fully Wrapped



TERC040R

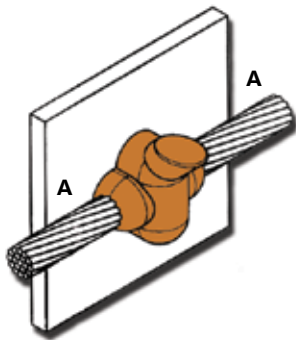
Mould	A(mm Ø)	B (mm)	Powder	Clamp
TERC040R/095	10-40	95	200x2	GHC-1

Cable To Steel Surface and Pipe



TCS1P

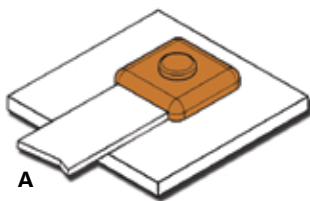
Mould	A (mm ²)	Powder	Clamp
TCS1P025	25	45	GHC-1
TCS1P035	35	45	GHC-1
TCS1P050	50	65	GHC-1
TCS1P070	70	90	GHC-1
TCS1P095	95	115	GHC-1
TCS1P120	120	115	GHC-1
TCS1P150	150	150	GHC-1
TCS1P185	185	200	GHC-1
TCS1P240	240	200	GHC-1
TCS1P300	300	250	GHC-1



TCS3V

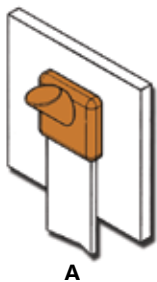
Mould	A (mm ²)	Powder	Clamp
TCS3V025	25	45	GHC-1
TCS3V035	35	45	GHC-1
TCS3V050	50	65	GHC-1
TCS3V070	70	115	GHC-1
TCS3V095	95	150	GHC-1
TCS3V120	120	150	GHC-1
TCS3V150	150	200	GHC-1
TCS3V185	185	250	GHC-1
TCS3V240	240	2 X 150	GHC-2
TCS3V300	300	2 X 200	GHC-2
TCS3V008	8DIA	65	GHC-1
TCS3V010	10DIA	115	GHC-1

Bar to Steel Surface



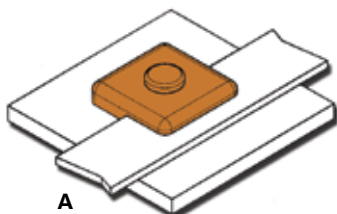
TB1S

Mould	A (mm)	Powder	Clamp
TB1S25X3	25 X 3	90	GHC-1
TB1S25X6	25 X 6	150	GHC-1
TB1S50X6	50 X 6	2 X 150	GHC-2



TB2S

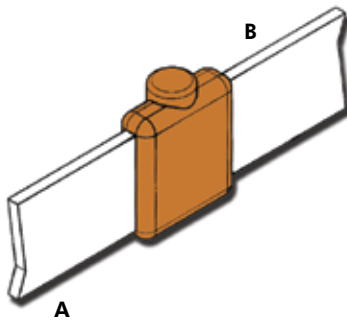
Mould	A (mm)	Powder	Clamp
TB2S25X3	25 X 3	90	GHC-1
TB2S25X6	25 X 6	150	GHC-1
TB2S50X6	50 X 6	2 X 150	GHC-2



TB3S

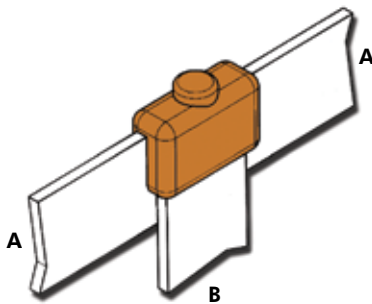
Mould	A (mm)	Powder	Clamp
TB3S25X3	25 X 3	115	GHC-1
TB3S50X6	50 X 6	250	GHC-1

Bar To Bar



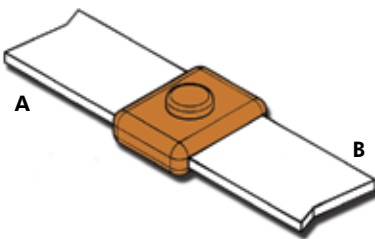
TB1B

Mould	A (mm)	Powder	Clamp
TB1B25X3	25 X 3	65	GHC-1
TB1B25X6	25 X 6	150	GHC-1
TB1B50X6	50 X 6	250	GHC-1



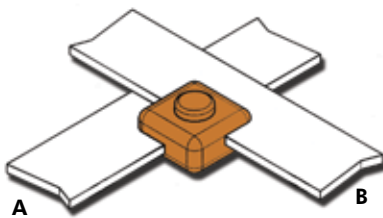
TB2B

Mould	A (mm)	B (mm)	Powder	Clamp
TB2B25X3/25X3	25 X 3	25 X 3	65	GHC-1
TB2B25X6/25X6	25 X 6	25 X 6	150	GHC-1
TB2B50X6/50X6	50 X 6	50 X 6	250	GHC-2



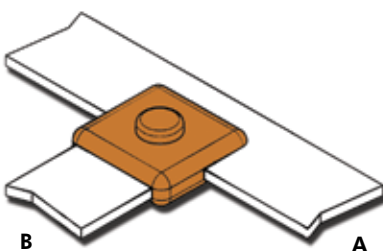
TB3B

Mould	A (mm)	Powder	Clamp
TB3B25X3	25 X 3	65	GHC-1
TB3B25X6	25 X 6	115	GHC-1
TB3B50X6	50 X 6	250	GHC-2



TB4B

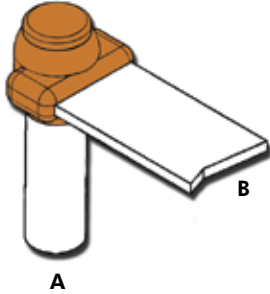
Mould	A (mm)	B (mm)	Powder	Clamp
TB4B25X3/25X3	25 X 3	25 X 3	65	GHC-1
TB4B25X6/25X6	25 X 6	25 X 6	115	GHC-1
TB4B50X6/50X6	50 X 6	50 X 6	200	GHC-2



TB5B

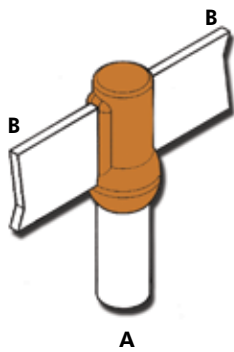
Mould	A (mm)	B (mm)	Powder	Clamp
TB5B25X3/25X3	25 X 3	25 X 3	65	GHC-1
TB5B25X6/25X6	25 X 6	25 X 6	65	GHC-1
TB5B50X6/50X6	50 X 6	50 X 6	250	GHC-2

Bar to Earth Rod



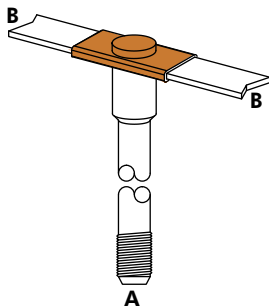
TEBR

Mould	A (mm Ø)	A (inches Ø)	B (mm)	Powder	Clamp
TEBR12.7/25X3	12.7	1/2	25 X 3	90	GHC-1
TEBR12.7/50X6	12.7	1/2	50 X 6	115	GHC-1
TEBR14.2/25X3	14.2	5/8	25 X 3	90	GHC-1
TEBR14.2/25X6	14.2	5/8	25 X 6	115	GHC-1
TEBR14.2/50X6	14.2	5/8	50 X 6	200	GHC-1
TEBR17.2/25X3	17.2	3/4	25 X 3	150	GHC-1
TEBR17.2/25X6	17.2	3/4	25 X 6	200	GHC-1
TEBR17.2/50X6	17.2	3/4	50 X 6	2 X 200	GHC-2



TEBT

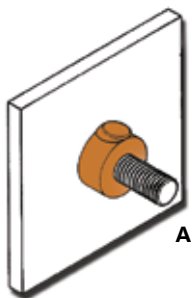
Mould	A (mm Ø)	A (inches Ø)	B (mm)	Powder	Clamp
TEBT12.7/25X3	12.7	1/2	25 X 3	90	GHC-1
TEBT14.2/25X3	14.2	5/8	25 X 3	90	GHC-1
TEBT14.2/25X6	14.2	5/8	25 X 6	150	GHC-1
TEBT14.2/50X6	14.2	5/8	50 X 6	200	GHC-1
TEBT17.2/25X3	17.2	3/4	25 X 3	150	GHC-1
TEBT17.2/25X6	17.2	3/4	25 X 6	200	GHC-1
TEBT17.2/50X6	17.2	3/4	50 X 6	2 X 150	GHC-2



TEBRH

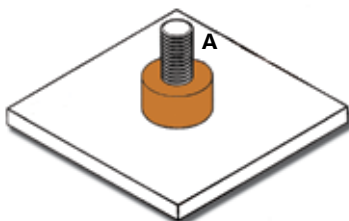
Mould	A (mm Ø)	A (inches Ø)	B (mm)	Powder	Clamp
TEBRH12.7/25X3	12.7	1/2	25 X 3	90	GHC-1
TEBRH14.2/25X3	14.2	5/8	25 X 3	90	GHC-1
TEBRH14.2/25X6	14.2	5/8	25 X 6	150	GHC-1
TEBRH14.2/50X6	14.2	5/8	50 X 6	200	GHC-1
TEBRH17.2/25X3	17.2	3/4	25 X 3	150	GHC-1
TEBRH17.2/25X6	17.2	3/4	25 X 6	200	GHC-1
TEBRH17.2/50X6	17.2	3/4	50 X 6	2 X 150	GHC-2

Stud to Steel Surface



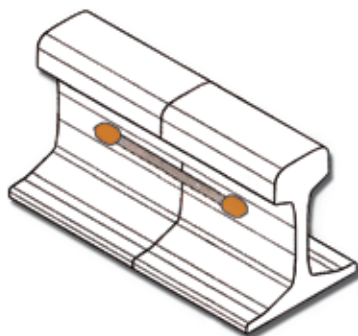
TSVS

Mould	Stud	Powder	Clamp
TSVSM6	M6	25	GHC-1
TSVSM8	M8	32	GHC-1
TSVSM10	M10	45	GHC-1
TSVSM12	M12	65	GHC-1
TSVSM16	M16	115	GHC-1



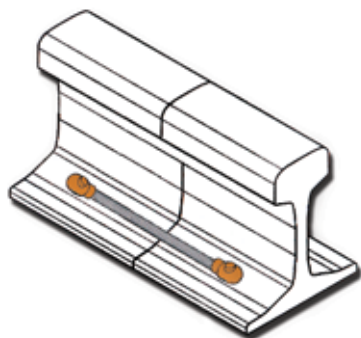
TSHS

Mould	Stud	Powder	Clamp
TSHSM6	M6	25	GHC-1
TSHSM8	M8	32	GHC-1
TSHSM10	M10	45	GHC-1
TSHSM12	M12	65	GHC-1
TSHSM16	M16	115	GHC-1



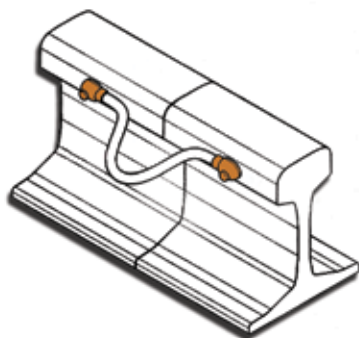
TRW - L/R

Mould	A (mm)	Sleeves	HD	Powder	Clamp
TRW035L/H	35	GXWF035	HD35	45	GHC-RW
TRW035R/H	35	GXWF035	HD35	45	GHC-RW
TRW050L/H	50	GXWF050	HD50	65	GHC-RW
TRW050R/H	50	GXWF050	HD50	65	GHC-RW
TRW070L/H	70	GXWF070	HD70	75	GHC-RW
TRW070R/H	70	GXWF070	HD70	75	GHC-RW
TRW095L/H	95	GXWF095	HD95	75	GHC-RW
TRW095R/H	95	GXWF095	HD95	75	GHC-RW
TRW120L/H	120	GXWF120	HD120	115	GHC-RW
TRW120R/H	120	GXWF120	HD120	115	GHC-RW
TRW150L/H	150	GXWF150	HD150	150	GHC-RW
TRW150R/H	150	GXWF150	HD150	150	GHC-RW



TRF

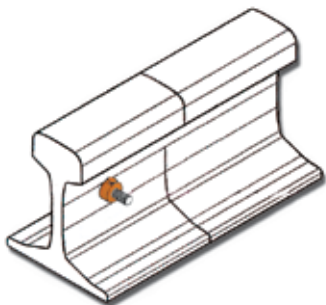
Mould	A (mm)	Sleeves	Powder	Clamp
TRF035	35	GXWF035	32	GHC-CP
TRF050	50	GXWF050	45	GHC-CP
TRF070	70	GXWF070	65	GHC-CP
TRF095	95	GXWF095	65	GHC-CP
TRF120	120	GXWF120	90	GHC-CP
TRF150	150	GXWF150	115	GHC-CP



TRC

Mould	A (mm)	Rail Bond	Powder	Clamp
TRC-035	35	GRCOPB035X220	45	GHC-RC/D
TRC-050	50	GRCOPB050X220	65	GHC-RC/D
TRC-070	70	GRCOPB070X220	75	GHC-RC/D
TRC-095	95	GRCOPB095X220	90	GHC-RC/D
TRC-120	120	GRCOPB120X220	115	GHC-RC/D

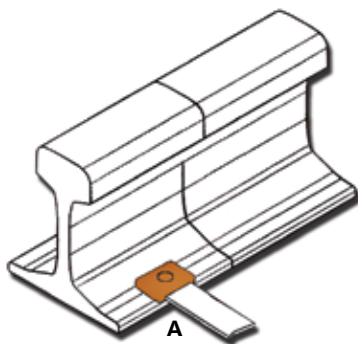
Stud to Rail



TWS

Mould	Stud	Powder	Clamp
TWS6	M6	45	GHC-RW
TWS8	M8	45	GHC-RW
TWS10	M10	65	GHC-RW
TWS12	M12	90	GHC-RW
TWS16	M16	115	GHC-RW

Bar to Rail



TBF90

Mould	Stud	Powder	Clamp
TBF90/25X3	25 X 3	90	GHC-CP

END

Mould Cross-Section & Advantages

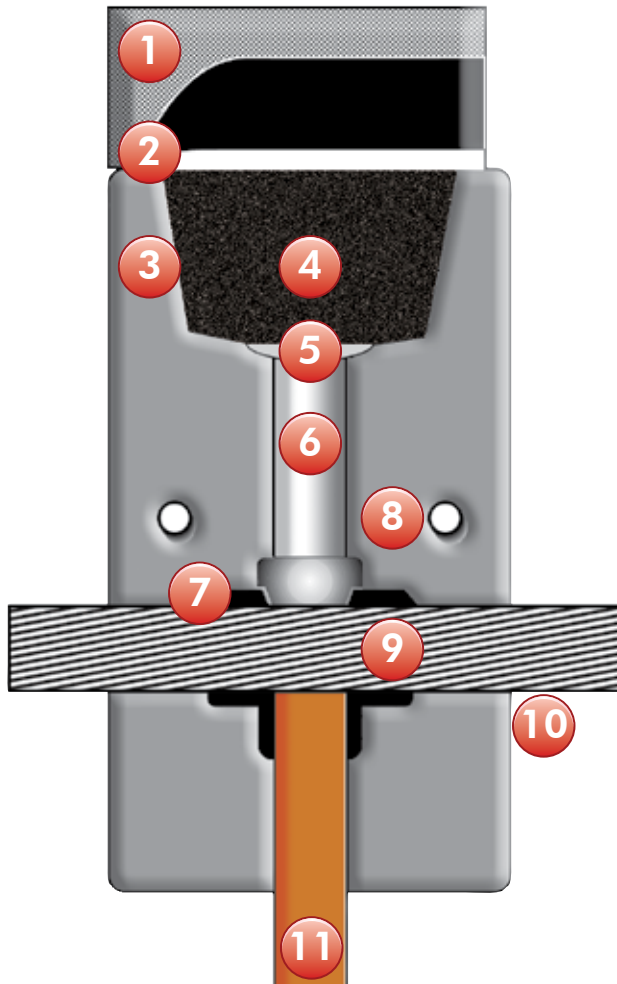
The TokaiWeld permanent connection process has been engineered to be an easy and efficient welding system. No outside power, bulky gas tanks or other equipment associated with welding are required with the TokaiWeld system.

The weldmetal powder, consisting of powdered aluminium and copper oxide, is poured into a graphite mould following by ignition powder and ignited by means of an ordinary flint gun.

The resultant exothermic welding reaction produces high temperatures molten copper and aluminium oxide slag.

The molten copper melts the steel retaining disc and flows down the Tap hole and over the conductors in the weld chamber, melting and welding them into a solid homogeneous joint. The whole process takes no more than a few seconds.

Cross-Section Diagram



- 1) Mould Cover
- 2) Starting Powder
- 3) Mould Cup
- 4) Weldmetal Powder
- 5) Steel Retaining Disc
- 6) Weld Chamber
- 7) Tap Hole
- 8) Locating Pin
- 9) Cable (conductor)
- 10) Conductor Area
- 11) Earth Rod

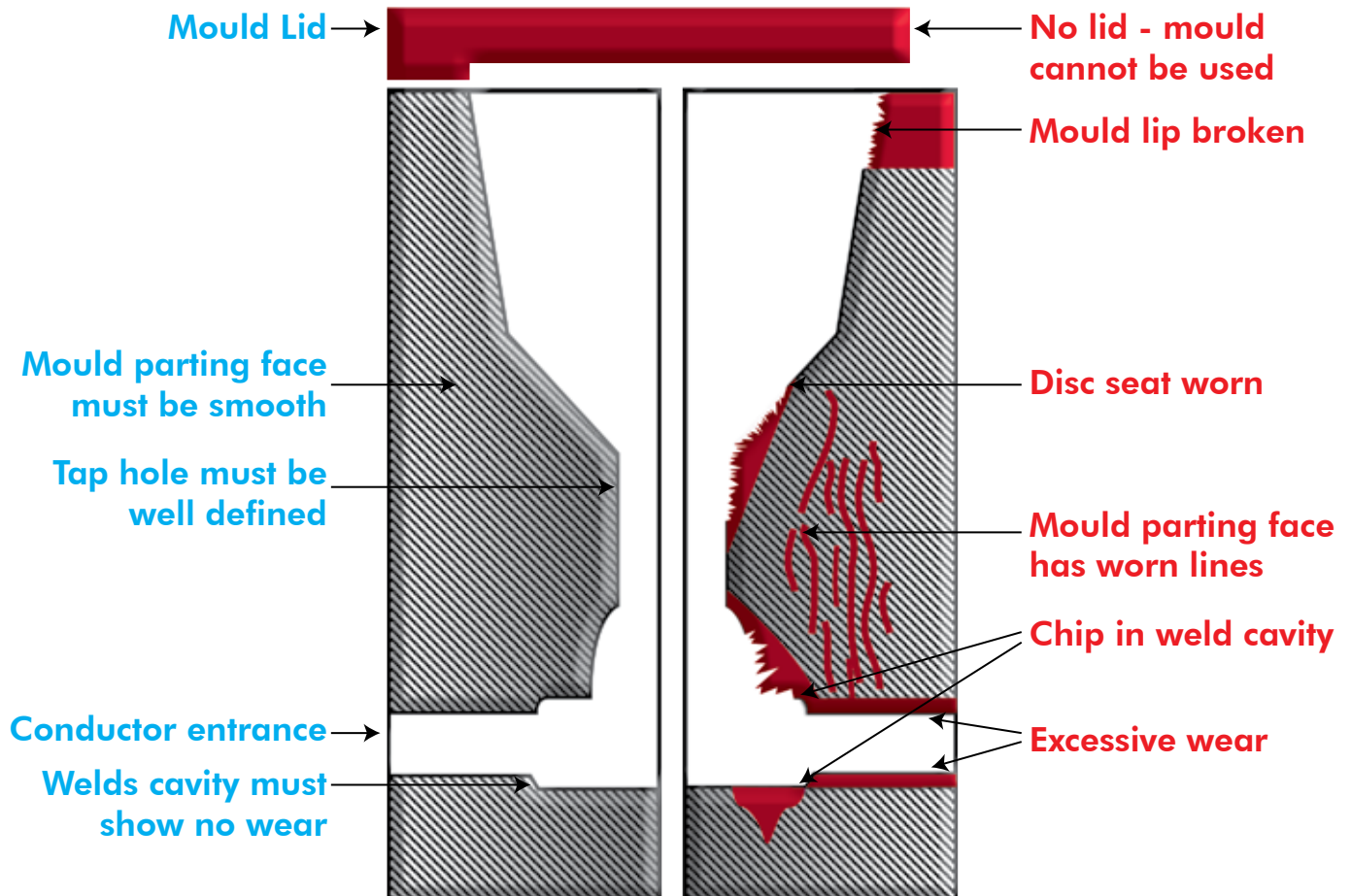
Vertical Split Mould

The Tokai Weld moulds are designed to complete ± 100 connections depending on the care given to the mould during usage, transport and storage.

Regular checks will determine if moulds are fit for use.

1. Moulds must be dry and have lids.
2. Mould face must be smooth, so when closed it seals properly.
3. Mould disc seat must show no sign of chips, cracks, gauges or wear.
4. Steel retaining disc must seal properly. No powder must fall into weld cavity prior to weld.
5. Tap home must be well defined.
6. Weld cavity must have no chips or signs of wear.
7. Conductors must fit snugly and not be loose in mould.
8. The correct mould cleaning tool must be used.

Cross-Section Diagram



Vertical Split Mould (cont'd)

An exothermic welded connection may be tested by any of the non-destructive technique applicable to other welding processes. These include x-ray, ultrasonic, dye penetrate. None of these techniques can be used in a compression or crimped connection, since the joint will show up as a crack, which is actually what it is.

The exothermic welded connections can also be inspected visually since one can see immediately if welding has taken place. On the other hand one cannot see if a compression joint has been made correctly.

Mechanical connections can result in the following:

Increase in time causes corrosion. Increases in corrosion cause increase in resistance. Increase in resistance causes heat, which in turn accelerates the corrosion. The ultimate result is premature failure. Exothermic connections avoid these problems.



Types of Connections	Maximum Temp.
1. Mechanical and pressure type connections	250°C
2. Brazed connections	450°C
3. Exothermic connections	800°C
NB: Copper melting point	1083°C

Machined cross section of exothermic welded connections shows excellent fusion of conductors

An Award Winning Company

with a solid track record and portfolio!

As the nation's leading lightning protection and security solutions provider, TOKAI is proud to provide quality products and services that protects your homes, buildings, lives and businesses. We are the only ISO certified lightning and security solutions provider in the nation. Our products are registered with Jabatan Kerja Raya and SIRIM. Tokai's Earthing & Lightning Protection Systems are in full compliance to **IEC 62305 & BS EN 62305-2006** and are tested in accordance to ***IEC 62561:2012**

Established in 1993, Tokai has grown from strength to strength, winning numerous projects that have become landmarks in the nation. Tokai is the dominant force in the field of lightning & surge protection as well as engineering security solutions.

Tokai Group of Companies is a 100% Malaysian owned entity. Our engineers and technicians are highly-trained with vast project experience to ensure total customer satisfaction. Tokai's name is synonymous with quality and excellence.

Please visit our website for more details.

* tested to 100KA of lightning currents



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TOKAI's complete range of solutions includes:



Tokai Integrated Safety, Security and Management to protect people, assets and critical installations.

TOKAI E&LP

Earthing and Lightning Protection (E&LP) range of products that are certified and tested to IEC 62561:2012.

TOKAI ESP

Electronic Surge Protection (ESP) range of products for complete protection of electronic equipments such as CCTVs, PCs and etc.



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